

**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)	
<hr/>)	

**COMMENTS OF THE
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION
ON THE MAY 30, 2006
DRAFT DECISION**

Charles F. Robinson, General Counsel
Grant A. Rosenblum, Regulatory Counsel
Judith B. Sanders, Regulatory Counsel
California Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
Telephone: 916-351-4400
Facsimile: 916-351-2350

Attorneys for the
California Independent System Operator

Dated: June 19, 2006

**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)	

**COMMENTS OF THE
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION
ON THE MAY 30, 2006
DRAFT DECISION**

In accordance with Rules 77.2, 77.3 and 77.4 of the Commission’s Rules of Practice and Procedure, the California Independent System Operator Corporation (“CAISO”) respectfully submits its comments on Administrative Law Judge (“ALJ”) Wetzell’s draft decision entitled “Opinion on Local Resource Adequacy Requirements,” mailed May 30, 2006, in the above-referenced proceeding (“Draft Decision”).

I. INTRODUCTION AND OVERVIEW

The Draft Decision characterizes itself as “another step towards full implementation of resource adequacy requirements.” (Draft Decision at 2.) This understates the Draft Decision’s importance. Local capacity requirements lie at the foundation of the resource adequacy’s core objective - “assuring sufficient capacity is available when and where it is needed.”¹ The CAISO therefore strongly agrees with the Draft Decision that the time for Commission action is now and that any further delay in adopting and implementing local capacity requirements will jeopardize achievement of the Commission’s fundamental goals for the resource adequacy program.

The CAISO commends ALJ Wetzell and Commission staff for their leadership in developing meaningful local capacity requirements. In this regard, the CAISO supports many of the basic elements of the Draft Decision. Nonetheless, there are certain items for which the CAISO suggests modifications or refinements. Each of these topics is

¹ D.05-10-042 at 7.

discussed further below and proposed changes to the Draft Decision are set forth in Attachment A.

II. COMMENTS AND PROPOSED REVISIONS TO THE DRAFT DECISION

A. The Commission Should Adopt a Stable Reliability Service Level, While Preserving the Ability to Reassess and Refine How the Reliability Service Level Should Be Achieved.

The CAISO's LCR study provided the Commission with capacity level "options" that reflect different grid and service reliability levels. The different grid reliability levels correspond to specific performance criteria for the integrated transmission grid that the CAISO must satisfy under both California statute and its FERC-approved Tariff. The Draft Decision adopted Option 2 as "the appropriate reliability level for establishing LSEs' local procurement obligations for 2007." (Draft Decision at 21.) The CAISO supports this conclusion. However, the CAISO disagrees with the Draft Decision's refusal to select Option 2's underlying grid reliability level as the basis for local capacity obligations going forward. The Draft Decision's trepidation creates unnecessary uncertainty surrounding procurement of local resources and, more importantly, appears to be founded in confusion between the role of the target service and grid reliability level and how to determine or reach those target levels.

The Draft Decision states that it "would prefer to have better quantitative information at our disposal regarding the probabilities of operational events as well as information regarding the ratepayer and societal costs of service interruptions." (Draft Decision at 19-20.) The CAISO agrees and therefore supports the Commission's desire to develop a probabilistic approach to determining capacity requirements based on a "loss of load probability" analysis. However, the development of a probabilistic approach is not a small undertaking and is likely to require several years of data collection and analysis. Prior to this time, the continued use of Option 2 reflected in the LCR study is appropriate.

This follows from a comparison between Option 2 and the available alternatives. The CAISO admits that Option 3 is unnecessarily conservative, since it ignores operational solutions. Acceptable operating solutions should be accounted for and

incorporated in LCR determinations, as is the case in Option 2. The other alternative is Option 1. As noted in the Draft Decision, Option 1 corresponds to NERC Category B, which requires sufficient local generation capacity to ensure the grid can meet specified standards after any single contingency (N-1) without involuntary load interruption. The Draft Decision correctly recognized that Option 1 relies solely on load interruption to address any system contingency after the loss of the first transmission element. In this regard, the Draft Decision also acknowledged that “[n]o party has presented information that would lead us to conclude that the risk of such interruptions [under Option 1] is acceptable.” (Draft Decision at 21.) The risk is unknown precisely because the CAISO Control Area is, and has been since before its inception, operated consistent with Option 2’s underlying service reliability level. Thus, the adoption of Option 1 will, to some admittedly unknown degree, result in anticipated reliability lower than that currently enjoyed by customers of CPUC jurisdictional LSEs.

While the risk associated with the lower level of grid reliability is unknown, the additional cost of the enhanced reliability is quantifiable. The Draft Decision recites that the difference in LCRs under Option 1 and Option 2 is about 5%. The Draft Decision concluded that in light of the uncertainty associated with the risk of interruptions under Option 1, the “procurement of an additional 5% of needed capacity to be reasonable.” (Draft Decision at 21.) Significantly, if procurement of additional capacity is reasonable now, it will only become more so in the future. This is because feasible alternative operating solutions to reduce capacity requirements will be evaluated on an annual basis through the CAISO’s grid planning process and incorporated into future LCR studies. Indeed, the Draft Decision does not appear to consider this reality because of some apparent confusion over the target grid reliability level reflected in Option 2 and the means of satisfying Option 2.

As noted, NERC Category C can be satisfied with an array of tools, including involuntary interruption of load. The Draft Decision expressly contemplates, and, as noted, the CAISO supports, ongoing efforts to develop transmission-related or other suitable operational solutions to decrease the quantity of local capacity that must be procured. Thus, the adoption of Option 2 does not presuppose a particular level of capacity and permits the Commission, through its authority over the service level

received by jurisdictional customers, to deliberately and thoughtfully select solutions that result in converging the capacity levels required to comply with Options 1 and 2.

Based on the foregoing, the CAISO would recommend modifying the Draft Decision in the manner set forth in Appendix A to extend adoption of Option 2 beyond 2007.

B. The CAISO, As The Independent Grid Operator, Is Ideally Suited To Conduct The Local Capacity Requirements (LCR) Studies Necessary On An Ongoing Basis To Determine Local Procurement Obligations.

As the draft decision aptly recognizes, the 2007 LCR study is the cornerstone for the establishment of 2007 local generation requirements, and the Commission must, of necessity, be assured that the process by which the study is conducted is reasonable (Draft Decision at 14). In light of the time constraints created by the need for study results and a final decision in Phase I by late June, 2006, that process was made as transparent as possible through the “meet and confer” conference, established to define input assumptions, and the stakeholder workshop following submission of the study on April 21. Thus, the Commission’s comments on the same page of the draft decision and in paragraph 5 of the ordering language on page 75—that the use of a third party to conduct future LCR studies “may merit consideration in future proceedings”—are both discouraging and misplaced. Furthermore, the CAISO has the statutory obligation to plan and operate the system to a reliability level that is no less stringent than that required by NERC/WECC. Indeed, it is doubtful that any third party organization has both the data and the expertise necessary to conduct LCR studies. As tacitly acknowledged by the Draft Decision, the CAISO has a familiarity with operational requirements across the transmission network footprint that no other party would be capable of duplicating. Thus, the confidence the CAISO could lend a third party study is uncertain and the applicability of the results would be unclear. Therefore, the CAISO submits that hiring a “third party” to conduct such studies is not only unnecessary but certainly contradicts the fundamental premise that the CAISO, as the *independent* transmission grid operator, is the “third party” created and uniquely qualified to fulfill this role. By leaving the matter open for discussion in upcoming proceedings, the Commission creates uncertainty that will undercut the CAISO’s efforts in this regard. For this reason, the CAISO

respectfully requests that the draft decision be modified and the notion that a different party be hired to conduct future studies be rejected outright in the final decision.

