# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Promote	)	
Policy and Program Coordination and	)	R.04-04-003
Integration in Electric Utility Resource	)	
Planning	)	
	)	

# PETITION OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION TO MODIFY COMMISSION DECISION 05-10-042 ON RESOURCE ADEQUACY

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Dated: December 6, 2005

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In accordance with Rule 47 of the Commission's Rules of Practice and Procedure, the California Independent System Operator Corporation ("CAISO") respectfully petitions the Commission to modify its October 27, 2005 "Opinion on Resource Adequacy Requirements" (Decision (D.) 05-10-042) ("RA Opinion"). The CAISO's petition seeks discrete modifications to the RA Opinion that will enhance (1) the efficacy of resource adequacy in 2006 and (2) the ability of market participants to satisfy the imminent, initial compliance deadline by efficiently engaging in resource procurement. Given that the first year compliance filings are due on January 27, 2006, the CAISO further requests that Administrative Law Judge ("ALJ") Wetzell shorten the time for responses to this petition to December 9, 2005. (Rule 47(f).)

### I. Introduction and Summary

The RA Opinion built upon the commendable efforts of ALJ Wetzell's Draft Decision to continue California's progress toward a meaningful resource adequacy requirement that properly seeks to ensure that the infrastructure investment required for reliability actually occurs. The CAISO particularly supports the RA Opinion's incorporation of refinements to the availability obligation of resource adequacy resources to better conform to the CAISO market redesign. The CAISO, however, believes that the RA Opinion requires discrete modifications to ensure that the anticipated reliability benefits of resource adequacy are more likely to be realized in 2006. In addition, certain proposed changes clarify the fundamental resource adequacy obligation

imposed on suppliers and therefore will assist parties to conclude resource adequacy transactions prior to the January 27, 2006 compliance filing date. Those suggested modifications are:

- Explicitly address the impact of planned outages on a resource adequacy resource's eligibility to satisfy a load serving entities resource adequacy obligation. The CAISO recommends modifying the RA Opinion to include a new conclusion of law specifying that "resources scheduled to be offline for maintenance for 25% of the month or longer during any reporting month must be replaced in the LSE's compliance showing."
- ➤ Clarify the definition of qualifying imports to specify that the delivery point must be at an intertie. This would require that RA Opinion section 7.5 be modified to state "(b) specifies firm delivery point at an Inter-tie."
- > Specify a new conclusion of law that "non-qualifying facility wind generation must be part of the CAISO's Participating Intermittent Resource Program ("PIRP") to be eligible to provide resource adequacy capacity."
- ➤ Specify, in order to avoid potential disputes, that (1) RA Opinion 7.3 include the requirement that "LSEs must provide the CAISO with the contractual or delivery information and (2) the CAISO is the appropriate entity to determine the level of import capacity available for allocation among Commission jurisdictional LSEs.
- Modify the resource adequacy obligation to account for non-summer month deliverability issues. The CAISO recommends that the planning reserve margin for non-summer months be adjusted from 15-17% to 23%.

### II. Discussion

## A. Planned Outages Must Be Accounted For

In D.04-10-035, the Commission adopted numerous counting conventions for determining the quantity of capacity from various resource types that may be eligible to satisfy a LSE's resource adequacy obligation.<sup>1</sup> These counting conventions, which accepted the formulas included in Section 5 of the June 15, 2004 "Workshop Report on Resource Adequacy Issues," referenced scheduled outages as an element of the formulas. However, the conventions did not explain how the temporal character of scheduled outages should be incorporated into determining a static capacity value. This incompatibility was discussed during the Phase 2 workshops. The CAISO further raised the issue in its opening comments on both the Phase 2

Workshop Report<sup>2</sup> and ALJ Wetzell's draft decision.<sup>3</sup> Yet, the RA Opinion omits discussion of the topic. The CAISO recommends modifying the RA Opinion to specify that resources scheduled to be offline for maintenance for 25% or 8 days of the month or longer during any reporting month must be replaced in the LSE's compliance showing (the 8 days are an aggregate amount that may be scheduled all at once or throughout the month).

The absence of any discussion in the RA Opinion regarding the treatment of scheduled outages negatively impacts reliability and the efficiency of resource procurement. The reliability concern is straightforward. For example, assume a 500 MW generator will be unavailable to produce power for two weeks during planned maintenance. Given the ambiguity between the D.04-10-035's reference to scheduled outages and D.05-10-42's silence, the full 500 MW may arguably count toward an LSE's obligation. However, the planning reserve margin ("PRM") is generally intended to account for operating reserves/regulation (~8-9%), forecast error (~3%), and forced outages (~4-5%), not planned outages. As such, the adopted PRM is insufficient to account for planned outages and the failure to resolve the ambiguity regarding the treatment of planned outages creates a potential insufficiency of available RA resources to reliably operate the Grid.

