

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

Order Instituting Rulemaking to Consider)	
Refinements to and Further Development of the)	R.05-12-013
Commission's Resource Adequacy)	
Requirements Program)	
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**COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION ON THE LOCAL RESOURCE ADEQUACY REQUIREMENT
PHASE 1 STAFF REPORT**

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**COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION ON THE LOCAL RESOURCE ADEQUACY
REQUIREMENT PHASE 1 STAFF REPORT**

The California Independent System Operator Corporation ("CAISO") respectfully submits the following comments on the Local Resource Adequacy Requirement Phase 1 Staff Report dated April 10, 2006 in accordance with Administrative Law Judge ("ALJ") Wetzell's April 13, 2006 e-mail ruling granting Energy Division's request for schedule modification.

INTRODUCTION

The CAISO appreciates the additional opportunity to offer feedback on key resource adequacy topics such as implementation of a Local Resource Adequacy Requirements ("Local RAR") and development of a tradable capacity product. In its comments, the CAISO indicates areas where it supports the direction of Commission Staff as outlined in its report or as outlined by Southern California Edison ("SCE") in the Tradable Capacity Product Workshop Report ("TCP Report") and provides additional input and guidance in areas where the CAISO is not aligned with those reports. Finally, the CAISO provides the Commission with additional and important comments on (1) the need for the appropriate mix of resources and, (2) the CAISO's recommendation

regarding the appropriate Applicable Reliability Criteria the Commission should elect in its pending June 2006 Local RAR decision.

I. LOCAL RESOURCE ADEQUACY REQUIREMENTS

I.A. Local Capacity Requirements

Comments to be submitted as part of CAISO's 2007 Local Capacity Technical Analysis Study due April 21st and possible additional comments by the CAISO on April 28th.

I.B. Local RAR

I.B.1 Adoption of a Local Rar Annually

The CAISO does not believe the Commission needs to initiate a new OIR for establishing the Local RAR for 2008 and beyond. For 2007, the Commission will decide on the appropriate service reliability level that will establish the Local RAR. The process, understanding, and methodology to do so will be well established through this OIR (R.05-12-013) and its supporting record. The CAISO believes the Commission should take the methodology from 2007, which will not change substantively in the near term, and delegate authority to Commission Staff to do the same for 2008 and beyond (or until such a time that it makes sense to change the methodology as a result of new techniques or technologies).

The CAISO supports Commission Staff's recommendation to fix the geographic boundaries of the local areas, produce a list of resources within those local areas and count only those resources within the local area as eligible in meeting the Local RAR.

The CAISO would encourage Commission Staff to reconsider its preference for an annual Local RAR approach in favor of a multi-year Local RAR. The Staff Report

states that a distinct advantage of the annual process is that it better aligns with changes made to transmission and generation systems. The CAISO, however, disagrees and believes there may be a misunderstanding as to how the CAISO incorporates proposed changes to transmission and generation assets into its studies.

Transmission and generation infrastructure is generally planned and constructed on a timeline much greater than one year; generally it is more like 3 to 10 years. Due to required interconnection studies and specific milestone steps required in developing a transmission or generation project, the CAISO has sufficient forewarning and the ability to incorporate such projects into its planning and technical studies. For instance, if the CAISO were to perform a three-year Local RAR study, the CAISO would incorporate all known projects based on their commercial on-line dates into the analysis. Thus, a multi-year Local RAR study would not necessarily be a single number for multiple years, but would likely have some incremental changes based on infrastructure additions and/or facility retirements. The multi-year study would therefore result in a three values, one for each study-year.

The CAISO believes the advantages of a multi-year RAR study outweigh any disadvantages. A multi-year Local RAR should produce longer-term contracts that provide generation developers with greater revenue certainty and the financing community lower risk, which will promote infrastructure development.

One perceived concern is that a multi-year study could over-state the Local RAR. The CASIO believes this is a low risk, low probability outcome as a multi-year RAR study would most likely produce a Local RAR in future years that is under the actual requirement since load growth is more the norm than major load loss. Because of this

fact, a multi-year Local RAR would likely still need an annual true-up process to ensure the appropriate Local RAR is met. The CAISO envisions that the next compliance year's values would be mandatory and future years' numbers informative. Accordingly, the CAISO would provide a multi-year study each year and therefore provide values that reflect the "expected" Local RAR for each future year.

I.B.2 Allocation of Local RAR to CPUC-Jurisdictional LSES

The CAISO will need to do an allocation of the Local RAR to each Local Regulatory Authority, including the CPUC, using CEC forecasts of each LSE-specific contribution to the annual peak load, or, if unavailable, the relevant LSE's actual peak load, in the Transmission Access Charge area ("TAC Area").¹ The Commission would then allocate the Local RAR based on its defined methodology as proposed in the Staff Report. The CAISO agrees with the Commission that all LSEs, regardless of size, must be responsible for meeting their proportionate share of the Local RAR.

I.B.3 Load Forecasting and Assignment Notification of Local RAR

The CAISO does not currently have a position on this issue, but reserves the right to comment on load forecasting and assignment notification of Local RAR as opportunities may arise in this proceeding.