The CAISO notes that certain parties requested a technical “peer review” of the 2007 LCR study.² It goes without saying that stakeholders are free (and are encouraged) to conduct any type of review of the LCR studies that they feel is necessary for understanding or clarification of the methodology, inputs or assumptions. As discussed herein and in the following sections, the CAISO does not object to the follow-up workshop in July to further review the 2007 LCR study as addressed in the Draft Decision, and opportunities for stakeholder review and comment have been specifically included in the proposed schedules for the 2008 LCR study and the integrated 2008 LCR study/Grid Planning Process. However, the CAISO would caution the Commission against implementing a lengthy and cumbersome adversarial-style review process that could cause delays in meeting deadlines in the upcoming schedules for 2008 and beyond. It is the CAISO’s hope that the LCR study and local RAR procurement process will become more streamlined as we move into the future, and not continually bogged down with months of analysis and debate.

For all of these reasons, the CAISO proposes that the second full paragraph on page 14 of the draft decision be rewritten as set forth in Attachment A.

C. The LCR/Local RAR Schedule For 2008 Should Be Modified.

The draft decision outlines a 2008 LCR Study process and schedule. (Draft Decision at 30). The CAISO has two suggested modifications to that schedule that will coordinate the 2008 LCR Study process with both the year-end holidays and other activities being conducted by the CAISO. The Draft Decision proposes the CAISO begin the LCR Study in December 2006 and produce the 2008 LCR Study by February 5, 2007. The CAISO requires 8 to 10 weeks to perform the LCR Study. The CAISO is concerned about its ability to timely deliver the 2008 LCR Study because the study process is proposed to begin in December 2006 during the holiday season when the CAISO will also be engaged in evaluating any RCST backstop procurement needs. Given these concerns, the CAISO suggests the following minor schedule modifications to better

² See, e.g., the May 3, 2006 Reply Comments of CMUA.

accommodate these personnel constraints by providing an additional two (2) weeks to perform the analysis during the month of February:

LCR/Local RAR Schedule for 2008 (Modified)

December 1, 2006	PTOs submit base cases to CAISO
February 19, 2007	CAISO releases 2008 LCR study
February 27, 2007	CAISO hosts meeting on LCR study
March 16, 2007	Parties comment on 2008 LCR study
May 2007	Commission reviews CAISO's 2008 LCR study and adopts Local RAR for 2008
May 2007	Commission allocates 2008 Local RAR to all LSEs
October 1, 2007	LSEs file Local RAR showing and "Year-Ahead" System RAR
November 1, 2007	CAISO analyzes demonstrations for "residual" needs due to effectiveness factors and reports back to LSEs
December 3, 2007	LSEs demonstrate any additional procurement of "residual" through revised Local RAR, year ahead System RAR, and even December 2007 monthly System RAR, after which time the CAISO may engage in backstop procurement to resolve Local RAR deficiencies. (Date could be adjusted to coincide with monthly showing date.)

If RMR remains in 2008, like 2007, the CPUC will need to accommodate and again integrate the LCR procurement and showing process with the RMR process. Similar to the schedule to accommodate RMR as outlined in the Draft Decision, the CPUC would require LSEs to make a preliminary showing of capacity procured from 2008 RMR candidate units, allowing the CAISO to evaluate and potentially forego RMR contracts on those units that have been fully procured under a resource adequacy obligation. To accommodate this evaluation and to allow the CPUC to allocate any final RMR designated capacity to its LSEs, the final annual showing would need to be moved to the end of October 2007. Thus, the CPUC should consider potential RMR process impacts when determining the final schedule for the 2008 LCR showing.

Alternatively, the CAISO has repeatedly stated in its filings in this proceeding that the LCR Study needs to be woven into and be in sync with the Grid Planning Process. This is the CAISO's preference. The above "modified" schedule will need further refinement if we are to achieve this goal beginning with the 2008 LCR Study.

The PTOs' goal is to conclude their transmission expansion plans by the end of the year; however, the process has often extended into March and April. Additionally,

the CAISO historically does not receive the updated load forecasts or base cases from the PTOs until the end of the first quarter. Thus if the Commission were to maintain the above “modified” schedule, it will need to significantly modify it again when the PTOs provide this critical input information to the CAISO; otherwise as a consequence, the 2008 LCR Study would have to be based on the 2007 load forecast.

As a compromise proposal, the CAISO suggests and prefers the following “Grid Planning Process” schedule that better accommodates the timelines for historic PTO grid planning process deliverables, yet satisfies the CPUC’s objective of allowing LSEs sufficient time for their procurement activity:

LCR/Local RAR Schedule for 2008 (Grid Planning Process)

January 5, 2007	PTOs submit base cases and load forecast to the CAISO
March 9, 2007	CAISO releases 2008 LCR study
March 20, 2007	CAISO hosts meeting on LCR study
April 6, 2007	Parties comment on 2008 LCR study
May 2007	Commission reviews CAISO’s 2008 LCR study and adopts Local RAR for 2008
June 2007	Commission allocates 2008 Local RAR to all LSEs
October 1, 2007	LSEs file Local RAR showing and “Year-Ahead” System RAR
November 1, 2007	CAISO analyzes demonstrations for “residual” needs due to effectiveness factors and reports back to LSEs
December 3, 2007	LSEs demonstrate any additional procurement of “residual” through revised Local RAR, year ahead System RAR, and even December 2007 monthly System RAR, after which time the CAISO may engage in backstop procurement to resolve Local RAR deficiencies. (Date could be adjusted to coincide with monthly showing date.)

Given the shared objective to produce an accurate LCR Study that is based on the best available information and a process that maximizes the time allowed for RA capacity procurement as well as stakeholder input, it will be critical for the Commission to ensure that deliverables are provided timely and as scheduled.

D. An Additional Workshop on the 2007 LCR Study is Acceptable

The Draft Decision requires an additional workshop be held on the 2007 LCR Study to “determine whether any opportunity exists to make corrections or adjustments to avoid local area generation procurement...” (Draft Decision at 16.) The CAISO can

support this process, however, the CAISO needs to know when this workshop would occur and recommends July 21st. At this time, the CAISO is not aware of any additional proposed operational solutions or refinements. However, the Commission should note that it takes the CAISO typically two to three weeks to assess the affect on the locational capacity requirements for any newly proposed operational solution. Should the PTOs provide any additional proposed operational solutions or refinements, the CPUC must provide the CAISO sufficient time (2 to 3 weeks) to evaluate these proposals, if any exist. Thus, any proposed operational solutions would have to be submitted immediately following the final decision, i.e. by no later than July 3, 2006, if the workshop contemplated for the later part of July is to view the results.

E. The \$40 Per KWH-Year Capacity Price For RCST Designated Generation May No Be A Sufficient Trigger For Local RAR Waivers.

The CAISO supports the concept that a penalty and enforcement mechanism be adopted as part of this proceeding in order to promote compliance by the LSEs in meeting local capacity requirements. The CAISO agrees with the Commission that such penalties should be imposed on non-compliant LSEs in addition to the costs of backstop procurement; otherwise, the LSEs would have an incentive to simply rely on the CAISO's backstop authority and frustrate the goals of this proceeding (Draft Decision at 65-68). With respect to the waiver process described in the Draft Decision at pages 70-72, the CAISO continues to have concerns with the waiver process as expressed in its Comments. However, if the Commission believes that a waiver process should be adopted, as discussed in the Draft Decision, it should be done as an interim measure. Furthermore, the CAISO is concerned that the use of \$40 per kWh-year as the trigger for granting local RAR waivers will not be sufficient for achieving the intended purposes.

As the Draft Decision correctly identifies, the \$40 per kW-year trigger/penalty was taken from the Offer of Settlement in *Independent Energy Producers Association v. California System Operator Corporation* FERC Docket No. EL05-146-000 and is derived from the formula established to determine the approximate annual target price for designated capacity pursuant to the CAISO's Reliability Capacity Services Tariff (RCST). The derivation of \$40 per kW-year by subtracting a \$33 per kW-year as a

conservative estimate of Peak Energy Rent (PER) from the \$73 per kW-year capacity price agreed upon in the Settlement, provides a reasonable ballpark estimate of capacity costs for new capacity, less estimated revenue. Additionally, for the purposes of local RAR procurement, the CAISO believes that \$40 per kW-year provides a sufficient penalty for non-compliance with RAR requirements when added to the LSE's requirement to pay for backstop procurement. (see Draft Decision at 67: "It is our judgment that a penalty equal to 100% of the cost of new capacity is an appropriate penalty for failure of an LSE to meet its local procurement obligation").

