BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking to Promote Policy and Program Coordination and Integration in Electric Utility Resource Planning

R.04-04-003

OPENING COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ON THE DRAFT DECISION OF ALJ WETZELL REGARDING OPINION ON RESOURCE ADEQUACY REQUIREMENTS

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Dated: October 17, 2005

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In accordance with Rule 77.7.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 Regarding Resource Adequacy Requirements," mailed September 27, 2005, in the above-referenced proceeding ("Draft Decision").

I. Introduction

The CAISO commends ALJ Wetzell and the staff of the Commission and California Energy Commission ("CEC") on producing a Draft Decision that continues California's progress toward a meaningful resource adequacy ("RA") requirement that properly seeks to "ensure that the infrastructure investment required for reliability actually occurs." (Draft Decision at 7.) To achieve this ultimate longterm objective, as the Commission has itself recognized, the current year-ahead RA requirement must be complimented by a long-term resource obligation better suited to promote infrastructure development. The CAISO, therefore, encourages the Commission to use this Draft Decision to expeditiously initiate the steps needed to incorporate long-term obligations into the RA requirement.

Notwithstanding the evolutionary process of the Commission's RA requirement, the Commission should not allow near-term reliability to be jeopardized. The CAISO's present comments focus on preventing the degradation of reliability from levels currently experienced. In particular, the CAISO believes that the Draft Decision must be modified in the following respects to realize the Commission's stated goal of "assuring that capacity is available when and where it is needed." (*Id.*)

- Reject deferral of the Local Capacity Requirement ("LCR"). The Draft Decision rests on an incorrect understanding of the reliability criteria underlying the LCR and the purported barriers to its implementation.
- > Refine the RA availability obligation to extend beyond the day-ahead and into real time.

- Specify that RA resources must bid \$0 for the Residual Unit Commitment ("RUC") availability payment and will not receive a RUC availability payment if the market clears above \$0.
- Modify or clarify the requirements for qualifying capacity by stating that (1) Department of Water Resources contracts do not count towards the portfolio limitations for Firm LD contracts, (2) interruptible demand response programs triggered by an CAISO emergency do not court, and (3) energy-limited resources must be capable of operating for two-hours per day during the non-summer months.
- Adopt a revised planning reserve margin for non-summer months that takes into consideration changes in generator deliverability.

II. Local Capacity Requirements

The Draft Decision proposes to defer implementation of LCR until 2007. (Draft Decision at 76.) Should the Commission adopt the Draft Decision's recommendation, the CAISO seriously questions its ability to serve real-time load at a level of reliability comparable to that achieved under current CAISO criteria without the CAISO assuming a substantial "procurement" role to secure the resources necessary to serve customers in transmission constrained local areas. This outcome should be untenable to the Commission. Not only does the Draft Decision directly conflict with the Commission's LSE-based RA approach by elevating the CAISO to the role of primary resource buyer, it magnifies, rather than minimizes, the cost risks to which consumers will be exposed. Nor do the purported procedural, cost, and operational concerns cited by the Draft Decision as justification for the postponement withstand scrutiny. Accordingly, the Commission should adopt an LCR requirement in its final order or, alternatively, utilize the substantial effort to date as a starting point for an expedited, limited workshop process that can be completed in sufficient time to meet the June 2006 implementation date.¹

A. There Is No Valid Reason Why the Commission Cannot Proceed With LCR For June 2006

1. The LCR Criteria Is Based on Existing Reliability Criteria So That the Costs of Procuring the Necessary Capacity Cannot Impose a Hardship

The Draft Decision misperceives the height of the barriers to the present adoption of the LCR.

¹ The Draft Decision provides for further proceedings to implement RA. Section 9 of the Draft Decision suggests that the scope of the future proceedings may be reasonably broad, including capacity markets and the drafting of a general order covering RA provisions. There does not appear to be any barrier to bifurcating future proceedings based on priority of issues. The CAISO suggests that any issues the Commission believes are not fully vetted, but are essential for June 2006 implementation, can be resolved by January 2006 if entities are specifically assigned responsibility for developing straw proposals, i.e., an allocation plan.