I.B.4 Aggregation of Local Areas

Albeit administratively convenient, the CAISO is concerned with the Commission Staff proposal to aggregate all the local areas within an IOU distribution service area to derive one Local RAR for the entire IOU distribution service area. The CAISO's

¹ The term "TAC Area" was established in connection with the CAISO Transmission Access Charge. The term is used here because the TAC Areas are coterminous with the service areas of the Original Participating TOs (Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric) as they existed prior to the addition of any new PTO or, in other words, the former Control Areas of the PTOs (further defined in CAISO Tariff Appendix F, Schedule 3).

concern is that, due to economic advantages, LSEs could overprocure in the highly resourced local areas at the expense of the lower resourced local areas, and in effect create an under-procurement of the “right” MWs in certain local areas. The result could result in additional backstop procurement by the CAISO to satisfy the Applicable Reliability Criteria in local areas that had under-procurement, and potentially unnecessary over-procurement of MWs in other local areas. The CAISO is concerned that preventable and unnecessary costs could accrue as a result of employing this Local RAR aggregation methodology.

I.B.5 Compliance Demonstration for Local RAR

The CAISO concurs that the Local RAR demonstration should be done on an annual cycle concurrent with the System RAR showing. The CAISO also agrees that the Local RAR demonstration should be for 100% of the requirement for all twelve months, January through December.

The CAISO also accepts that there must be a limited iterative process for LSEs to procure their Local RAR. After the first procurement cycle, to the extent additional units are required as determined by the CAISO, LSEs should have the first opportunity to procure any residual need before the CAISO determines whether or not any backstop procurement is required. The CAISO states a “limited” iterative process because the Local RAR demonstration occurs on or around Sept 30th, the CAISO and the LSEs have limited time before a January 1st implementation to perform the analysis and procurement functions required in this iterative process.

I.B.6 Counting Resources for Local RAR

- a) *Counting Reliability Must Run (RMR) Condition 1 and Condition 2 Resources for Local RAR*

The CAISO previously filed with the Commission that it does not support the IOU proposal recommending RMR Condition 1 units count toward reducing the need in the local area. To qualify this statement, and as a general principle, the CAISO wants to see the replacement of RMR sooner rather than later, and the CAISO is reluctant to support policies it feels sustain the continuation of RMR.

Saying that, the CAISO also realizes the need to transition away from RMR and move into this paradigm of an established annual Local RAR and showing in combination with a single CAISO backstop procurement product to meet established Applicable Reliability Criteria and Commission selected service level. The CAISO would like to see this transition occur by 2008. Thus, the CAISO supports the Commission Staff position of not counting RMR towards the Local RAR as this position clearly supports the CAISO's and the Commission's policy and addresses timing and sequencing concerns described below. However, the CAISO would not object if the Commission were to credit RMR Condition 1 and Condition 2 resources against the Local RAR as an interim step for 2007.

The CAISO would object to a decision that allows RMR Condition 1 units to meet System RA requirements absent the existence of a resource adequacy contract for the unit. As the CAISO has previously stated, and as acknowledged by the IOUs, the RMR contract has inherent inflexible dispatch rights and, "RMR Condition 1 is not a full capacity product and does not confer the same value as such a [RA] product." Further, the cost structure and short-term perspective (one-year) of the RMR contract fully address the need for revenue adequacy over a longer-term, and therefore, does not help the Commission meet its RAR program objective of ensuring infrastructure investment

for reliability occurs. Accordingly, as noted above, RMR Condition 1 units should only count as meeting the System RAR if an LSE enters into a separate RA contract with an RMR Condition 1 resource.

The CAISO is also concerned about the timing and sequence of the RMR process and the Commission's RA filing schedule. Due to RMR contract negotiation and FERC filing constraints, the CAISO Board must approve RMR designations in September. The system and local RA filings for 2007 are due to the Commission on October 1, 2006. Thus, RMR designations will have been made prior to the RA showing due date, thus potentially allowing LSEs to calculate whether or not they wish to enter into an RA contract for local capacity with an already designated RMR unit or leave it to the CAISO to contract for the resource under RMR. In the CAISO's opinion, this has the potential to create adverse incentives and an over-reliance on RMR contracting. Thus, these conflicting contract paths, if sustained, will hinder the Commission's ability to meet its RAR program objectives, and again illustrate the need to transition away from RMR sooner rather than later.²

b) Dispatchable Demand-Response Resources

The CAISO presently has no comment.

c) Distributed Generation (DG)

The CAISO presently has no comment.

d) Effectiveness Factors and Counting Resources Outside the Defined Local Area

² As the Commission considers counting and compliance issues, the Commission should understand that due to the fact that the RMR contract allows RMR owners to transfer between RMR Condition 1 and RMR Condition 2 terms, the CAISO will not know what units finally designated RMR in 2007 will be operating under either condition until sometime after November 30, 2006. RMR Owners retain the right to transfer between the Condition 1 and Condition 2 terms of the RMR Agreement within their contract cycle given certain restrictions.

The CAISO supports the Commission Staff's proposal to fix the geographic boundaries of the local areas, produce a list of resources within those local areas and count only those resources within the local area as eligible in meeting the Local RAR. Staff also effectively characterized the limited usefulness of published effectiveness factors as effectiveness factors are not static, but dynamic variables that can fluctuate depending on the contingency being studied within a local area. Finally, and as mentioned by staff, the CAISO will evaluate and consider all RA designated resources, both inside and outside the local area, when determining whether or not backstop procurement is necessary.