However, the CAISO is concerned that the \$40 per kW-year calculation is an insufficient "trigger" for the granting of waivers of local procurement obligations. (Draft Decision at 71). The CAISO recognizes that the waiver process is not automatic and that LSEs must make a demonstration to the Commission that: 1) bids were solicited in good faith, and 2) that no bids for under \$40 per kW-year were received. Nonetheless, it is possible that LSEs will be unable to solicit and obtain bids for less than \$40 per kW-year, and will be able to make satisfactory waiver demonstrations. If a waiver is obtained, the LSE will be subject only to a payment for backstop procurement, which would be \$40 per kW-year, and that figure therefore becomes the "ceiling" price for the LSE's procurement obligation. Therefore, the Commission should take into consideration whether the cost of capacity in a load pocket is actually higher than the \$40 trigger. In other words, there could well be circumstances wherein the waiver should not be granted at the \$40 level, and the LSE should be required to solicit bids at the higher cost before granting a waiver is considered.

In its opening comments on the LCR Workshop Report, the CAISO observed, "[i]n 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."³ The CAISO concludes that a multiplier of the \$40 per kW-year could well strike the best balance. Otherwise, by setting the trigger too low, as the CAISO suspects that it is,

³ Comments of the California Independent System Operator Corporation on the Local Resource Adequacy Requirement Phase I Staff Report, CPUC Docket R.05-12-013 (April 21, 2006) at 23.

backstop procurement will increase. This unintended result can be avoided by evaluating the waiver “trigger” for a particular circumstance.

F. The LCR for Deficient Areas Should Not be Reduced

The CAISO encourages the CPUC to consider alternative language to address the issue of reduced LCRs for those areas that have a deficiency in qualifying capacity resources. (Draft Decision at 21-22) The CAISO is concerned about a policy that could be interpreted as “reduce the LCR such that it always matches the available generation in the local area.” This would be a perverse policy and counter to the Commission’s objectives of having sufficient capacity available when and where needed. The CAISO appreciates the CPUC’s sensitivity to this issue and that the CPUC does “... not intend to continually approve a practice that could undermine this fundamental program objective.” (Draft Decision at 22) However, the CASIO feels a more consistent policy is to not reduce the LCR in 2007, but also do not penalize for the inability to meet the LCR in that deficient area. It is important that the CPUC signal that capacity is needed in a local area above and beyond the area’s available generation. The CAISO’s suggested compromise is to leave the policy intact, but not to create unreasonable compliance and/or penalties for such circumstances for this local procurement cycle.

G. A 1-in-10 Load Forecast Should Have Permanence as a LCR Study Assumption

The Draft Decision appropriately supports the use of a 1-in-10 load forecast for establishing the reliability needs in local areas (Draft Decision at 22-23). However, the CAISO wants to see greater durability and permanence for the use of a 1-in-10 load forecast as a fundamental LCR Study input assumption for future studies as well as the 2007 LCR study. The load forecast assumption for future LCR Studies should not remain as an open issue that is revisited in Phase 2 of this proceeding. To accept anything otherwise results in the misalignment of resource and transmission planning, building in a continual yet preventable bias toward transmission over generation.

Using a 1-in-10 year peak forecast has been an established standard practice among the PTOs for transmission planning studies within California for local areas for determining if and what reinforcement of the transmission system is needed. A 1-in-10

forecast results in a “higher” peak load than does a 1-in-5 year forecast. If resource adequacy requirements are performed on a 1-in-5 load forecast, the resource procurement need would be based on a “lower” peak value when compared to the peak load derived from the 1-in-10 load forecast based transmission studies. As such, “fewer” MWs and, therefore, generation resources would need to be procured to meet the 1-in-5 peak than what would be dictated by the transmission planning studies. Thus, not comparing transmission and generation on an equivalent 1-in-10 year peak load forecast creates a bias toward transmission over resource procurement and that can result in adverse unintended consequences. As a matter of sound public policy, the CAISO strongly encourages the CPUC to be resolute in its support of a 1-in-10 year peak load forecast for future LCR Studies.

H. Dispatchable Demand Response Issues

The CAISO believes it is premature to conclude that dispatchable demand response resources should be allowed to count towards local capacity requirements for 2007. The problem is a practical one resulting from data and study limitations. The CAISO’s LCR study evaluated the effect of specifically located, known generators on particular contingencies during specific load conditions. As the ALJ and Commission Staff are aware, the ultimate capacity requirement is a function of the relative effectiveness of the specific generating resources to remedy the binding constraints or contingencies. The specific location and performance history of the dispatchable demand resources would have to be studied to determine the relative effectiveness of dropping the particular load in mitigating the same binding constraints or contingencies. Simply put, it cannot be assumed that one MW of dispatchable demand response is equivalent to one MW of generation under the LCR study. Therefore, inclusion of dispatchable demand response products under the present conditions could result in under-procurement of local resources.

I. Local Area Aggregation with 50% Local RAR Procurement Limitation In The Greater Bay Area is Counterproductive to Objectives for Resource Adequacy.

The CAISO is concerned that the mantra of market power has usurped the resource adequacy discussion and is shaping LCR policy more so than the original and

worthy objectives of resource adequacy as set forth by the Commission. The notion of aggregating a service territory as diverse and large (territorially) as PG&E's distribution service area (representing 7 out of the 9 local areas identified in the 2007 LCR Study) seems counterproductive and at odds with the Commission's goal of ensuring that capacity is available when and where needed and minimizing reliance on backstop procurement. PG&E's service territory stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east. This represents a significant portion of California, and yet the Draft Decision recommends aggregating the LCR for such a territory because "... (1) significant market power concerns persist and (2) aggregation can mitigate these concerns." (Draft Decision at 36) By aggregating PG&E's service territory to address market power, the Commission effectively mutes any signal indicating where and when capacity is needed, a foundational objective of resource adequacy. The CAISO is sensitive to the issue of market power; however, the CAISO has cause for concern when market power concerns interfere with and alter the overarching objectives of resource adequacy.

Indeed, the Commission should be aware that the proposed market power mitigation package of aggregating local areas is likely to produce perverse incentives. Specifically, generators that are absolutely essential for a particular local area will not accept any contract offer from an LSE below what they believe is the CAISO backstop procurement price. Assuming RCST is the primary backstop and \$40 per kW-year is a reasonable expected payment under RCST, they will insist on no less than this price. Alternatively, LSEs will seek to minimize their bilateral RA procurement costs and will seek to contract with less critical resources that offer a lower price. Thus each LSE is expected to meet its aggregate LCR, yet, any additional cost the CAISO incurs in the backstop procurement of the essential units is socialized to all load. In the end, the total cost to an individual LSE is the (LCR procurement cost + socialized cost of backstop). Therefore, each LSE will likely do the calculus as to whether the cost savings of not contracting directly with the essential unit is greater than their portion of the socialized cost of the CAISO backstop. Under this scenario, it seems inevitable that more MWs would be procured than required because of the combination of RA and CAISO backstop. Clearly, it would be more efficient to enforce the requirements for each local area

separately and rely solely on the penalty waiver process to mitigate the market power concern.

The CAISO believes the CPUC can forego aggregation of local areas since the Draft Decision also contemplates a waiver process as an additional market power mitigation measure. As stated in the Draft Decision “[w]e find that a waiver process is necessary as a market power mitigation measure....” (Draft Decision at 68) The CAISO believes that since the Draft Decision recommends a waiver process, this, in itself, is a sufficient tool to address market power concerns at this stage in the development of a local RAR. Thus, if an LSE cannot procure capacity in good faith in any of the local areas, then the Commission could grant that LSE a waiver and the deleterious effects of aggregating the LCR avoided. However, the waiver process cannot be an effective market power mitigation tool if the “trigger” is set too low, as discussed in the previous section of these Comments.