Boiled down, the Draft Decision suggests that cost, implementation and procedural concerns compel deferral for at least six months. As the CAISO has noted in prior comments, the cost concern is, in fact, primarily a challenge to the appropriateness of the underlying reliability criteria. If the CAISO has appropriately identified the capacity requirements needed to operate the system in accordance with applicable planning and operating standards, then the capacity is "needed" to serve California consumers and the cost of securing the capacity by definition cannot be excessive. The Draft Decision itself acknowledges that a fundamental objective of RA to "promote the recovery of investment costs through payments for capacity." (Draft Decision at 9.) Thus, whether a resource is needed for one hour or two-thousand hours per year, that resource must receive sufficient contribution to its going forward fixed costs to ensure that it remains available to serve California load. From a capacity payment perspective, therefore, the Draft Decision's hesitancy to adopt the LCR over a concern regarding an all hours availability obligation is largely irrelevant.²

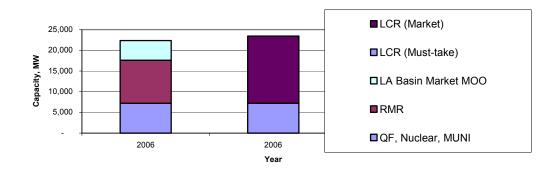
The Draft Decision's assessment of the basis of the CAISO LCR criteria is confused. Contrary to the implications of the Draft Decision, the LCR **does not** represent new reliability criteria, but rather reflects a set of reliability criteria no different than that applied today by the CAISO. Specifically, the LCR is based on a combination of the CAISO's existing Reliability Must-Run ("RMR") criteria and the planning/operating requirements that determine the resource commitments made under the CAISO's current FERC Must-Offer Waiver Process. In other words, the LCR criteria reflect the standards under which the CAISO must operate the CAISO Controlled Grid to maintain today's level of reliability. In contrast, the RMR criteria alone do not, and are not intended to, achieve this objective. The LCR allows the CAISO to operate the grid with an ability to recover from overlapping contingencies in which a major facility is lost from service (N-1), the system is then readjusted, and then another major facility (N-1 or common mode N-2) is lost from service. *These are the actual conditions under which the CAISO currently must operate the CAISO Controlled Grid.* The RMR criteria solely look at a single or N-1 contingency. Similarly, the LCR, but not RMR, considers 500kV path mitigation. Under WECC/NERC standards, the CAISO must account for contingencies on the entire CAISO Controlled Grid, including established 500 kV path ratings. Therefore, the current RMR criteria simply constitute a subset of the

² The Draft Decision also mentions "operational burdens," which the CAISO interprets as operational or variable costs. No party has provided an estimate of the potential operational cost impact of LCR. The CAISO posits that such costs will be relatively insignificant. As noted below, for the period prior to implementation of MRTU, the CAISO will utilize its current Must-Offer Waiver Process, whether pursuant to FERC order or for RA resources only. Thus, long-start units will have the opportunity to avoid operating costs associated with the LRC availability obligation. The operational costs associated with making short-start units available in real time is comparatively small and merely reflects the operational conditions that prevail today under the FERC must-offer obligation.

applicable CAISO Grid Planning Standards.³

Simply put, the Draft Decision's characterization that the LCR analyzes "extreme" contingencies is wrong. Moreover, the fact that the LCR resulted in capacity requirements greater than current RMR contracts was not only expected, but a necessary outcome of the intent of the LCR process – to identify all the capacity in local transmission constrained areas needed to allow the CAISO to operate the system in accordance with current reliability standards.

To emphasize this point Figure 1 shows that the level of capacity obligations is generally consistent between the existing procurement methods (RMR and Must-Offer, including capacity procured under CAISO Operating Procedure M-438) vs. LCR. LSEs will be required to procure a comparable quantity of capacity and make it available to the CAISO. The difference between the two procurement methods is relatively small (1,085 MWs). This amount can, in large part, be accounted for by hydro capacity in NP15 owned by PG&E. Unlike Southern California, which generally has thermal units in the load pockets that require day-ahead commitments through the FERC Must-Offer process to be available to address the applicable reliability criteria, many of the load pockets in Northern California possess hydro units that are assumed available by CAISO operators because of their quick-start capability. The need for these units is explicit in the LCR. Therefore, it is inaccurate to assert that the LCR analysis resulted in "unexpectedly high" levels of LCR. Mechanisms Exist to Allocate the Costs of LCR procurement.