I.B.7. Evaluation of Compliance Demonstrations and Actions Taken Due to Non-Compliance with Local RAR

a) CAISO Evaluation

The CAISO will review and aggregate the Local RAR filings of both the CPUC and non-CPUC jurisdictional LSEs and include any RMR procurement and compare this amount to the Commission-adopted Local RAR levels. The Staff Report states that if the Local RAR is satisfied in the aggregate, the CAISO will not engage in backstop procurement, with one exception due to the possibility of additional procurement if ineffective MWs were procured and, therefore, the local area need was not fully satisfied.³ The roles of the Commission in establishing the service reliability level and the CAISO in exercising its backstop procurement authority to meet grid reliability as established by, among other things, NERC Planning Standards, is an important issue that warrants further discussion among the CAISO and Commission.

³ *Local Resource Adequacy Requirements Phase 1 Staff Report*, 10 Apr. 2006, p. 26.

The Commission, like other Local Regulatory Authorities (“LRA”), has the responsibility to determine the “service reliability” level for end-use customers served by LSEs within CAISO-identified local capacity areas. This means that the Commission will exercise its jurisdiction over its LSEs to compel procurement of generation or demand resources to meet the Commission determined level of service reliability. The Commission or other LRAs may allow planned or controlled load interruption options. Any such automatic load shedding options must be acceptable to the CAISO, i.e. the load to be shed must be demonstrable, verifiable and appropriately dispatchable.⁴

The CAISO is responsible for maintaining the integrity of the interconnected transmission grid in a manner consistent with prevailing Applicable Reliability Criteria, primarily consisting of reliability standards established by NERC and WECC. These criteria require adequate local generation and associated telemetry and control, to ensure the grid can survive any single contingency (N-1) with no load interruption. The Applicable Reliability Criteria also require adequate resource adjustments by the CAISO to prepare for the next contingency after the actual occurrence of a first contingency (N-1-1). The N-1-1 criteria may be satisfied by various options, including generation commitment, transmission switching, planned or controlled load interruption, or a combination thereof. The options chosen to meet the N-1-1 criterion must be operationally feasible and accepted by the CAISO. Thus, an important distinction

⁴ In determining an acceptable service reliability level, the Commission and the other LRAs must understand that there could be practical and technical limitations to establishing a “lower” service reliability level than what is acceptable to other LRAs within a local area. For instance, if an LRA is willing to accept minimum Applicable Reliability Criteria and, therefore, willing to do pre-contingency load shedding after a first contingency event (“N-1”), yet other LRAs or the Commission are unwilling to accept such a service reliability level, then telemetry and remote-control infrastructure would need to be in place, enabling the CAISO to execute pre-contingency load shedding on the particular LSE that elected a lower level of service reliability relative to the others.

between the CAISO's role in maintaining grid reliability and the Commission's role of establishing service reliability is that the grid can remain reliable apart from the interruption of service to end-use customers.

With that background, once the Commission elects the Local RAR based on an appropriate service reliability level, as stated previously, the CAISO will assess the adequacy of LSE procurement, both from CPUC and non-CPUC jurisdictional entities and engage in procurement only as a backstop measure to the desired level of service reliability.⁵

b) CPUC Evaluation

The CAISO currently has no comment.

I.B.8. Joint IOU's Transfer Payment Proposal

The CAISO acknowledges Commission Staff's insight regarding the administrative hurdles and burdens associated with implementing a functional transfer payment mechanism. The CAISO appreciates the concept of a transfer payment mechanism and believes that such a mechanism could aid in the satisfaction of the Local RAR. For instance, payments from those LSEs that are short local capacity within a local area to those LSEs that are long may close gaps that might otherwise hinder the achievement of satisfying the overall local capacity requirement. This could be particularly germane in areas where the apportionment of MW obligations does not align well with the MW capacity of individual generating units that count toward meeting the Local RAR in those local areas.

⁵ As noted above, the CAISO and the Commission are currently addressing their respective roles in determining procurement levels, processes and mechanisms. The CAISO anticipates being able to more fully describe its procurement role after the conclusion of such discussions.

As Commission Staff pointed out however, there are fundamental design details that would need to be fleshed out before a transfer payment mechanism could be implemented. The Staff Report details a few of these concerns and the CAISO would like to point out another around tracking and the need to replace the local capacity attributes.

For example, an under-procured LSE (LSE1) is allocated 20 MW of local attribute from an over-procured LSE (LSE2) who has a 100 MW capacity contract with a physical resource and whose obligation is only 80 MW. If LSE2 defaults and invalidates the capacity contract, how does LSE1 know its 20 MW of local attribute is no longer valid? In addition, LSE2 is out of the business and no longer serves its load and, therefore, another LSE (LSE3) picks up the load. LSE3's load forecast would increase and need to cover the additional RAR by picking up another 80 MW of capacity. Thus, what happens to the 20 MW of attribute originally assigned to LSE1? It appears to be unaccounted for unless there is a tracking, notification and replacement obligation to recover the lost 20 MW. Unless there is a replacement obligation, then the physical resource with the original capacity contract no longer has a RA must-offer requirement, in total or in part, and depending on what regulatory mechanisms are available to the CAISO, reliability may be impacted.

The transfer payment mechanism could assist in balancing the Local RAR among the LSEs. As long as the overall MW amount for each local area is met, the CAISO recognizes that no penalty would be necessary. However, if the MW requirement is still short after the allocation of the local attribute, the costs of the CAISO's backstop procurement should be assessed to those LSEs who are short in that local area. Thus, the

CAISO would need from the CPUC a final and publicly available report indicating the deficient LSEs for allocation of backstop costs, as appropriate.