As discussed above, the CAISO has reservations about the adoption of a waiver process because a system of waivers could increase reliance on backstop procurement, and has encouraged the Commission to consider the circumstances under which the \$40 per kW-year “trigger” should be increased to reflect higher capacity costs in certain local areas. Furthermore, the CAISO strongly recommends that, if approved, the waiver process be viewed as an interim measure that can be replaced with a more appropriate and suitable mechanism like a capacity market. Additionally, the CAISO recommends that the Commission monitor the waiver process so that it is equitable and that particular circumstances do not cause “free riders” or cost-shifts when waivers are granted. If, eventually, a capacity market is established as the Commission has envisioned, all LSEs should be responsible for their capacity share. Thus, any waiver policy should instill this same sense of responsibility.

In summary, the CAISO strongly encourages the Commission to reconsider aggregating the local areas within the PG&E distribution area and to strike a more reasoned balance between resource adequacy objectives and market power concerns. Rather than using the aggregation of load pockets as a market power tool, the Commission should address such concerns through the waiver process until a functioning capacity market is developed. As an alternative, but not a preferred course of action, the

CAISO would be willing to support the aggregation approach described in the Draft Decision solely for the 2007 procurement cycle and only for the purposes of monitoring market power and reliance on backstop procurement.⁴ It bears repeating that the continued aggregation of load pockets within the PG&E service territory simply defeats the fundamental purpose for conducting an LCR study and assigning local capacity obligations based on such study: achieving the optimal level of capacity within a local area to maintain grid reliability at the service level chosen by the Commission.

J. LSE’s Should Show all Local RA Resources in their Preliminary and Annual LCR Showings.

The CAISO encourages the CPUC to have LSEs, both in their preliminary and annual LCR showing, show all RA resources the LSEs have under contract that are within any of the local areas identified by the CAISO, and not just those “local” RA resources within the LSEs particular service area(s). When the CAISO runs its model to determine the LCR, knowing the universe of RA resources within each of the local areas is essential to deriving the most accurate LCR and minimizing CAISO backstop and RMR procurement. For instance, in the “preliminary” showing, should LSEs include all resources they contracted for in the local areas, not just in their particular service area(s), the combination of units within a local area, once studied, could be effective enough to allow the CAISO to forego a RMR contract in the that local area, reducing overall costs. Similarly, LSEs should show these external (relative to the LSE’s service area) yet local RA resources as part of their annual showing such that the CAISO, CPUC and CEC have a clear picture of the local resources that have been procured in total and no local RA resources are overlooked.

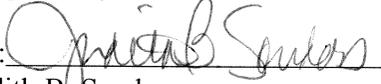
///
///
///
///
///

⁴ The adoption of a 50% procurement limitation, strictly for the 2007 local procurement cycle, is consistent with the CAISO’s April 28, 2006 reply comments in this docket (see pages 3-4).

Based on the foregoing, the CAISO would recommend modifying the Draft Decision in the manner set forth in Appendix A.

Dated: June 19, 2006

Respectfully submitted,

By: 

Judith B. Sanders
Grant A. Rosenblum
Attorneys for
The California Independent System
Operator Corporation

APPENDIX A

(page 2-3, second bullet of summary)

The Commission approves LSE procurement obligations that are based on a level of reliability described as “Option 2” in the CAISO’s LCR study report. ~~For 2007, t~~That option represents the most appropriate balancing of reliability objectives and the costs of attaining reliability based on information that is currently available. The Commission will apply Option 2 to future LCR studies, until superseded, if at all, by an alternative study approach, including a reliance on probabilities. However, for purposes of assigning procurement obligations to LSEs, we direct the Commission’s Energy Division to adjust the LCRs for the local areas for which deficiencies in qualified generation capacity have been identified by the CAISO.

3.2.1 The LCR Study Process

(page 14, second full paragraph)

At the outset of this proceeding, parties suggested that an independent third party rather than the CAISO should be selected to perform the LCR study for 2007. ~~While this suggestion may merit consideration in future proceedings, it~~ This suggestion could not reasonably have been pursued with any expectation of our adopting local RAR in time for 2007. At this time, Furthermore, the CAISO—which, as the independent grid operator, has direct knowledge of system conditions and operations—appears to be particularly well positioned (if not uniquely so) to determine where load pockets exist and what their associated LCRs are. We note also that by the time this proceeding was underway, the CAISO had already completed an LCR study for 2006. It was clearly in a position to conduct the study for 2007 within the expedited schedule for Phase I and should continue in this role for subsequent periods. No party identified the means by which a third party could have been selected and funded to complete an LCR study for 2007 within the applicable time constraints was able to persuasively identify the basis for using another party to perform this function or to point out any benefits that would be achieved by such a selection. We conclude that these recommendations should be rejected.

3.2.2.1 Reliability Options ~~for 2007~~

(page 21-22)

The most persuasive information before us is the CAISO’s conclusion that a decision to adopt Category B criteria for purposes of local procurement obligations would likely result in substantial load interruptions when N-1 conditions occur. No party has presented information that would lead us to conclude that the risk of such interruptions is acceptable if that risk can be avoided or mitigated. The CAISO has determined that for 2007, the totals of the LCRs for the nine identified local areas are 22,649 MW and 23,857 MW under Options 1 and 2, respectively, a difference of about 5%. Given the reduced

risk of interruptions expected under Option 2, we consider the required procurement of an additional 5% of needed capacity to be reasonable for 2007 and future LCR studies. However, as noted above, we believe it is important to have better information regarding probabilities of operational events and therefore direct Energy Division staff to work with the CAISO to evaluate the possibilities of moving to a more probabilistic approach. In the meantime, and until other material new information compels a change in reliability level, the reliability level in Option 2 is reasonable going forward. We make this reliability determination for 2007 only. We leave for further consideration in this proceeding the appropriate reliability level for Local RAR for 2008 and beyond.

We conclude that Option 2 represents the appropriate reliability level for establishing LSE's local procurement obligations. ~~for 2007 with one proviso: we direct the Energy Division to calculate reduced LCRs for those areas for which the CAISO has identified a deficiency in qualifying capacity resources. However, for 2007 we will make one modification to the local procurement process for those areas in which the CAISO has identified a deficiency in qualifying capacity resources.~~ These areas are identified as Sierra, Stockton, Greater Fresno, and Kern in the CAISO's LCR study report, although it is conceivable that supplemental review process described above could affect this list of deficient areas. For these areas, LSEs will not be expected to procure local resources beyond the existing level of qualifying capacity listed in the LCR study for each load pocket and, for this procurement cycle, will not incur penalties for a failure to do so. We take this approach to deficiencies because we do not find it reasonable to require LSEs to procure capacity that, according to the LCR study, does not currently exist in an area. PG&E's contention (in its April 28 comments, p. 7) that "[w]hen adopting an LCR study the Commission should never accept a requirement greater than available resources (i.e., a determination that a local area is deficient), since that determination is, properly, part of the grid planning process," is apropos.

~~Similarly, a~~ As AReM contends, LCRs should be "reasonable and attainable" to the extent that they are translated into local procurement obligations. Accordingly, we wish to emphasize that we authorize this treatment of deficiencies for 2007 only in view of the limited time remaining in 2006 for LSEs to acquire the capacity needed to meet their 2007 obligations. Since one of the long-term objectives of RAR, including local RAR, is to provide appropriate incentives for investment in generation resources where they are needed, we do not intend to continually approve a practice that could undermine this fundamental program objective. Finally, while we recognize that this waiver for deficiencies could reduce expected reliability in the affected local areas to less than that associated with Category C, we see no practical alternative for 2007.

3.3.7.2 Dispatchable Demand Response Resources

The Staff Report proposed that dispatchable demand-response resources should count towards meeting Local RAR, provided that such resources are located within the defined local areas. The report noted, however, that implementing this proposal for 2007 would require that the CEC develop supplemental information about these resources. It therefore invited parties to comment on the feasibility of developing such information in

a timely manner for 2007. Alternatively, if the information could not be obtained in time, this counting protocol would be implemented for 2008.