³ The Draft Decision further notes that the LCR uses a one-in-ten peak load forecast, rather than RMR's onein-five peak load forecast. The RMR technical process was, in part, developed as a compromise among the CAISO and market participants. An element of this compromise was the use of a one-in-five year peak load forecast. However, for local load pockets, the CAISO believes a one-in-ten year load forecast is more appropriate because of the absence of load and temperature diversity in small load pockets. In fact, the CAISO and IOUs have used the one-in-ten year weather forecast during the grid planning process to address load pockets in their respective service areas.

2. Mechanisms Exist to Allocate the Costs of LCR Procurement

The Draft Decision states that "we have not been presented with an adequately developed method by which local capacity requirements can be allocated to individual LSEs." (Draft Decision at 77.) However, a model or process for allocating LCR costs is under review at FERC through SCE's various filings to revise its Transmission Owner ("TO") Tariff to reflect new categories of Reliability Services costs incurred as a PTO in compliance with the Commission's resolution adopting CAISO Operating Procedure M-438.⁴ M-438, which springs from the D.04-07-028, directs SCE to procure levels of capacity in the South of Lugo and North of Miguel area that increase with SCE's service area peak-hour load. This model relies on the PTOs to fulfill the procurement obligation and allocate the costs to other LSEs through its TO Tariff.

SCE has filed to recover the costs attributable to the operating procedure as calculated by comparing the operating and start-up costs of each unit with the market value of capacity and energy produced by these units for hours during which the operating procedure is effective. Despite protests, FERC concluded that the formula rate proposed by SCE was just and reasonable, but set the cost allocation provisions of SCE's filing for hearing.⁵ Subsequently, SCE filed to revise its TO Tariff to include, among other things, the cost of specific M-438 contracts (i.e., a capacity payment and payment reflecting the incremental cost of using a directed resource instead of a least-cost resource) as part of its Reliability Services costs. FERC has consolidated this filing with the previously referenced hearing proceeding.⁶ What this suggests is that FERC is amenable to utilizing Reliability Services under the TO Tariffs to recover the costs of local capacity. While uncertain until FERC approval whether such an approach will strictly comply with cost causation principles, such an approach is likely to provide an equitable allocation that would permit going forward with LCR in the final order.

The alternative approach relies on imposing the procurement obligation directly on all LSEs serving load within the load pocket. The Commission is already requiring LSEs to provide a load forecast that includes all hours of the year. Thus, the physical location of the metered load is all that is needed to determine the proportional load pocket obligation. Two factors would need to be addressed. First, under the "best estimate" load forecasting approach, LSEs would have a significant incentive to under-forecast load in the load pocket and the CAISO would be required to buy residual capacity to prevent a procurement shortfall. This likely scenario can be avoided by adoption of the "current customer" approach to load forecasting. Such an approach, also assists in resolving the second factor,

⁴ Southern California Edison, FERC Docket Nos. ER05-763-000, ER04-1209-000, EL05-29-000, and ER05-410-000.

⁵ Southern California Edison, 109 FERC ¶ 61,263 (2004) at P 15.

⁶ Southern California Edison, 112 FERC ¶ 61,247 (2005).

which would be assigning the specific customer to a particular bus-bar to determine inclusion in the load pocket. The CAISO, therefore, suggests the Commission can adopt an approach where LSEs are assigned a load pocket obligation based on the load of their current customers in the pocket.⁷ To the extent the CEC requires additional evaluation to assess the feasibility of this approach, the CAISO recommends that it be included in a focused workshop held at the earliest possible date in November 2005 following adoption of the final order to ensure implementation by June 2006.