As stated in the Staff Report, “The purpose of a Local RAR program is to ensure sufficient local generation capacity is contracted for and is available to the California Independent System Operator (CAISO) to meet local reliability needs.”⁶ A transfer payment mechanism that allows administratively set payments to meet the local obligation will not incent the development of new resources within the local areas. Therefore, a transfer payment mechanism must be temporary and is only appropriate (given product details fleshed out) until other market-based mechanisms are developed that allow for the efficient trade and transfer of real capacity.

I.B.9. Enforcement and Penalties for Failure to Meet System or Local RAR Obligations

The CAISO generally supports the staff position on the nature and application of penalties and the proposal to draft a General Order to develop enforcement protocols. As indicated in the Commission Staff Report, penalties are necessary to deter non-compliance with the Local RAR program and can help prevent reliance on CAISO backstop procurement. Furthermore, if appropriately designed and applied, penalties should create an incentive for parties to engage in bi-lateral contracts to meet their Local RAR.

The CAISO understands the CPUC’s limitations in changing State statutes, but nonetheless, the CAISO would like to see penalty amounts defray the cost of any backstop procurement.

⁶ *Local Resource Adequacy Requirements Phase 1 Staff Report*, 10 Apr. 2006, p. 5.

I.B.10. Market Power

The Staff Report indicates that market power is an inherent problem within the local areas where a high percentage of installed generation is necessary to meet local reliability and/or there is a high concentration of ownership of the available generation capacity needed to meet local reliability requirements. In addition, as noted in the Staff Report, while FERC has jurisdiction over market power mitigation, the best means within the Commission's jurisdiction for managing market power are long-term contracts and additional transmission infrastructure.

The Staff Report proposes that the CAISO's backstop procurement role will adequately address the issue of market power during the transition period to a fully implemented RA program along with implementation of MRTU. Specifically, staff indicates that it "looks to an appropriately designed CAISO backstop procurement mechanism to address market power concerns on an interim, or perhaps longer, basis."⁷ While the CAISO agrees that the CAISO's backstop procurement ability may be utilized to help address the issue of local market power during this transition period, the CAISO cautions that backstop authority granted to the CAISO is intended to be used on a limited basis and not as a substitute for bi-lateral contracting.

Similarly, while MRTU incorporates some market power mitigation features, the overall MRTU design relies on a foundation of sufficient capacity procurement through resource adequacy and long-term contracting for a majority of the LSEs' energy needs. Thus, the CAISO cautions against relying on the CAISO's backstop procurement authority and MRTU market power mitigation features as market power safety nets. The

⁷ *Local Resource Adequacy Requirements Phase 1 Staff Report*, 10 Apr. 2006, p. 37.

Commission's role in determining the State's resource adequacy and long-term contracting requirements play a pivotal role in building the foundation upon which the CAISO's own reliability and market power mitigation authority depend.

I.B.11. Waivers

The CAISO is also not a proponent of waivers for many of the same reasons outlined in the Staff Report. The CAISO believes they would be difficult to adjudicate, prone to subjectivity and likely difficult to implement. The practical barriers to an efficient process are substantial. For instance, on what basis are waivers granted or denied and when? What is the review and approval process? What cost allocation mechanism would ensure costs are fairly spread to those entities that don't meet their Local RAR? Due to these concerns, the CAISO would advise the Commission to not support a waiver process; however, should the Commission ultimately consider a waiver, an ex-ante waiver is likely necessary to prevent potentially protracted litigation over the propriety of the imposition of any capacity surcharge.

II. Tradable Capacity Product Issues

II.A. Workshop on March 27, 2006

II.A.1. Issue 1: Forced Outage Impact on Qualifying Capacity

Market participants have consistently stated that market rules must be well-defined and transparent to permit the efficient allocation of transactional risk associated with a standard tradable capacity product. The TCP Report identifies forced outages, testing of generating units, and scheduled outages as potential sources of such risk. Each of these areas is discussed below.

Forced Outages

There are two related, but distinct, consequences of a forced outage on risk allocation and administration of the resource adequacy program: (1) changes to the Net Qualifying Capacity⁸ of a particular generating unit over time and (2) the need to replace forced out Net Qualifying Capacity in any given reporting period(s). To allocate and address these risks, the TCP Report advances the concept of “forced is forced.” Under the “forced is forced” concept, “LSEs may rely on [Net Qualifying Capacity] from such units in their RA compliance filings until the [Net Qualifying Capacity] from that unit is changed (a process that is envisioned to occur once a year). The TCP Report advocates establishing the Net Qualifying Capacity value 90 days prior to the submission of the year-ahead compliance filings, i.e., approximately July 1 of each year. Accordingly, under the forced is forced approach described in the TCP Report, the LSE bears no direct financial risk of a forced outage during the compliance year after the unit has been validated for inclusion in a Resource Adequacy Plan, but for contracts greater than one year, “buyers and sellers of such products would need to incorporate contractual terms which assign the risk for future changes to [Net Qualifying Capacity].”⁹ (TCP Report at 4.)

⁸ Under the CAISO’s Interim Reliability Requirements Tariff, filed on March 13, 2006 (FERC Docket No. ER06-723-000), to be effective prior to the implementation of the Market Redesign and Technology Upgrade project (“MRTU”), and under the proposed MRTU Tariff, filed February 3, 2006 (FERC Docket No. ER06-615-000), Qualifying Capacity is the “beginning,” or maximum capacity that a resource can provide. However, Qualifying Capacity may be modified, in accordance with Commission decisions, by other factors to derive Net Qualifying Capacity. These other factors include performance standards (MRTU Tariff), deliverability, and testing. It is Net Qualifying Capacity that must be reported on an LSE’s Resource Adequacy Plan.