The comments, other than those of the CAISO, reflect broad support for allowing dispatchable demand response to count for meeting local procurement obligations starting in 2007. SCE, however, states that it does not currently map the locations of its demand response program participants, and their associated curtailable load, to local areas. As AReM notes, SCE's service area has one load pocket whereas the service area of PG&E has seven load pockets. Yet, PG&E supports counting dispatchable demand response and has raised no issues regarding the development of data to support doing so. Thus, even though SCE does not currently map demand response resources to local areas, it is not clear why it could not do so for 2007 since PG&E can. Nevertheless, the record does not provide an adequate basis upon which to order SCE to produce the data for 2007.

Consistent with its concern regarding data adequacy, SCE recommends that this issue be deferred to the 2008 Local RAR filing cycle. The CAISO agrees, noting that the problem is a practical one resulting from data and study limitations. The CAISO's LCR study evaluated the effect of specifically located, known generators on particular contingencies during specific load conditions. Accordingly, the ultimate capacity requirement is a function of the relative effectiveness of the specific generating resources studied to remedy the binding constraints or contingencies. The specific location and performance history of the dispatchable demand resources would have to be similarly studied, and understood in the same manner as generating resources, to determine the relative effectiveness of dropping the particular load in mitigating the same binding constraints or contingencies. Because of this problem, it cannot be assumed that one MW of dispatchable demand response is equivalent to one MW of generation under the LCR study. The CAISO, therefore, concludes that inclusion of dispatchable demand response products under the present conditions could result in under-procurement of local resources.

~~As AReM notes, SCE's service area has one load pocket whereas the service area of PG&E has seven load pockets. Yet, PG&E supports counting dispatchable demand response and has raised no issues regarding the development of data to support doing so. Thus, even though SCE does not currently map demand response resources to local areas, it is not clear why it could not do so for 2007 since PG&E can. Nevertheless, the record does not provide an adequate basis upon which to order SCE to produce the data for 2007. We ask that SCE evaluate further whether this data could be developed for 2007.~~

We hereby determine that qualifying, dispatchable demand response resources should not be allowed to count for Local RAR showings for 2007, ~~to the extent feasible. However, we~~ ask that the CEC pursue the collection and development of the data that are required to allow such resources to count for Local RAR in the future. achieve this. ~~We recognize that it may not be possible to implement this counting protocol until 2008 with respect to the SCE territory.~~

3.3.12 Waivers

(pages 71-72, final paragraph)

We find that a waiver process is necessary as an interim market power mitigation measure, and should therefore be adopted as a component of the Local RAR program until a functioning capacity market is established. After reviewing the extensive workshop comments, we find that TURN has presented a fair, balanced, and credible approach that we will therefore adopt in part. As noted earlier, TURN has calculated a capacity cost of \$40 per kW-year using data from the settlement of the IEP complaint (footnote omitted). ~~We intend that this price would function as a trigger for availability of a waiver, not as a price cap on what LSEs might be willing to pay. We recognize that there might be situations where an LSE might want to pay more.~~ However, we are mindful of the concerns raised by the CAISO that undue reliance on backstop procurement could be encouraged if the trigger is set too low. For this reason, during the course of evaluating individual requests for waivers, we will take into consideration costs of capacity in the load pocket plus the risk that total backstop procurement costs will increase and be shifted to all participants. Therefore, we may determine it is necessary to establish a threshold greater than \$40 per kW-year for future LCR procurement cycles. We note also that we are not adopting a monthly price trigger; specifically, we are not adopting a trigger price of one-twelfth of the yearly price trigger (\$3.33 per kW-month), as we would not expect RAR prices to be uniform throughout the year. Finally we emphasize that the waiver applies to Commission-imposed penalties only. A deficient LSE would be responsible for any applicable backstop procurement costs even if it received a waiver from penalties.

The following process for waivers will be followed. An LSE requesting a waiver would make such request at the time it files its Local RAR compliance showing. The waiver request would include (1) a demonstration that the LSE fairly and in good faith solicited bids for RAR capacity needs along with accompanying information about the terms and conditions of the Request for Offer, and (2) a demonstration that it either (a) received no bids or (b) received no bids under \$40 per kW-year (or the Commission-determined “trigger”, as discussed above). We agree with the principle that the showing must demonstrate that the LSE actively pursued all commercially reasonable efforts to acquire the resources needed to meet the local procurement obligation.

3.3.5.1 Annual Showings

(page 38, first paragraph)

The Staff Report identified several reasons for this “100%/twelve months” approach for Local RAR. First, it is possible that even if all LSEs procure their full allocation of Local RAR, they will not necessarily have procured all of the resources necessary to meet the reliability needs of a particular local load pocket. This outcome is possible because such a deficiency can only be determined after the CAISO has had the opportunity to analyze the effectiveness factors of all of the units actually procured to meet the Local RAR in a local load pocket. Thus, to ensure the CAISO has knowledge of all resources procured within each of the local areas, in the Annual Showing it will be necessary that LSEs show all resources they have procured in any of the local areas identified by the CAISO, even if those resources lie outside the local area of the particular LSE making the showing. To the extent that additional units are needed to meet effectiveness factor concerns, the CAISO needs to identify the units, and LSEs

should have the first opportunity to engage in this procurement, rather than automatically rely on CAISO backstop procurement mechanisms. Consequently, Local RAR demonstrations should be made in sufficient time to permit the CAISO to engage in such analysis and identify residual procurement needs. Second, the CAISO needs to be able to prepare for any necessary backstop procurement after the LSEs have made all of their procurement demonstrations, including those that may meet residual needs. The CAISO must have sufficient time to review any additional procurement demonstrations and determine if backstop or “supplemental procurement” is required. If so, the CAISO must have sufficient time to engage in a process to secure the resources it needs to maintain local area reliability. Third, a year-long procurement obligation should provide assurance of revenue adequacy to those units that are most needed to ensure the reliability of the CAISO grid, and encourage the type of longer term, LSE-based procurement that the CPUC supports.

(page 49, first paragraph)

3.3.7.1 RMR Resources

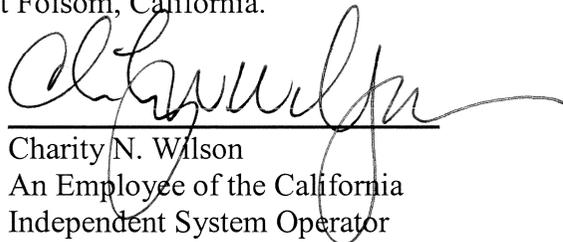
We require that all LSEs file Preliminary Local RAR compliance showings on September 22, 2006.¹ This preliminary Local RAR demonstration can be as much as the LSEs full Local RAR demonstration, but, at a minimum, it must accurately show whether the LSE has, by September 22, 2006, entered into an RAR capacity contract with a unit that is among the list of units proposed for 2007 RMR Contracts. These demonstrations will not be used to determine compliance with local procurement obligations but they are required to be accurate. An LSE that has no 2007 RMR-proposed units under an RAR contract prior to September 22, 2006 would make a simple filing to that effect, as this information may help reduce CAISO RMR procurement. The IOUs are strongly encouraged to be as comprehensive as possible in their Preliminary Local RAR demonstrations because the IOUs control so many Qualifying Facility, nuclear, and hydro units that are assumed in many of the RMR studies. In addition, the IOUs should include in the preliminary showing all resources under contract within any of the local areas identified by the CAISO, even if those resources are not within the local area(s) of the IOU's service territory.

¹ The CAISO suggested “one week” but we find that it is useful to put an actual date to the suggestion. All RAR showings are submitted to the Commission and concurrently copied to the CEC and the CAISO.

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 May 30,
2006 Draft Decision in Docket No. R.05-12-013.

Executed on June 19, 2006, at Folsom, California.