3. The Purported Procedural Barrier Can Be Overcome

The Draft Decision states that implementation of the LCR "would be inconsistent with the processes and the authority of this Commission." (Draft Decision at 78.) This conclusion is unnecessarily restrictive and formalistic. The California Constitution confers broad authority on the Commission to establish its own procedures. (Utility Consumers Action Network v. Public Utilities Commission (2004) 120 Cal.App.4th 644, 654) Indeed, no decision of the Commission can be invalidated based on the informality in the proceeding. (Pub. Utilities Code § 1701(a.) As such, courts have liberally construed the Commission's power such that Commission action within its jurisdiction is subject to challenge only where it contravenes federal and state due process requirements. (People v. Western Air Lines, Inc. (1954) 42 C.2d 621, 632.) Due process is provided by the requirement of adequate notice and an opportunity to be eard. (Id.) Here, such notice and opportunity was provided. As the Draft Decision references, parties had the opportunity to address the CAISO's proposed criteria and preliminary results. (Draft Decision at 75.) The Workshop Report expressly requested input on the LCR, including "whether the more stringent load forecasting and outage conditions for identifying local capacity requirements in the CAISO proposal should be accepted." (Workshop Report at 101.) In response, for instance, the Joint Parties not only evaluated the CAISO's preliminary results, but also included the actual preliminary values,⁸ in their comments on the Workshop Report.⁹ Accordingly, there can be no question that

⁷ The New England ISO uses this method to establish the current year local obligation by evaluating the proportion of load that the LSE contributed towards the previous year's peak.

⁸ As noted on the record in the CAISO's Reply Comments to the Workshop Report, dated July 25, 2005, the CAISO corrected several inaccuracies in the preliminary LCR results. First, the CAISO's preliminary study showed local requirements in Fresno and Sierra that exceeded the local area load. The Fresno area information was incorrectly reported by reflecting the sum of the sub-area requirements, rather than the entire local area requirement. As a result of the overlapping of the sub-areas, this represented double-counting. Also, the preliminary report presented results for the Sierra area that accurately reflected generation requirements, but failed to include all load within the pocket. Both of these corrections were addressed at the July 29, 2005 stakeholder meeting on the LCR and in the final study results submitted to the Commission on September 23, 2005.

⁹ Comments of the Joint Parties – Southern California Edison Company (U338-E), Pacific Gas & Electric Company, Alliance for Retail Energy Markets, California Large Energy Consumers Association, California Manufacturers and Technology Association, The Utility Reform Network, and the Office of Ratepayer Advocates - on Resource Adequacy Phase 2 Workshop Report, July 13, 2005 at 5.

sufficient information necessary to adopt the LCR exists in the record.

B. Deferral of LCR Until 2007 Will Likely Force The CAISO Into a Primary Procurement Role With Uncertain Cost Consequences

With no valid reasons to defer adoption of LCR in the final order, the Commission must also fully understand the implications of accepting the Draft Decision without revision. The Draft Decision's proposal to postpone LCR for a minimum of six months appears to rely on the fallacy that the FERC imposed must-offer requirement will inevitably endure until the CAISO's Market Redesign and Technology Upgrade ("MRTU") is implemented and that the RMR mechanism "remains available and effective for achieving local reliability." (Draft Decision at 79; see also at 77 ["Absent a showing that the local procurement obligations that would be imposed on LSEs will be more cost-effective than current local procurement through RMR mechanisms, we are not prepared to order LSEs to pursue such obligations for 2006."].) RMR is not equivalent to the proposed LCR obligations in meeting current levels of reliability. Unlike the availability obligations proposed for LCR resources, RMR does not grant the CAISO dispatch rights sufficient to respond to the full scope of potential contingencies or operating conditions for which the CAISO must account. This is consistent with the fact that RMR covers only a subset of the reliability criteria that must be addressed through LCR. It is also consistent with the CAISO's current use of the FERC must-offer process to commit resources necessary to satisfy applicable reliability criteria not otherwise met through RMR.

Further, the CAISO cannot concur with the Draft Decision's unwavering assumption that the FERC must offer obligation will remain after implementation of RAR. FERC has indicated its intent to terminate the must-offer obligation when RAR becomes effective.¹⁰ This likelihood has increased with the complaint filed by the Independent Energy Producers Association ("IEP") to replace the current must-offer obligation with a capacity service tariff.¹¹ The CAISO believes a Tariff-based capacity service may constitute a reasonable mechanism for the CAISO to fulfill its secondary, backstop role to the LSEs' primary role of procuring the resources necessary to achieve current reliability levels. Thus, the CAISO emphasizes that if LSEs are not required to procure local capacity, and in the absence of a FERC must offer obligation, the CAISO will step in to procure the capacity necessary to meet its reliability criteria through some mechanism, including a possible Tariff-based approach. Therefore, if FERC adopts such an approach, the CAISO will use the LCR results to determine the necessary level of capacity it needs to procure because of the absence of the Commission mandated LSE LCR.