⁹ All workshop participants, and the TCP Report, agree that forced is forced, without more, jeopardizes system reliability. It does so by eliminating any incentive for resource owners to maximize availability and by creating an incentive for load serving entities to procure unreliable and, therefore, less expensive capacity. Thus, forced is forced will negatively effect operational reliability in two ways: (1) by degrading the quality of the generation fleet over time and (2) by foreclosing any obligation to replace capacity that becomes unavailable even for protracted periods. The Commission must address both of

The CAISO can generally support the TCP Report's treatment of forced is forced with respect to how performance standards may impact Net Qualifying Capacity over time. However, the CAISO recommends that the Commission presently augment the forced is forced proposal by imposing a reasonable obligation on LSEs to replace capacity forced out-of-service for protracted periods as discussed below.

1. Performance Standards

The TCP Report correctly notes that in D.05-10-042 the Commission assigned the CAISO the responsibility of developing performance standards that would be applied in calculating the quantity of capacity eligible to count towards satisfaction of the Commission's resource adequacy requirements. In this regard, and contrary to the apparent implication in the TCP Report, the quantity of capacity that LSEs can count on their Resource Adequacy Plans will ultimately be a "function of availability." The CAISO is committed to establishing performance standards that tie a supplier's availability, i.e., the absence of forced outages, with the quantity of capacity it may sell for resource adequacy purposes. In fact, the CAISO filed its MRTU tariff with language that indicates it plans to establish these requirements as an element of Net Qualifying Capacity. Moreover, the CAISO has put resource owners on notice that their current operational data can be collected and used in the initial application of such performance standards. The CAISO therefore anticipates commencing a stakeholder process to develop such performance standards. The Commission should reiterate its support for such an effort and the importance of performance standards within the overall context of its Resource Adequacy program.

these consequences by confirming the need for well-considered performance standards developed by the CAISO and adopting a reasonable replacement obligation as discussed below.

However, prior to a clear-definition of those standards, the CAISO understands that parties will be transacting without perfect knowledge. Accordingly, the CAISO agrees with the TCP Report that for an interim period the Net Qualifying Capacity should be held constant during any one particular compliance year and that such value may be established 90 days before the year-ahead compliance filing is due. As a practical matter, given that such standards are unlikely to be developed and implemented prior to July 1, 2006, Net Qualifying Capacity for 2007 will not be affected by performance metrics. The CAISO also notes that this annual approach should be interim not only to allow the Commission to gain experience with the impact of forced outages on its resource adequacy program, but also until, and if, any liquid, transparent capacity market is developed. A capacity market would allow modification of Net Qualifying Capacity on a more frequent basis because a mechanism would exist to readily procure increments of capacity as well as transparently price that replacement capacity. By having a liquid market with a transparent price, it is relatively simple for transacting parties to allocate the risk and account for the cost changes to Net Qualifying Capacity.

Moreover, as noted above, the potential negative impact of deferring the implementation of performance standards on supplier incentives to adequately maintain generating units until compliance year 2008 is mitigated by the CAISO's notification, that it may utilize current outage information in adjusting Net Qualifying Capacity upon commencement of implementation of performance standards. The Commission should expressly support this approach. In addition, LSEs remain free to include availability metrics in negotiated bilateral contracts in the interim.

2. Replacement Obligation

As noted, the CAISO believes the Commission should impose a reasonable obligation on LSEs to replace capacity subject to prolonged forced outages. The replacement obligation implicates two risks – financial risk and reliability risk. The SCE-proposed concept of a firm and contingency product addresses the financial risk by allocating the risk between the contracting parties, but this financial risk is contingent upon the Commission establishing a replacement obligation in the first instance to supplement any future performance standards. As the system operator, the CAISO is concerned with the reliability risk resulting from the loss of relied-upon capacity as well as the potential cost transfers related to addressing the reliability needs. This is especially true prior to the implementation of performance standards. But performance standards alone will not fully address the reliability concerns that arise following an actual catastrophic outage.

Indeed, the workshop participants recognized that the forced is forced policy may lead to absurd results where, for instance, a unit suffers a catastrophic mechanic failure and the owner subsequently determines it is uneconomic to remedy the failure. That unit, despite being essentially retired, will continue to count toward the load serving entity's obligation for the remaining term of the compliance year under the forced is forced description advanced by the TCP Report. The CAISO believes this outcome is anathema to the reliability goals underlying resource adequacy and therefore urges the Commission to impose a reasonable replacement obligation on LSEs.

The CAISO's proposed replacement obligation attempts to balance the CAISO's need for capacity to reliably operate the grid with an LSE's legitimate concerns regarding

the ability to enter into replacement transactions in the absence of a capacity market and under the current regulatory rules. Specifically, the CAISO proposes that if a unit is forced out in month T-0 and that outage is expected to last for at least seven (7) days into month T-3, the capacity must be replaced for T-3 and for any remaining period of its outage. For example, assume, a unit breaks down in at any time in June (T-0) and it is expected to remain out of service to September 8 (T-3), the capacity would need to be replaced in the LSE's compliance showing for September. Given that the showing for September will occur on the last business day in the month of July, the LSE will have between approximately 30 and 60 days to procure the replacement capacity. The CAISO believes this is reasonable. This is especially true given that the replacement obligation is likely to be of relatively short duration (the unit has already been under repair for potentially up to 90 days). Under D.04-12-048, the IOUs are authorized to bilaterally negotiate capacity transactions of up to three months or one quarter in duration with delivery beginning less than 90 days forward.¹⁰

In order to implement this obligation, any tradable capacity product must include a term that requires the supplier to inform the purchasing LSE of its outage as well as abide by the CAISO's Tariff provisions regarding reporting forced outages. (See, § 9.3.10.5). The CAISO Tariff requires the Operator of a Participating Generator to report a forced outage within 48 hours of the outage, the nature of the outage, the intended remedial actions, and estimated duration to complete the repairs. (See also, § 37.4.3 [\$500 fine for each day report is late].)