Charity N. Wilson
An Employee of the California
Independent System Operator

ANDREW B. BROWN
ELLISON, SCHNEIDER & HARRIS, LLP
abb@eslawfirm.com
R.05-12-013

ARTHUR HAUBENSTOCK
PACIFIC GAS AND ELECTRIC COMPANY
alhj@pge.com
R.05-12-013

Bishu Chatterjee
CALIF PUBLIC UTILITIES COMMISSION
bbc@cpuc.ca.gov
R.05-12-013

BRIAN K. CHERRY
PACIFIC GAS AND ELECTRIC COMPANY
bk7@pge.com
R.05-12-013

KEVIN BOUDREAUX
CALPINE CORPORATION
boudreauxk@calpine.com
R.05-12-013

BRIAN THEAKER
WILLIAMS POWER COMPANY
brian.theaker@williams.com
R.05-12-013

Charlyn A. Hook
CALIF PUBLIC UTILITIES COMMISSION
chh@cpuc.ca.gov
R.05-12-013

CAROLYN KEHREIN
ENERGY MANAGEMENT SERVICES
cmkehrein@ems-ca.com
R.05-12-013

DEBRALLOYD
CITY OF PALO ALTO
debra.lloyd@cityofpaloalto.org
R.05-12-013

Donna J. Hines
CALIF PUBLIC UTILITIES COMMISSION
djh@cpuc.ca.gov
R.05-12-013

DOUGLAS LARSON
PACIFICORP
doug.larson@pacificcorp.com
R.05-12-013

DAVID WITHROW
CALIFORNIA ISO
dwithrow@caiso.com
R.05-12-013

EVELYN KAHL
ALCANTAR & KAHL, LLP
ek@a-klaw.com
R.05-12-013

EDWARD V. KURZ
PACIFIC GAS AND ELECTRIC COMPANY
evk1@pge.com
R.05-12-013

FRED MASON
CITY OF BANNING
fmason@ci.banning.ca.us
R.05-12-013

GINA M. DIXON
SAN DIEGO GAS & ELECTRIC COMPANY
gdixon@semprautilities.com
R.05-12-013

GRACE LIVINGSTON-NUNLEY
PACIFIC GAS AND ELECTRIC COMPANY
gx12@pge.com
R.05-12-013

LILI SHAHRIARI
AOL UTILITY CORP.
lbbarr@adelphia.net
R.05-12-013

JEFF LAM
POWEREX CORP
jeff.lam@powerex.com
R.05-12-013

JAMES MAYHEW
MIRANT CORPORATION
jim.mayhew@mirant.com
R.05-12-013

JANE E. LUCKHARDT
DOWNEY BRAND LLP

ADRIAN PYE
ENERGY AMERICA, LLC
adrian.pye@na.centrica.com
R.05-12-013

FRANK ANNUNZIATO
AMERICAN UTILITY NETWORK INC.
allwazeready@aol.com
R.05-12-013

BONNIE S. BLAIR
THOMPSON COBURN LLP
bblair@thompsoncoburn.com
R.05-12-013

SCOTT BLAISING
BRAUN & BLAISING, P.C.
blaising@braunlegal.com
R.05-12-013

CHARLES A. BRAUN
BRAUN & BLAISING, P.C.,
braun@braunlegal.com
R.05-12-013

HSI BANG TANG
AZUSA LIGHT, POWER & WATER
btang@ci.azusa.ca.us
R.05-12-013

CHRIS RAPHAEL
CALIFORNIA ENERGY MARKETS
chris@newsdata.com
R.05-12-013

CURTIS KEBLER
GOLDMAN, SACHS & CO.
curtis.kebler@gs.com
R.05-12-013

DENNIS M.P. EHLING
KIRKPATRICK & LOCKHART NICHOLSON
GRAHAM
dehling@kling.com
R.05-12-013

DAVID X. KOLK
COMPLETE ENERGY SERVICES INC
dkolk@compenergy.com
R.05-12-013

DANIEL W. DOUGLASS
DOUGLASS & LIDDELL
douglass@energyattorney.com
R.05-12-013

ED CHANG
FLYNN RESOURCE CONSULTANTS, INC.
edchang@flynnrci.com
R.05-12-013

ED LUCHA
PACIFIC GAS AND ELECTRIC COMPANY
el15@pge.com
R.05-12-013

ERIC YUSSMAN
FELLON-MCCORD & ASSOCIATES
eyussman@knowledgeinenergy.com
R.05-12-013

MATTHEW FREEDMAN
THE UTILITY REFORM NETWORK
freedman@turn.org
R.05-12-013

GEORGE HANSON
CITY OF CORONA
george.hanson@ci.corona.ca.us
R.05-12-013

MICHAEL WERNER
CALIFORNIA DEPARTMENT OF WATER
RESOURCES
hcronin@water.ca.gov
R.05-12-013

IRENE K. MOOSEN
irene@igc.org
R.05-12-013

JEFFREY P. GRAY
DAVIS WRIGHT TREMAINE, LLP
jeffgray@dwit.com
R.05-12-013

JAMES ROSS
RCS, INC.
jimross@r-c-s-inc.com
R.05-12-013

JOHN P. MATHIS
EDISON MISSION ENERGY

AUDRA HARTMANN
LS POWER GENERATION
ahartmann@lspower.com
R.05-12-013

ANDREW ULMER
CALIFORNIA DEPARTMENT OF WATER
RESOURCE
aulmer@water.ca.gov
R.05-12-013

BRIAN T. CRAGG
GOODIN MACBRIDE SQUERI RITCHIE & DAY LLP
bcragg@gmssr.com
R.05-12-013

BARRY F. MCCARTHY
MCCARTHY & BERLIN, LLP
bmcc@mccarthyllaw.com
R.05-12-013

BARBARA R. BARKOVICH
BARKOVICH & YAP, INC.
rbarkovich@earthlink.net
R.05-12-013

CASE ADMINISTRATION
SOUTHERN CALIFORNIA EDISON COMPANY
case.admin@sce.com
R.05-12-013

CHRISTOPHER J. MAYER
MODESTO IRRIGATION DISTRICT
chrism@mid.org
R.05-12-013

Donald J. Brooks
CALIF PUBLIC UTILITIES COMMISSION
dbr@cpuc.ca.gov
R.05-12-013

DON P. GARBER
SAN DIEGO GAS AND ELECTRIC COMPANY
DGarber@sempra.com
R.05-12-013

DAVID MARCUS
dmarcus2@sbcglobal.net
R.05-12-013

DAVID A. SANDINO
CALIFORNIA DEPARTMENT OF WATER
RESOURCES
dsandino@water.ca.gov
R.05-12-013

Elizabeth Dorman
CALIF PUBLIC UTILITIES COMMISSION
edd@cpuc.ca.gov
R.05-12-013

ERIC OLSON
NAVIGANT CONSULTING INC.
eolson@navigantconsulting.com
R.05-12-013

VICKI E. FERGUSON
BRAUN & BLAISING P.C.
ferguson@braunlegal.com
R.05-12-013

GREG BASS
SEMPRA ENERGY SOLUTIONS
gbass@semprasure.com
R.05-12-013

GREGORY T. BLUE
DYNEGY INC.
greg.blue@dynegy.com
R.05-12-013

HOLLY B. CRONIN
CALIFORNIA DEPARTMENT OF WATER
RESOURCES
hcronin@water.ca.gov
R.05-12-013

JAN REID
COAST ECONOMIC CONSULTING
janreid@coastecon.com
R.05-12-013

JESUS ARREDONDO
NRG ENERGY INC.
jesus.arredondo@nrgenergy.com
R.05-12-013

JOHN JENSEN
MOUNTAIN UTILITIES
jjensen@kirkwood.com
R.05-12-013

JOSEPH PETER COMO
CITY AND COUNTY OF SAN FRANCISCO

ALAN COMNES
WEST COAST POWER
alan.comnes@nrgenergy.com
R.05-12-013

ANDREA WELLER
STRATEGIC ENERGY
aweller@sel.com
R.05-12-013

BILL CHEN
CONSTELLATION NEWENERGY, INC.
bill.chen@constellation.com
R.05-12-013

BOB ANDERSON
APS ENERGY SERVICES
Bob_Anderson@apses.com
R.05-12-013

BARRY R. FLYNN
FLYNN RESOURCE CONSULTANTS, INC.
brflynn@flynnrci.com
R.05-12-013

CALIFORNIA ENERGY MARKETS
cem@newsdata.com
R.05-12-013

CONSTANCE PARR LENI
CALIFORNIA ENERGY COMMISSION
Cleni@energy.state.ca.us
R.05-12-013