The Commission should understand that relying on the CAISO as the primary procurement agent

¹⁰ California Independent System Operator Corp., 108 FERC ¶ 61,254 (2004).

¹¹ Independent Energy Producers Association v. California Independent System Operator Corporation, FERC Docket No. EL05-146-000.

creates a potentially risky and costly proposition for California consumers for several reasons. First, under an LSE approach, capacity and energy can be bought more cost-effectively because of the option to enter into longer-term arrangements that allow for more favorable terms.

Second, and a corollary to the first item, is that an LSE will be less likely under a CAISO capacity service to procure energy and thereby hedge its energy price risk resulting from the need to dispatch such local units. The absence of long-term contracts creates greater exposure to potential market power under tight supply conditions. California learned during the energy crisis that over-reliance on the CAISO's real-time markets can impose unwanted volatility and cost escalation. This is especially true given that the very real risk exists that FERC may reject the CAISO's full local market power mitigation provisions in MRTU, and instead implement a method of scarcity pricing, absent an effective Commission local capacity RA obligation. While some LSE's have argued they may encounter market power in purchasing in certain locations, that is precisely when ISO's back stop capability will be most useful. Therefore, rather than forcing the ISO to be a primary purchaser, it is most cost effective to California consumers if the Commission were to require LSE's to procure locally on a long term basis, and leave the ISO in a backstop role

Third, an RAR program that primarily relies on CAISO procurement will likely lead to inefficient results because of an inability to coordinate LSE activities to meet the 15% planning reserve margin ("PRM") and CAISO procurement. Under the Draft Decision, all LSEs will be procuring to achieve their 115% RA obligations to meet the month ahead reporting obligation. Yet, the CAISO will not know the efficacy of their efforts to procure the locational capacity until those reports are provided. Thus, the PD establishes a very real scenario where by the LSEs meet their 115% PRM, but the CAISO must procure additional capacity. Accordingly, unless the CAISO's procurement occurs first and is allocated to LSEs as an offset towards the LSEs' obligation to meet its PRM, excessive capacity will be procured and paid for by California consumers. Given the magnitude of resources that may need to be procured by the CAISO, as evidenced by the current must-offer commitments, the impact of this inefficiency could be significant. Therefore, the Commission must weigh the material, negative consequences of deferring LCR until 2007 against its ability to overcome its perceived implementation hurdles.

III. Obligation on Resource Adequacy Resources

The Commission has frequently acknowledged, and the Draft Decision repeats, that RA "should ensure that capacity is available when and where it is needed [which] means that the RAR program design must be consistent with the CAISO's operational needs." (Draft Decision at 10.) Several modifications to the Draft Decision would facilitate realization of this fundamental RA objective.

The Draft Decision contemplates "an LSE-based RA obligation that extends the availability obligations described in D.04-10-035 to generators through contract provisions." D.04-10-035 imposes

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on RA suppliers an obligation to (1) be scheduled by the LSE, (2) be bid into the forthcoming day-ahead Integrated Forward Market ("IFM") if not already scheduled, or (3) be subject to the CAISO's RUC process if the bid is not accepted in the IFM. (See, Draft Decision at 14.) However, the CAISO has operational needs for capacity after the day-ahead processes have been completed.¹² Thus, the Commission's previously articulated sequential obligation requires refinement to conform to current needs and those of the CAISO's MRTU project and further elaboration on the CAISO's specific operating requirements, which can be effectuated either by simply requiring all RA contracts to conform to the CAISO's RA Tariff provisions or by revising the availability obligations in the final order. The CAISO believes the former approach is more efficient. If the Commission elects the latter, the final order should include the following changes as well as a requirement that RA contracts executed after the date of the order must incorporate any additional availability or availability-related obligations established by the CAISO.