Further, to the extent there is ambiguity in the treatment of planned outages, which the CAISO believes there is, parties contracting for resource adequacy capacity will have difficulty rationally allocating the responsibility and cost risk of planned outages. The value of capacity from a particular unit may vary depending on its maintenance characteristics and whether it will or will not fully count during its planned outages because of an LSE's potential obligation to account for replacement capacity. Clarifying this rule, therefore, will assist parties in addressing

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Interim Opinion Regarding Resource Adequacy, D.04-10-035 (Oct. 28, 2004) at § 3.5.

Opening Comments of the California Independent System Operator Corporation on Resource Adequacy Phase 2 Workshop Report at Sec. III.C (July 13, 2005) ("Phase 2 Workshop Comments").

Reply Comments of the California Independent System Operator Corporation on the ALJ Wetzell's Draft Decision on Opinion on Resource Adequacy Requirements at Sec. F (Oct. 24, 2005) ("CAISO Reply Comments").

the respective responsibilities of planned outages, which will expedite any ongoing resource adequacy procurement negotiations.

Admittedly, the CAISO's recommendation to replace resources scheduled to be offline for maintenance for 25% of the month or longer during any reporting month is somewhat arbitrary. Resources on planned outages that count toward an LSE's compliance showing are unavailable regardless of the duration and thereby raise reliability concerns. However, the CAISO believes that a maximum outage limited to 8 days in duration is more amendable to CAISO management and coordination so as to mitigate the reliability concerns. It should be emphasized that this resource adequacy counting rule does not alter the CAISO's authority over resource outage coordination. The CAISO retains the right to approve or decline any proposed scheduled maintenance notwithstanding its compliance with resource adequacy requirements. (See, CAISO Tariff § 2.3.3 et seq.) Moreover, the CAISO recognizes that its outage coordination provisions may require modification to address the incentive to underestimate the duration of planned outages created by the recommended resource adequacy rule.

#### В. The Definition of Import Must Be Clarified To Specify Delivery at an **Inter-Tie**

The RA Opinion exempts "firm import LD contracts" from the sunset and phase-out provision applicable to Firm LD contracts generally. The basis for this exemption is that firm import LD contracts "do not raise the issues of double counting and deliverability." For this justification to hold, the CAISO as well as Pacific Gas and Electric Company argued in response to ALJ Wetzell's draft decision that the definition of eligible imports must be clarified to specify that the firm delivery point must be either a delivery point at an inter-tie or outside the CAISO Control Area.<sup>5</sup>

RA Opinion at 68.

See, CAISO Reply Comments at Sec. E; Comments of Pacific Gas and Electric Company on Draft Decision of Administrative Law Judge Wetzell Entitled "Opinion on Resource Adequacy Requirements" at Sec. V (Oct. 17, 2005).

The RA Opinion perpetuates the definition of imports as: "(1) ... an Import Energy Product with operating reserves, (2) cannot be curtailed for economic reasons, and either (a) is delivered on transmission that cannot be curtailed in operating hours for economic reasons or bumped by higher priority transmission or (b) *specifies a firm delivery point*." However, if an import may simply be delivered to a "firm delivery point" within the CAISO Control Area generally, i.e., NP15, that import is indistinguishable from an in-area Firm LD contract. Under that circumstance, the supplier of the import may nevertheless choose to source the obligation from power within the CAISO Control Area by submitting a schedule for delivery at NP/SP 15. No operating reserves would be required. Further, the WECC is currently reconsidering its requirement that the sending control area provide operating reserves for the export. Thus, to better realize the Commission's intention that an import is supplied by generation outside the CAISO Control Area, the CAISO recommends that the RA Opinion be modified to state that the firm delivery point must be at an Inter-tie or Interconnection with the CAISO Control Area.

# C. An Eligibility Criterion for Intermittent Resources Should Be Participation in the CAISO's PIRP

PIRP allows intermittent resources (i.e., wind and other resources with an uncontrollable fuel source) to schedule energy in the forward market without incurring imbalance charges when the delivered energy differs from the scheduled amount. The CAISO achieves this goal largely through the intermittent resource's compliance with state-of-the-art forecasting protocols developed through PIRP. Upon implementation of the CAISO's Market Redesign and Technology Upgrade ("MRTU") project, the CAISO intends to factor the PIRP resource adequacy capacity when making Residual Unit Commitment ("RUC") decisions to avoid over-procurement of resources. RUC is intended to provide the CAISO with a tool to commit resources to ensure that sufficient generating capacity is on-line to be available to meet

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<sup>6</sup> RA Opinion at 67.

forecasted load. PIRP facilitates the efficiency of RUC by enhancing the CAISO's ability to predict the contribution to meeting load from intermittent resources. Accordingly, the CAISO believes that participation in PIRP should constitute a precondition for intermittent resources to provide eligible resource adequacy capacity. However, the CAISO recognizes that there may be reasons for intermittent qualifying facility resources with existing Public Utility Regulatory Policies Act ("PURPA") contracts to forego the benefits of PIRP. Therefore, the CAISO proposes that the requirement for PIRP participation extend only to those intermittent resources whose entire output is obligated under an existing PURPA contract.