DONALD BROOKHYSER
ALCANTAR & KAHL LLP
deb@a-klaw.com
R.05-12-013

DIANE I. FELLMAN
FPL ENERGY, LLC
diane_fellman@fpl.com
R.05-12-013

DOUGLAS MCFARLAN
MIDWEST GENERATION EME
dmcfarlan@mwgen.com
R.05-12-013

DEVRA WANG
NATURAL RESOURCES DEFENSE COUNCIL
dwang@nrdc.org
R.05-12-013

E.J. WRIGHT
OCCIDENTAL POWER SERVICES, INC.
ej_wright@oxy.com
R.05-12-013

LEGAL & REGULATORY DEPARTMENT
CALIFORNIA ISO
e-recipient@caiso.com
R.05-12-013

KAREN TERRANOVA
ALCANTAR & KAHL, LLP
filings@a-klaw.com
R.05-12-013

GARY DESHAZO
CALIFORNIA ISO
gdeshazo@caiso.com
R.05-12-013

GRANT A. ROSENBLUM
CALIFORNIA ISO
grosenblum@caiso.com
R.05-12-013

HANK HARRIS
CORAL POWER, LLC
hharris@coral-energy.com
R.05-12-013

JENNIFER CHAMBERLIN
STRATEGIC ENERGY, LLC
jchamberlin@sel.com
R.05-12-013

JOHN GOODIN
CALIFORNIA ISO
jgoodin@caiso.com
R.05-12-013

JOHN W. LESLIE
LUCE, FORWARD, HAMILTON & SCRIPPS, LLP
jleslie@luce.com
R.05-12-013

JOHN R. REDDING
ARCTURUS ENERGY CONSULTING

JEANNETTE OLKO joko@ci.colton.ca.us R.05-12-013	JOY A. WARREN MODESTO IRRIGATION DISTRICT joyw@mid.org R.05-12-013	JOHN PACHECO CALIFORNIA DEPT OF WATER RESOURCES jpacheco@water.ca.gov R.05-12-013	JUDITH SANDERS CALIFORNIA ISO jsanders@caiso.com R.05-12-013
JANINE L. SCANCARELLI FOLGER LEVIN & KAHN LLP jscancarelli@flk.com R.05-12-013	JAMES D. SQUERI GOODIN MACBRIDE SQUERI RITCHIE & DAY LLP jsqueri@gmsr.com R.05-12-013	JUDY PAU DAVIS WRIGHT TREMAINE LLP judykau@dwf.com R.05-12-013	JAMES WEIL AGLET CONSUMER ALLIANCE jweil@aglet.org R.05-12-013
JOSEPH F. WIEDMAN GOODIN MACBRIDE SQUERI RITCHIE & DAY,LLP jwiedman@gmsr.com R.05-12-013	KENNETH E. ABREU k.abreu@sbcglobal.net R.05-12-013	KEONI ALMEIDA CALIFORNIA INDEPENDENT SYSTEM OPERATOR kalmelda@caiso.com R.05-12-013	KAREN A. LINDH LINDH & ASSOCIATES karen@klindh.com R.05-12-013
KATIE KAPLAN INDEPENDENT ENERGY PRODUCERS katie@iepa.com R.05-12-013	Kathryn Auriemma CALIF PUBLIC UTILITIES COMMISSION kdw@cpuc.ca.gov R.05-12-013	KEVIN WOODRUFF WOODRUFF EXPERT SERVICES, INC. kdw@woodruffexpert-services.com R.05-12-013	KEITH MCCREA SUTHERLAND, ASBILL & BRENNAN keith.mccrea@sablau.com R.05-12-013
KEITH JOHNSON CALIFORNIA INDEPENDENT SYSTEM OPERATOR kjohnson@caiso.com R.05-12-013	KEVIN J. SIMONSEN ENERGY MANAGEMENT SERVICES kjsimonsen@ems-ca.com R.05-12-013	GREGORY S.G. KLATT DOUGLASS & LIDDELL klatt@energyattorney.com R.05-12-013	KIMBERLY KIENER IMPERIAL IRRIGATION DISTRICT kukiener@iid.com R.05-12-013
Karen M. Shea CALIF PUBLIC UTILITIES COMMISSION kms@cpuc.ca.gov R.05-12-013	Karen P. Paull CALIF PUBLIC UTILITIES COMMISSION kpp@cpuc.ca.gov R.05-12-013	KRIS G. CHISHOLM CALIFORNIA ELECTRICITY OVERSIGHT BOARD kris.chisholm@eob.ca.gov R.05-12-013	KEN SIMS SILICON VALLEY POWER ksims@siliconvalleypower.com R.05-12-013
LOS ANGELES DOCKET OFFICE CALIFORNIA PUBLIC UTILITIES COMMISSION LAdocket@cpuc.ca.gov R.05-12-013	Laurence Chaset CALIF PUBLIC UTILITIES COMMISSION lau@cpuc.ca.gov R.05-12-013	LAURA GENAO SOUTHERN CALIFORNIA EDISON COMPANY laura.genao@sce.com R.05-12-013	LISA A. COTTLE WHITE & CASE, LLP lcottle@whitecase.com R.05-12-013
LYNDA HARRIS CALIFORNIA DEPT. OF WATER RESOURCES lharris@water.ca.gov R.05-12-013	DONALD C. LIDDELL DOUGLASS & LIDDELL liddell@energyattorney.com R.05-12-013	LISA DECKER CONSTELLATION ENERGY GROUP, INC. lisa.decker@constellation.com R.05-12-013	LISA WEINZIMER PLATTS lisa_weinzimer@platts.com R.05-12-013
LAWRENCE KOSTRZEWA EDISON MISSION ENERGY lkostrzewa@edisonmission.com R.05-12-013	LYNELLE LUND COMMERCE ENERGY, INC. llund@commerceenergy.com R.05-12-013	LYNN MARSHALL CALIFORNIA ENERGY COMMISSION lmarshall@energy.state.ca.us R.05-12-013	LYNN HAUG ELLISON, SCHNEIDER & HARRIS, LLP lmh@eslawfirm.com R.05-12-013
LYNN M. HAUG ELLISON & SCHNEIDER lmh@eslawfirm.com R.05-12-013	LEE TERRY CALIFORNIA DEPARTMENT OF WATER RESOURCES lterry@water.ca.gov R.05-12-013	LEEANNE UHLER CITY OF RIVERSIDE luhler@riversideca.gov R.05-12-013	MARIC MUNN UNIVERSITY OF CALIFORNIA maric.munn@ucop.edu R.05-12-013
MARK J. SMITH FPL ENERGY mark_j.smith@fpl.com R.05-12-013	MARY LYNCH CONSTELLATION ENERGY COMMODITIES GROUP mary.lynych@constellation.com R.05-12-013	BRUCE MCLAUGHLIN BRAUN & BLAISING, P.C. mclaughlin@braunlegal.com R.05-12-013	MICHAEL B. DAY GOODIN MACBRIDE SQUERI RITCHIE & DAY LLP mday@gmsr.com R.05-12-013
MARC D. JOSEPH ADAMS, BROADWELL, JOSEPH & CARDOZO mdjoseph@adamsbroadwell.com R.05-12-013	MICHEL PETER FLORIO THE UTILITY REFORM NETWORK (TURN) mflorio@turn.org R.05-12-013	MARK FRAZEE CITY OF ANAHEIM mfrazee@anaheim.net R.05-12-013	MICHAEL J. GERGEN LATHAM & WATKINS LLP michael.gergen@lw.com R.05-12-013
MIKE JASKE CALIFORNIA ENERGY COMMISSION mjaskes@energy.state.ca.us R.05-12-013	MICHAEL MAZUR 3 PHASES ELECTRICAL CONSULTING mmazur@3phases.com R.05-12-013	MARGARET E. MCNAUL THOMPSON COBURN LLP mmcnaul@thompsoncoburn.com R.05-12-013	MARCIE MILNER CORAL POWER, L.L.C. mmilner@coral-energy.com R.05-12-013
MONA TIERNEY CONSTELLATION NEW ENERGY, INC. mona.tierney@constellation.com R.05-12-013	MANUEL RAMIREZ CITY AND COUNTY OF SAN FRANCISCO mramirez@sfwater.org R.05-12-013	MIKE RINGER CALIFORNIA ENERGY COMMISSION mringer@energy.state.ca.us R.05-12-013	MRW & ASSOCIATES, INC. mrw@mrwassoc.com R.05-12-013
MICHAEL SHAMES UTILITY CONSUMERS' ACTION NETWORK mshames@ucan.org R.05-12-013	MARY O. SIMMONS SIERRA PACIFIC POWER COMPANY msimmons@sierrapacific.com R.05-12-013	Mark S. Wetzell CALIF PUBLIC UTILITIES COMMISSION msw@cpuc.ca.gov R.05-12-013	MICHAEL TEN EYCK CITY OF RANCHO CUCAMONGA MTENEYCK@CI.RANCHO-CUCAMONGA.CA.US R.05-12-013
Merideth Sterkel CALIF PUBLIC UTILITIES COMMISSION mst@cpuc.ca.gov R.05-12-013	Nancy Ryan CALIF PUBLIC UTILITIES COMMISSION ner@cpuc.ca.gov R.05-12-013	NANCY TRONAAS CALIFORNIA ENERGY COMMISSION ntronaas@energy.state.ca.us R.05-12-013	PATRICIA GIDEON PACIFIC GAS AND ELECTRIC COMPANY pcg8@pge.com R.05-12-013
PHILIP HERRINGTON EDISON MISSION ENERGY pherrington@edisonmission.com R.05-12-013	PHILIPPE AUCLAIR phil@ethree.com R.05-12-013	PHILLIP J. MULLER SCD ENERGY SOLUTIONS philm@scdenery.com R.05-12-013	PHILIP D. PETTINGILL CALIFORNIA INDEPENDENT SYSTEM OPERATOR ppetlingill@caiso.com R.05-12-013
NICOLAS PROCOS ALAMEDA POWER & TELECOM procos@alamedapt.com R.05-12-013	RALPH E. DENNIS FELLON-MCCORD & ASSOCIATES ralph.dennis@constellation.com R.05-12-013	RICK C. NOGER PRAXAIR PLAINFIELD, INC. rick_noger@praxair.com R.05-12-013	RONALD MOORE GOLDEN STATE WATER/BEAR VALLEY ELECTRIC rkmoore@scwaler.com R.05-12-013
Robert L. Strauss CALIF PUBLIC UTILITIES COMMISSION rls@cpuc.ca.gov R.05-12-013	Rahmon Momoh CALIF PUBLIC UTILITIES COMMISSION rmm@cpuc.ca.gov R.05-12-013	ROGER VANHOY MSR PUBLIC POWER AGENCY rogerv@mid.org R.05-12-013	ROD AOKI ALCANTAR & KAHL, LLP rsa@a-klaw.com R.05-12-013
REED V. SCHMIDT BARTLE WELLS ASSOCIATES rschmidt@bartlewells.com R.05-12-013	ROBERT SHERICK PASADENA WATER AND POWER rsherick@cityofpasadena.net R.05-12-013	ROBERT S. NICHOLS NEW WEST ENERGY rsnichol@srpnet.com R.05-12-013	Robert J. Wullenjohn CALIF PUBLIC UTILITIES COMMISSION rw1@cpuc.ca.gov R.05-12-013
ROBIN J. WALTHER, PH.D. rwalther@oacbell.net	SAEED FARROKHPAY FEDERAL ENERGY REGULATORY COMMISSION	C. SUSIE BERLIN MC CARTHY & BERLIN. LLP	SEAN CASEY SAN FRANCISCO PUBLIC UTILITIES COMMISSIO