¹⁰ D.04-12-048 (Dec. 20, 2004) at pp. 100-102.

It should be evident from the foregoing that the CAISO's proposal requires accurate reporting by suppliers. The outage coordination report is subject to the CAISO's Enforcement Protocol, which requires timely, accurate and factual data reporting. (See, § 37.5.) To the extent the CAISO finds that its Enforcement Protocol provides an insufficient deterrent to gaming or manipulation by suppliers and LSEs, it will seek additional authority to mitigate such false or "under" reporting, including penalties and/or cost allocation provisions as to any capacity replacement costs that may be incurred by the CAISO.

The CAISO further notes that a replacement obligation, in part, mitigates potentially undesirable cost implications of the forced is forced policy. In the near term, the CAISO will likely possess tools that can help address, to some degree, the reliability concerns caused by the prolonged loss of capacity included in a LSE's Resource Adequacy Plan. Under the CAISO's proposed Reliability Capacity Services Tariff ("RCST"), for example, the CAISO will continue to possess authority to commit resources through the FERC Must-Offer Waiver Denial ("MOWD") process, but with an additional capacity payment element. Thus, if the CAISO needs capacity on a day-ahead basis to reliably operate the system, the CAISO has a mechanism to secure resources.

The proposed RCST settlement allows for the CAISO to utilize the MOWD process to commit resources currently available under the FERC MOO. In addition to appropriate minimum load cost compensation, the committed unit will receive a capacity payment equal to 1/17 the monthly RCST capacity rate. If a unit is subject to four MOWD, the CAISO is expected to review the need for this resource and may designate that unit a RCST resource for a term of three months. However, the absence of an

effective replacement obligation has the potential effect of transferring the cost of maintaining reliability from the load serving entity contracting with the unavailable resource to other load serving entities that continue to make sufficient resources available to the CAISO. This is because, under a forced is forced approach, the LSE contracting for the unavailable resource will remain in compliance with its resource adequacy obligations and no basis would exist to assign costs to such LSE.

Under its terms, RCST expires the earlier of December 31, 2007 or the date of implementation of the CAISO's MRTU. Under MRTU, no must-offer obligation other than that imposed through the resource adequacy policies of the Commission and other Local Regulatory Authorities will exist. To the extent resource adequacy capacity is insufficient to meet demand and operating reserve requirements, MRTU relies on price incentives to attract resources. For instance, the universe of resources available through the CAISO's Residual Unit Commitment process is limited to those resources that bid into the Integrated Forward Market. Accordingly, to the extent price signals are insufficient to encourage participation in the CAISO's markets, non-resource adequacy resources may not be available. Thus, maintaining an adequate level of resource adequacy capacity is important to both ensure sufficient resources are available and that such resources are participating in the CAISO's market at prices unaffected by spot-market volatility.

Scheduled Outages

The CAISO does not object to the proposal regarding treatment of scheduled outages. In part, this acquiescence rests on the reality that the CAISO maintains the

discretion to accept or deny any particular request for a scheduled outage. (CAISO Tariff § 9.3.2.)

Testing

The CAISO does not currently contemplate that testing will be performed on a regular schedule or uniform basis. The CAISO envisions using its testing authority to prevent and deter materially inaccurate claims of Qualifying Capacity using the formulas developed by the Commission. As such, LSEs transacting for capacity can protect themselves from risk associated with testing both through pre-contracting due diligence as well as assigning the financial consequence of a supplier's inaccurate submission of Qualifying Capacity to the supplier. Should the CAISO's testing program become more regularized, and again prior to any possible implementation of a capacity market, the CAISO recognizes that it should be consistent in timing with other conditions on Qualifying Capacity, such as the deliverability assessment.

II.A.2. Issue 2: Derates and Qualifying Capacity

See answers to II.A.1 above.

II.A.3. Issue 3: Penalties for Non-Performance

The CAISO strongly disagrees with the suggestion that penalties for LSE failure to procure should be removed from the Commission's resource adequacy program. The Commission and the CAISO concur that one objective of resource adequacy is to reestablish LSEs as primarily responsible for meeting customer and system needs. As such, there is a necessary interdependence between LSE procurement incentives and any necessary backstop procurement mechanism employed by the CAISO. Simply put,

efforts should be taken to ensure that the CAISO's backstop mechanism generally is not more attractive than LSE bilateral procurement.¹¹

That said, the CAISO suggests that utilization of the CAISO's RCST capacity cost as a basis for resource adequacy penalty values is logical and efficient. The RCST capacity value is appropriately intended to reflect the annual carrying cost of proxy unit less market revenues. The RCST capacity value is based on the following characteristics:

(1) an annual capacity payment of seventy-three dollars per kilowatt-year (\$73/kW-yr); (2) an Availability Factor of ninety-five percent (95%); (3) a heat rate of 10,500 BTU/kWh; (4) variable operations and maintenance costs of \$3.16/MWh, based on the EIA AEO Electricity Market Module Assumptions; (5) a NOx emissions rate of .009 lb/MMBTU (.0945 lb/MWh) at a price of \$7.50/lb or \$0.71/MWhr of variable cost adder; and (6) a daily gas price based on Equation C1-8 (Gas) of the Schedules to the Reliability Must Run Contract for the relevant Service Area (San Diego Gas & Electric Company, Southern California Gas Company or Pacific Gas & Electric Company), or, if the resource is not served from one of those three Service Areas, then from the nearest of those Service Areas.