# D. The CAISO Supports the Draft Decision's Treatment of Import Deliverability with Minor Clarifications

The CAISO generally supports the RA Opinion's adopted methodology for determining the allocation of available import capacity for resource adequacy counting purposes. However, the CAISO believes several revisions are necessary. First, the RA Opinion states, in pertinent part, that "[i]f the CAISO determines that the allocation on a particular path is not feasible to meet a local requirement, then it would allocate first based on 'evergreen' priority, then based on the load share percentage." The RA Opinion should be modified to clarify that infeasibility of the allocation on a particular path is not based on "a local requirement," but rather based on preestablished limits in the CAISO's baseline analysis. These limits are unrelated to local capacity requirements.

Second, the allocation method utilizes "evergreen" priority. In order to ensure efficient implementation of this requirement, the CAISO believes the RA Opinion should include a specific provision that LSEs must provide the CAISO with the contractual or delivery information.

Third, "Finding of Fact" No. 26 provides: "The third option for allocating to LSEs the CAISO-determined level of import capacity, which uses each LSE's share of CAISO system peak load and includes an evergreen (grandfather) priority, is reasonable and should be adopted."

The CAISO appreciates that this finding concludes that the CAISO's determination of the level of import capacity is reasonable. The CAISO feels, however, that a conclusion of law, similar to Conclusion of Law No. 5, should also be included recognizing that "the CAISO is the appropriate entity to determine the level of import capacity available for allocation among Commission jurisdictional LSEs." This conclusion acknowledges the CAISO's statutory responsibility to operate the Grid in a reliable manner and to ensure nondiscriminatory use of the transmission assets under the CAISO's operational control.

# E. Issues Relating to the Deliverability of Generation During Non-Summer Months Requires Modification of the PRM for Non-Summer Months

The RA Opinion overlooks a critical issue relating to deliverability from generation pockets. While the RA Opinion appropriately adopts the CAISO's recommendation to assume the deliverability of all generation pending completion of certain transmission upgrades, it does not address the need to account for changes in generator deliverability during non-summer months. This issue was timely raised by the CAISO in its Opening Comments to the Workshop Report.<sup>7</sup>

In those comments, the CAISO admitted that focusing the deliverability analysis solely on peak operating conditions may be inadequate given that the PRM does not change seasonally. As noted above, the PRM is intended to provide real-time operating reserves and compensate for such factors as load forecast error and resource forced outages. It was not intended to address deliverability limitations because all qualified capacity is assumed to be deliverable as a condition for counting toward an RA obligation. However, the CAISO's analysis of resource deliverability in non-summer months indicates that some resources are significantly less

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The CAISO first appreciated this concern as a result of the February 8, 2005, Assigned Commissioner's Ruling that request comments on, among other things, whether the LSE obligation should be based on an annual, monthly or seasonal peak. In the course of evaluating changes in the temporal nature of the obligation, the CAISO further considered changes in a resource's deliverability from the system peak (summer months) to the off-peak (non-summer months).

deliverable during the off-peak period.<sup>8</sup> As a result, if all resources are allowed to count towards a 15% PRM at the same levels as they contribute during the summer months, the uniform PRM would fail to ensure sufficient available resources during the non-summer months. Therefore, the CAISO recommends that the Commission compensate for the likely degradation of off-peak deliverability by adopting a PRM for the non-summer months that is 8% higher than the standard PRM or 23% of monthly peak load. The basis for incremental adjustment is fully explained in the CAISO's Phase 2 Workshop Comments at pages 44-46.

The CAISO's recommendation will not impose a meaningful increase in the administrative or cost burden associated with resource adequacy procurement. Under a monthly resource adequacy obligation period, capacity prices will likely be high only during the peak periods when it is most valuable, and inexpensive in the off-peak period when capacity is relatively more plentiful. As such, the incremental cost of procuring capacity for other off-peak seasons may be minimal. Further, implementation burdens are eliminated under the CAISO's approach because the same qualifying capacity for any single resource would be the same during any obligation period. Therefore, to ensure that the resource adequacy program supports a consistent level of operational reliability, the RA Opinion should be modified to address off-peak deliverability.

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Three principle areas affect the deliverability of resources in the non-summer months. These are lower off-peak load, transmission maintenance outages, and reduced imports from tie-line maintenance outages.

#### III. Conclusion

For the foregoing reasons, the CAISO respectfully requests that the Commission modify the RA Opinion consistent with the foregoing recommendations.

December 6, 2005

Respectfully Submitted: want A. Roserblum com

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California Independent System Operator

## **CERTIFICATE OF SERVICE**

I hereby certify that I have served, by electronic and United States mail, a Petition of the California Independent System Operator Corporation to Modify Commission

Decision 05-10-042 on Resource Adequacy in Docket No. R.04-04-003.

Executed on December 6, 2005, at Folsom, California.

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An Employee of the California Independent System Operator

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