SCOTT TOMASHEFSKY
NORTHERN CALIFORNIA POWER AGENCY
scott.tomashefsky@ncpa.com
R.05-12-013

Sudheer Gokhale
CALIF PUBLIC UTILITIES COMMISSION
skg@cpuc.ca.gov
R.05-12-013

STEPHEN J. SCIORTINO
CITY OF ANAHEIM
ssciortino@anaheim.net
R.05-12-013

SOUMYA SASTRY
PACIFIC GAS AND ELECTRIC COMPANY
svs6@pge.com
R.05-12-013

TONY ZIMMER
Tony.Zimmer@ncpa.com
R.05-12-013

WILLIAM H. BOOTH
LAW OFFICES OF WILLIAM H. BOOTH
wbooth@booth-law.com
R.05-12-013

MIKE KASABA
QUIET ENERGY
3311 VAN ALLEN PLACE
TOPANGA, CA 90290
R.05-12-013

MEGAN SAUNDERS
SEMPRA ENERGY SOLUTIONS
101 ASH STREET, HQ09
SAN DIEGO, CA 92101-3017
R.05-12-013

SETH D. HILTON
STOEL RIVES
sdhilton@stoel.com
R.05-12-013

SEEMA SRINIVASAN
ALCANTAR & KAHL, LLP
sls@a-klaw.com
R.05-12-013

STACY AGUAYO
APS ENERGY SERVICES
stacy.aguayo@apses.com
R.05-12-013

Traci Bone
CALIF PUBLIC UTILITIES COMMISSION
tbo@cpuc.ca.gov
R.05-12-013

TRACEY DRABANT
BEAR VALLEY ELECTRIC SERVICE
traceydrabant@bves.com
R.05-12-013

WAYNE TOMLINSON
EL PASO CORPORATION
william.tomlinson@elpaso.com
R.05-12-013

DAVID J. COYLE
ANZA ELECTRIC COOPERATIVE, INC
PO BOX 391090
ANZA, CA 92539-1909
R.05-12-013

LINDA Y. SHERIF
CALPINE CORPORATION
sheriff@calpine.com
R.05-12-013

SEBASTIEN CSAPO
PACIFIC GAS AND ELECTRIC COMPANY
sscb@pge.com
R.05-12-013

STEVE KOERNER
EL PASO CORPORATION
steve.koerner@elpaso.com
R.05-12-013

THOMAS CORR
SEMPRA ENERGY
tcorr@sempraglobal.com
R.05-12-013

THEODORE ROBERTS
SEMPRA GLOBAL
troberts@sempra.com
R.05-12-013

WILLIAM W. WESTERFIELD III
STOEL RIVES LLP
wwesterfield@stoel.com
R.05-12-013

ROBERT MARSHALL
PLUMAS-SIERRA RURAL ELECTRIC CO-OP
PO BOX 2000
PORTOLA, CA 96122-2000
R.05-12-013

STEVE ISSER
GOOD COMPANY ASSOCIATES
sisser@goodcompanyassociates.com
R.05-12-013

STEVEN S. SCHLEIMER
CALPINE CORPORATION
sschleimer@calpine.com
R.05-12-013

STEVEN KELLY
INDEPENDENT ENERGY PRODUCERS ASSN
steven@iepa.com
R.05-12-013

THOMAS DARTON
PILOT POWER GROUP, INC.
tdarton@pilotpowergroup.com
R.05-12-013

VALERIE WINN
PACIFIC GAS & ELECTRIC
vjlw3@pge.com
R.05-12-013

RANDALL PRESCOTT
BP ENERGY COMPANY
501 WESTLAKE PARK BLVD.
HOUSTON, TX 77079
R.05-12-013

AKBAR JAZAYEIRI
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVE. ROOM 390
ROSEMead, CA 91770
R.05-12-013