In order to prevent reliance on the RCST mechanism, the CAISO believes it is appropriate for the Commission to apply some multiplier to the RCST value. This multiplier could be, for example, anywhere from 1.1 to 3 times the base RCST value.

¹¹ The CAISO recognizes that its backstop mechanism is appropriately used under circumstances where market power has been exercised or competitive outcomes have otherwise not occurred.

Finally, the CAISO agrees with the statement in the TCP Report that “the CPUC should clarify that an LSE’s obligation ends at the year-ahead and month-ahead showings, and that failure to meet the requirements of such showings will result in the assessment of penalties by the CPUC, while Scheduling Coordinators will be assessed penalties by the CAISO for failure to adhere to the must-offer obligations placed upon RA resources.” (TCP Report at 7.)

II.A.4. Issue 4: Maintenance and Repair Obligations

The CAISO does not currently have a position on this issue, but reserves the right to comment on maintenance and repair obligations as opportunities may arise in this proceeding.

II.A.5. Issue 5: Bulletin Board and Centralized Title Clearing

The CAISO agrees with the TCP Report’s statements regarding the value of bulletin boards and the need for further exploration into the appropriate and most useful structure of such tools.

II.A.6. Issue 6: Clarity on Import Requirements

As noted in the TCP Report, the issue of whether the must-offer obligation is applicable to imports is the subject of SCE’s pending Petition to Modify D.05-10-042. The CAISO submitted comments and reply comments addressing this issue. Rather than repeat those comments here, the CAISO incorporates those comments herein.¹²

The CAISO questions the need to address import allocation rules in order to develop a tradable capacity product. Nevertheless, the CAISO welcomes any refinements the Commission may elect to pursue with respect to how import capacity is

¹² Those documents can be found at <http://www.caiso.com/docs/2004/07/06/2004070610241317725.html>.

allocated to CPUC-jurisdictional LSEs. The CAISO has stated its intention to accommodate Commission allocation rules within its Tariff. However, given that the import deliverability assessment reflects the physical realities of the grid and maintenance of reliable grid operations, the CAISO must ensure that any accommodation of Commission resource adequacy rules is just and reasonable to all CAISO market participants. As such, issues related to the “size of the import allocation” and the treatment of non-CPUC jurisdictional LSEs for import deliverability purposes are currently pending at FERC under the CAISO’s Interim Reliability Requirements Tariff filing in FERC Docket No. ER06-723-000 (“IRR Tariff”). The CAISO suggests, therefore, that the Commission defer any significant changes to its import allocation rules until after FERC has provided guidance on the IRR Tariff, which is anticipated for May 2006.

II.A.7. Issue 7: Creditworthiness

The CAISO does not currently have a position on this issue, but reserves the right to comment on creditworthiness as opportunities may arise in this proceeding.

II.A.8. Issue 8: Intermediaries

The CAISO does not currently have a position on this issue, but reserves the right to comment on intermediaries as opportunities may arise in this proceeding.

II.A.9. Issue 9: Pooling of Assets and Substitution

The TCP Report accurately reflects the CAISO’s position at the workshop. The CAISO appreciates the significance of this issue to both suppliers and purchasers. As such, the CAISO presently intends to carefully review the input of other workshop participants on this topic and provide a reply.

II.A.10 Issue 10: Regulatory Uncertainty

The TCP Report states that “[g]iven market design uncertainties at the CAISO, some generators may believe that they do not have an obligation to perform if they do not receive adequate compensation for Ancillary Services or Energy from the CAISO.” (TCP Report at 13.) The CAISO intends that its market structures be compensatory to suppliers, while capturing the efficiencies of competition for California electricity consumers. To the extent a supplier believes the CAISO’s markets do not allow achievement of this goal, the CAISO remains willing to work with the supplier community and other stakeholders to remedy any perceived deficiency. If the any supplier continues to feel that any CAISO rate, term or condition is unjust and unreasonable, it may seek redress at FERC, but it is inappropriate for any supplier to unilaterally refuse to perform an obligation set forth in the CAISO Tariff.

III. Implementation Issues

III. A. Filing Guide and Templates

No comment

III. B. Maximum Cumulative Capacity Buckets

No comment

III. C. Accounting for Transmission Losses

The CAISO would advise the Commission not to change its position regarding the treatment of transmission losses and stick with the current and simplifying assumption of a 3% adder. In the CAISO’s opinion, the SCE proposal is convoluted and would provide little benefit relative to the additional complexity and burden involved.