- A distinction must be made between "short" and "long" start units. Short-start units (start-up + minimum run time < 5 hours) must self-schedule or offer into the CAISO's proposed combined Hour Ahead Scheduling Process ("HASP") and real time market for each hour of the operating day, even if not scheduled in the IFM or committed by RUC, unless otherwise released from this obligation by the CAISO.
- 2. As noted above, it is FERC that will determine whether or not the must-offer obligation endures beyond implementation of RAR. If FERC determines the current must-offer obligation does not endure, an RA obligation between June 1, 2006 and implementation of MRTU must also be defined. The CAISO contemplates that the current must offer waiver process or some modified version of the process will remain in place for RA and other identified resources until implementation of MRTU. Simply put, all RA resources must make themselves available to the CAISO for commitment or dispatch prior to the operating day. A long-start RA unit must continue to apply for a waiver under the procedures set forth in the CAISO Tariff, and if not granted a waiver, must make its RA capacity available in real time. Similar to today, short-start RA units must make themselves available in real time subject to use limitation and contingency designations.

¹² For example, WECC MORC requires that the control area be able to replace any operating reserves that may be utilized to respond to a contingency within the next sixty minutes following the event.

- **3.** The CAISO expects that under the current markets as well as under the MRTU IFM/RUC process, the commitment of a resource will result in either a full energy schedule or a schedule that commits the unit, but only a partial dispatch of its energy. For such RA resources that are committed, but only partially dispatched, the RA availability requirement will extend into real time.
- 4. Based on the MRTU design, any multi-hour block imports that are expected to qualify as an RA resource must be capable of hourly selection if not fully committed in the IFM process. Further, if the block resource is selected in RUC, the resource must be dispatchable in those hours in the HASP and real time markets. These specific requirements must be established in the bi-lateral RA contracts between LSEs and suppliers on going forward basis. These requirements are essential to ensure import capacity provides value beyond the day-ahead. Absent such a requirement, the CAISO may be forced to rely exclusively, and inefficiently, on resources located within the control area for all post day-ahead requirements. That said, the CAISO acknowledges that many existing import energy contracts have call-options that currently end after the CAISO's Day-Ahead market , precluding the availability of the resource in real time if not previously exercised. Prior to MRTU, these resources must be self-scheduled in the Day-Ahead market to satisfy their RA availability obligation.
- 5. In Resolution E-3955, the Commission stated: "it is unwilling to pay any cost for reliability. It is not the intention of this Commission to simply provide needless revenue streams, or the ability to double-recover costs, to generators. It is the Commission's position that an RA resource that receives an RA payment should not also receive a RUC availability payment through the CAISO." The Commission further noted that "this is an issue to be fully addressed in the final phase 2 decision." However, the Draft Decision fails to do so, but should conform to the Commission position articulated in Resolution E-3955 by specifying that an RA resource must submit a \$0 RUC availability bid and credit any RUC availability revenue received from this source to the load-serving entity¹³.

¹³ The CAISO has proposed that RA resources selected in RUC would be ineligible to receive a RUC Availability payment. Nonetheless, the Commission needs to make clear that RA resources are contractually ineligible for such payments, particularly if the CAISO's proposal of not paying RUC Availability payments to RA resources is rejected by FERC.

It is especially important for the Commission to act given FERC's signal that it will defer to the outcome of the RA proceeding as a guide on this issue.

IV. Qualifying Resources

A. The Portfolio Limitation on Firm LD Contracts Must Include DWR Contracts

The Draft Decision's treatment of Firm LD contracts reflects a pragmatic, transitional approach generally supported by the CAISO. The CAISO agrees with rejection of a "grace" period, the adoption of a discrete sunset date, and the declining portfolio share limitations. The Draft Decision notes that the portfolio limitations "will apply to all LD contracts, regardless of the date signed, to eliminate incentives for parties to rush to sign large quantities of additional LD contracts." (Draft Decision at 62.) The Draft Decision should clarify that "all LD contracts" includes the subset of DWR contracts that do not set forth or limit the seller's selection of delivery points or generation sources.

Firm LD-type DWR contracts total approximately 6000 MW. Accordingly, if DWR contracts are not included in the portfolio limitations, RA portfolios in 2006 will likely consist of roughly 37% Firm LD contracts during the CAISO's summer system peak of approximately 46,000 MW (25% + 6000/46000) and expand to approximately 42% during the CAISO's non-summer system peak of approximately 34,000 MW (25% + 6000/34000). In D.04-10-035, the Commission asserted its unwillingness to risk California's grid reliability by ignoring contract features.¹⁴ Failing to include the DWR contracts in the portfolio limitations exacerbates the deliverability and dispatchability concerns that prompted the phase-out of Firm LD contracts in the first instance.¹⁵ (Draft Decision at 58.) Indeed, the Commission should be aware that to the extent existing Firm LD contracts include call-options that are not exercised on a particular day or hour, the CAISO may fall short of resources to cover forecasted load and operating reserves. In such circumstances, the CAISO may need to commit non-RA resources at potential scarcity RUC availability prices.

Equally significant, the importance and potential magnitude of procurement under the CAISO's Tariff-based capacity service will increase if the DWR contracts are excluded from the portfolio limitations. Yet, if the DWR contracts are part of the 25% Firm LD contract limitation, LSEs will be required to procure a greater percentage of physical capacity. Some percentage of this physical capacity

¹⁴ D.04-10-035 at 29.

¹⁵ The CAISO acknowledges the Commission's prior desire to "accord full value" to the DWR contracts. (D.04-10-035 at 29.) Most of the MW associated with the DWR contracts extend beyond the December 31, 2008 sunset date. Therefore, if included in the calculation of portfolio limits, the DWR contracts would not be fully counted beginning in 2008 because they will likely exceed 5% of total load. Nevertheless, the DWR contracts remain value mechanisms to hedge against volatile energy prices.

will likely be in the load pockets and thereby diminish the quantity of resources the CAISO would be compelled to procure under the RCST to fully satisfy the LCR. The Draft Decision should clarify this ambiguity by expressly stating that all Firm LD contracts, includes DWR contracts.

B. Emergency Interruptible Programs Should Not Be Counted As RA Resources

The Draft Decision refuses to "adopt the CAISO's recommendation that emergency-only DR resources should not count for RAR." (Draft Decision at 50.) The Commission in its final opinion should reconsider this outcome. There are approximately 1500 MW signed up as emergency-only DR. The PRM is intended to account for mandated operating reserve requirements of approximately 7%, regulation of approximately 2%, forecast error (RAR uses a 1-in-2 year weather forecast and will, by design, be wrong 50% of the time), and forced outages. The use of emergency-only DR increases the likelihood that the PRM will be incapable of accounting for the listed factors absent either 1) the declaration of an emergency so as to trigger the DR programs or 2) the CAISO utilizing non-RAR resources to avoid the emergency. The first scenario is wholly inconsistent with the traditional use of the programs and, more importantly, with the expectations of the participants that the programs would be triggered only in true periods of scarcity. Similar to California's experience after the energy crisis, participation in such programs will decrease dramatically. Under the second scenario, the CAISO will likely be forced to commit mpm RA resources during the RUC process at RUC availability prices that reflect the scarcity of RA resources, more than offsetting the Draft Decision's concern regarding negating the value of emergency-DR programs.

C. Energy or Use Limited Resources Must Be Available More Than Twelve Hours During the Non-Summer Months to Qualify as an RA Resource

In D.04-10-035, the Commission determined that to qualify as an RA resources, the resource must (1) be able to operate for a minimum of four hours per day for three consecutive days and (2) be able to run a minimum aggregate number of hours per month based on the number of hours that load in the CAISO Control Area exceed 90% of peak demand in that month. The Draft Decision proposes to apply the first prong to both summer and non-summer months, but limit application of the second prong to summer months only. (Draft Decision at 72.) Approval of the Draft Decision's qualifying criteria for energy and use limited resources exposes California to potential reliability risks by counting capacity that is physically unable to run more than 12 hours, fails to offer a reasonable quantity of energy, and is incapable of meeting a transparent and clear offer obligation. Rather, the Commission should adopt the CAISO's recommendation that in the non-summer months resources must be able to operate two-hours per day and thus make themselves available to the CAISO no less than two-hours per day.