III. D. Process for Resolving Discrepancies

In response to stakeholder comments, the CAISO attempted to clarify in its IRR Tariff some basic parameters of its role in resolving discrepancies arising from the submission by any LSE of its Resource Adequacy Plans. Proposed Section 40.2.3 of the IRR Tariff provides, in pertinent part:

If a Scheduling Coordinator for a Load Serving Entity submits a Resource Adequacy Plan that the ISO identifies as not demonstrating compliance with Resource Adequacy rules adopted by the CPUC or other Local Regulatory Authority, as applicable, the ISO will first notify the relevant Scheduling Coordinator, or in the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), the relevant Scheduling Coordinators, and attempt to resolve the issue. If this process does not resolve the ISO's concern, the ISO will notify the CPUC or other appropriate Local Regulatory Authority of the potential deficiency. To the extent that the CPUC or other appropriate Local Regulatory Authority allows Load Serving Entities under its jurisdiction to cure the identified deficiency or determines that no deficiency exists, the Scheduling Coordinator shall inform the ISO at least 10 days before the effective month. If the deficiency is not resolved prior to the 10th day before the effective month, the CAISO will use the information contained in the Supply Plan to set Resource Adequacy Resources' obligations under this section of the ISO Tariff for the applicable reporting month.

According to the preference expressed by market participants, the CAISO's proposal seeks to obtain resolution of discrepancies informally between Scheduling Coordinators before referring the matter to the Commission. Once referred to the Commission, the CAISO allows the Commission to resolve the discrepancy, if any. In order for the CAISO to have sufficient time to perform its necessary system configurations for the upcoming compliance month, the CAISO requests that information on the outcome of the matter be communicated at least 10 days before the effective month. The CAISO respectfully requests that the Commission consider this timing requirement in developing its own dispute resolution procedures.

IV. Other Issues

IV. A. The Commission Should Consider the Appropriate Mix of Resources

The CAISO would like to point out to the Commission that an important component to local area reliability is consideration of the overall resource mix in the load pockets, including the type of resources that can start within the time that operating standards allow operation within the emergency ratings of transmission facilities. For instance, having quick-start capable resources in transmission-constrained load pockets can help replenish the capacity and energy lost due to an unexpected loss of a generating unit or transmission facility.¹³ Alternatively, the CAISO may have to consistently run long-start resources to respond to a potential contingency in a timely manner. Thus, quick-start capable resources provide the value that they can prevent load shedding as a result of a contingency while also avoiding having uneconomic long-start units committed for system protection. If quick start capable units are available in the load pockets, then the commitment of long-start units could be avoided and their associated start-up and minimum load uplift costs potentially reduced or eliminated.

The CAISO encourages the Commission to incorporate this important topic as part of the dialogue in the resource adequacy and long-term procurement proceedings and discuss ways to incent the development of the appropriate mix of resources within transmission-constrained areas.

¹³ This is particularly critical in areas where cheaper generation exists outside the load pocket. In these instances, the transmission import capability into the load pocket is likely fully utilized to import the cheaper energy into the load pocket. Any sudden loss of generation within the load pocket will need to be replaced by quick-start capable units as the tie lines are likely fully utilized, particularly during peak or near-peak conditions.

III. B. Recommendation Regarding the Appropriate Applicable Reliability Criteria

Given the CAISO's understanding of the CPUC's responsibility to maintain service reliability, the CAISO strongly recommends the Commission establish, as a matter of precedent, an LCR that incorporates Performance Criteria- Category C¹⁴ as the appropriate applicable reliability criteria with the incorporation of suitable operational solutions. The CAISO would advise the Commission to reject any policy or standard that would counter the laudable goal of "resource adequacy" and erode service reliability. The CAISO's concern is that adopting a lower standard, like Performance Criteria- Category B, which may require pre-contingency load shedding, or over-relying on operational schemes that incorporate load shedding, is counter-productive politically, difficult to explain to the public, and likely, very costly based on the value of load loss (public safety, lost wages, productivity, etc.). Load-shedding schemes may play a role in limited circumstances; however, load shedding should never be a casual option. Again, recognizing the important decision the Commission must make, the CAISO intends to provide sufficient details and guidance in its LCR Study to help the Commission make this important decision, find that balance and confidently make the appropriate choice regarding the robustness of the grid.


¹⁴ Category C describes system performance that is expected following the loss of two or more system elements. This loss of two elements is generally expected to happen simultaneously. Yet, it is worthy to note that once the "next" element is lost after the first contingency, i.e. a N-1-1 condition, the event is effectively a Category C. Depending on system design and expected system impacts, the controlled interruption of supply to customers (load shedding), the removal from service of certain generators and curtailment of exports may be utilized to maintain grid reliability.

CONCLUSION

The CAISO appreciates the opportunity to work closely with the Commission on this important issue of establishing resource adequacy requirements. As a matter of public policy, the outcome of this proceeding is critical to the consumers and economy of California and to the sustained reliability of the CAISO Controlled Grid. The CAISO is aligned with many of the positions outlined in the Staff Report, and encourages the Commission to consider the CAISO's input and guidance in those areas where we are not aligned or additional details need to be considered.

April 21, 2006

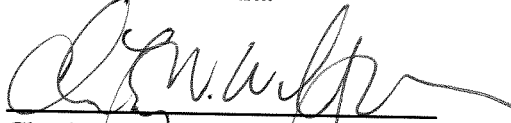
Respectfully Submitted:

By: 
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California Independent System Operator

CERTIFICATE OF SERVICE

I hereby certify that I have served, by electronic and United States mail,
Comments of The California Independent System Operator Corporation on the Local
Resource Adequacy Requirement Phase 1 Staff Report in Docket No. R.05-12-013.

Executed on April 21, 2006, at Folsom, California.



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