Under the Draft Decision, a resource could qualify as an RA resource for an entire non-summer

month at its entire capacity so long as it had 12 hours of run capacity. This is patently insufficient. The first prong element was offered to ensure that resources were, in fact, available to satisfy system peak conditions during a heat spike, which generally occur over a four-hour period for an average of three days. It was not intended to set the floor for the availability obligation or the energy available during the entire month. Indeed, the Draft Decision's treatment of energy-limited resources is inconsistent with its refusal to presently qualify DR programs that only have four-day call capability. (Draft Decision at 51.) The two-hour per day proposal is consistent with rules adopted in other ISOs, provides greater assurance that sufficient energy exists to meet load, and permits clarity in defining the offer requirement. If the Commission chooses not to adopt the CAISO's proposal, the CAISO strongly urges the Commission to acknowledge that the issue may be reconsidered after experience with this operational limitation.

V. Deliverability

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

The CAISO supports the Draft Decision's selection of Alternative 3 to determine the allocation of available import capacity for RA counting purposes, but believes a revision is necessary to clarify that infeasibility of the allocation on a particular path is based on pre-established limits in the CAISO's baseline analysis that are unrelated to local capacity requirements. The CAISO also supports the Draft Decision's proposal to use historical delivery data to allocate import capacity to accommodate DWR contracts. However, the CAISO believes a Conclusion of Law provision should be added to specify that LSEs must provide the CAISO with the contractual or delivery information necessary to implement Alternative 3.

The Draft Decision must further expressly acknowledge the need to allocate, pursuant to Alternative 3, a portion of the available transmission import capability to non-jurisdictional CAISO Participating Transmission Owners ("PTOs") and other users of the CAISO grid. Some entities within the CAISO Control Area, which are not PTOs, do not have a sufficient amount of Existing Transmission Contracts ("ETCs") to satisfy their import needs for resource adequacy purposes. These entities can be identified by historic CAISO Wheeling Access charges for importing power across the CAISO system using transmission not encumbered by ETCs. These entities should also be allocated a portion of the CAISO import capability based on the amount of their historical Wheeling Access charge payments related to imports into the CAISO Control Area. However, Alternative 3 proposes to allocate import capability in proportion to an LSE's share of the CAISO peak load, rather than its proportion of the CAISO Transmission Access Charge ("TAC"). As a result, allocations based on the Wheeling Access charge, which are in financial terms, are not comparable to a peak load allocation methodology. Therefore, the ISO recommends resolving this incompatibility by specifying that the term LSE for Alternative 3 implementation purposes, encompasses all load serving entities in the CAISO Control Area, including those not regulated by the Commission. Then, imports should be allocated in proportion to their share of the TAC with an evergreen priority. In addition, the ISO recommends that Alternative 3 include a use it or lose it provision to prevent LSE's withholding their unused import allocations from LSEs trying to procure new long-term power contracts.

B. Deliverability From Generation Pockets During Non-Summer Months

The Draft Decision's discussion of deliverability from generation pockets overlooks a critical issue that must be incorporated in the final decision. While the Draft Decision 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.¹⁶

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. 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 preliminary analysis of resource deliverability in non-summer months reveals that some resources are significantly less deliverable during the off-peak period.¹⁷ 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 offpeak 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 Workshop Comments, dated July 13, 2005, at pages 44-46.

The CAISO's recommendation will not impose a meaningful increase in the administrative or cost burden associated with RA procurement. Under a monthly RA obligation period, capacity prices will likely be high only during the peak periods when it is most valuable, and inexpensive in the off-peak

¹⁶ 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).

¹⁷ Three principle areas affect the deliverability of resources in the non-summer months. These are lower offpeak load, transmission maintenance outages, and reduced imports from tie-line maintenance outages.

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 offpeak 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 Workshop Comments, dated July 13, 2005, at pages 44-46.

The CAISO's recommendation will not impose a meaningful increase in the administrative or cost burden associated with RA procurement. Under a monthly RA 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 RA program supports a consistent level of operational reliability, the Draft Decision should be modified to address off-peak deliverability.

VI. Conclusion

For the foregoing reasons, the CAISO respectfully requests that the Commission adopt the Draft Decision with the modifications and clarifications discussed above.

October 17, 2005

Respectfully Submitted; By:

Grant A. Rosenblum Attorney for California Independent System Operator

CERTIFICATE OF SERVICE

I hereby certify that I have served, by electronic and United States mail, Opening Comments of The California Independent System Operator Corporation on the Draft Decision of ALJ Wetzell Regarding Opinion on Resource Adequacy Requirements in Docket No. R.04-04-003.

Executed on October 17, 2005, at Folsom, California.

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