# 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	)	
	)	

#### REPLY BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR ON LONG-TERM PLANS OF THE INVESTOR OWNED UTILITIES

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Pursuant to Administrative Law Judge Brown's Ruling Establishing a Briefing Outline and Setting Briefing Schedule ("ALJ Ruling"), dated September 28, 2004, the California Independent System Operator ("CAISO") respectfully submits this reply brief on the long-term procurement plans ("LTPPs") of Southern California Edison ("SCE"), Pacific Gas and Electric Company ("PG&E"), and San Diego Gas & Electric Company ("SDG&E").

### I. THE COMMISSION MUST CAREFULLY ASSESS THE NEED FOR ADDITIONAL AGGREGATE RESOURCES AND ACT ACCORDINGLY

As noted in its Opening Brief, the CAISO's focus in this proceeding centers, in large part, on advancing resource adequacy and improving the identification of necessary transmission with sufficient lead-time for orderly construction. Resource adequacy, at its most basic level, seeks to ensure the availability of sufficient resources to reliably meet real-time load demands. It is axiomatic that this fundamental objective can be achieved and sustained over time only where resource investment keeps pace with projected load growth. It is an equally accepted principle that uncertainty impedes necessary investment. The CAISO commends the tremendous progress made by the Commission since the "power crisis" in redefining and clarifying the regulatory environment applicable to those portions of California's energy markets under its jurisdiction.

Notwithstanding the Commission's laudable efforts, not the least of which is the *Interim Opinion Regarding Resource Adequacy* ("*Interim Opinion*") adopted on October 28, 2004, until the culmination of those efforts, some regulatory uncertainty will necessarily linger with regard to the details of resource adequacy implementation and the ultimate effects of community choice aggregation and a core/non-core structure.

The manner in which the utilities account for resource adequacy amid the load uncertainty associated with community choice aggregation and a core/non-core program appropriately constitutes a central concern of this proceeding. The utilities should be permitted to structure their portfolios to minimize the potential for stranded costs caused by prospective load shifts. In dealing with these concerns, however, the Commission should not loose sight of the fact that a shift in who serves the load does nothing to reduce the physical presence of total load. Simply put, the load leaving the IOUs has not left California and it must be served. Thus, it is critical to consider the total load that is expected to ensure that resource adequacy can be achieved.

TURN has recognized that "a policy that minimizes stranded cost risk will not do very much to get new resources built in the State." (TURN Opening Brief at 13.) Moreover, LSEs, other than the IOUs, are also likely to lack sufficient clarity in the identity and quantity of their potential customer base to be in a position to currently proceed with infrastructure investment. Therefore, in the very short-term, there may be barriers to investment over and above those projects expressly articulated, and ultimately approved, in the IOUs' LTPPs. For this reason, the CAISO reiterates that if the Commission believes resources, beyond those proposed by the IOUs to meet the anticipated needs of their bundled customers, must be constructed for aggregate system capacity needs, the IOUs represent the most realistic entities that can currently implement

such an undertaking. Any such undertaking should be accompanied by an equitable method to allocate such resource costs.

Like all forecasts, the timing of any need for additional resources is subject to some degree of imprecision. However, what is clear, is that TURN has overstated that "all credible data submitted in this case ... show that there should be capacity sufficient to meet all customer needs through 2008." (TURN Opening Brief at 4.) The CAISO concurs that the projected "base case" scenario of its "Five-Year Assessment" ("Assessment") anticipates adequate resources will be available through 2008. (See, Exhibit 101.) The daily operation of the grid provides valuable information regarding the prescience of the Assessment's forward projections. In this regard, actual system conditions experienced during the summer of 2004, after preparation of the Five-Year Assessment, suggest that demand conditions may be trending towards the Assessment's "peak" demand forecast. In addition, the California Energy Commission's Electric Demand and Supply Outlook, finds that a "planning reserve of 15% or greater is not maintained beginning in 2007 unless new resources are added." (Exhibit 86 at pg. 8.) Thus, whether the Commission should direct the IOUs to develop or procure new resources as the "interim agents" for resource adequacy policy revolves around the level of "insurance" the Commission deems appropriate given the uncertainties inherent in supply/demand forecasts.

The Border Generation Group ("BGG") further highlighted the appropriateness of the IOUs functioning as de facto "agents" with respect to transmission infrastructure. Citing City of San Diego witness William Monsen, the BGG correctly stated that "whether there is community choice, a core/non-core market structure, or an increase in the level of direct access, these forms of 'departing load' do not necessarily mean that there will be a diminished need for transmission in the San Diego area." (BGG Opening Brief at 11-12.) It follows that unless the community

choice or direct access LSE secures generation within its local boundaries, the LSE will likely be required to rely on the IOUs' transmission assets. Indeed, Strategic Energy and Constellation NewEnergy acknowledge that "[t]o the extent that existing transmission bottlenecks are relieved and potential constraints are addressed before they develop, system reliability will be enhanced and LSEs will have more options in terms of the resources to meet their energy and reserve capacity requirements." (Constellation Opening Brief at 11.) The implications are twofold. First, all IOUs should, as did SDG&E, develop *transmission plans* based on an aggregate forecast of load without consideration of who serves the load. Second, as community choice and core/non-core structures develop, information from those LSEs under the Commission's jurisdiction should be incorporated into the transmission planning aspects of the LTPPs.

# II. CERTAIN REQUESTS BY THE IOUs TO MODIFY THEIR AB 57 PROCUREMENT PLANS SHOULD BE GRANTED BUT SUBJECT TO CONDITIONS TO PRESERVE THE EFFICIACY OF THE COMMISSION'S RESOURCE AEQUACY EFFORTS

In their opening briefs, SCE and PG&E request that the Commission modify their existing AB 57 Procurement Plans as well as Decision No. 03-12-062 in a manner consistent with their respective pending Petitions for Modification. (See, SCE Opening Brief at 68-80 and PG&E Opening Brief at 46-48.) Several of the requested modifications interact with resource adequacy and the CAISO's current and/or intended future market designs. The CAISO does not take a position on each of the IOUs' requests for modification, but believes that, as to the following items, the Commission should adopt the proposed changes. However, as discussed below, the CAISO believes that expanding the IOUs' ability to enter into multi-year contracts for nonrenewable resources, while meritorious, must be accomplished in a manner that does not unduly vitiate the effectiveness of the Commission's resource adequacy program.

#### A. Multi-Year Procurement

The IOUs seek to remove the current prohibition against multi-year contracts for nonrenewable resources that commence delivery beyond 2004. They also seek to eliminate the restriction that contracts for nonrenewable resources commencing after 2004 be limited to one-year terms and begin delivery prior to the fourth quarter of 2005. (SCE Opening Brief at 68; PG&E Opening Brief at 46-47.) The CAISO generally supports the IOUs' request. The CAISO agrees that the present limitations on multi-year contracting potentially hinder the IOUs from procuring the least cost/best fit resources for their portfolios, hedging against market risk, and creating the incentives for new infrastructure development. In addition, PG&E correctly recognizes that multi-year contracting "will help to keep online existing units that do not currently have contracts." (PG&E Opening Brief at 47.)

Nevertheless, the CAISO is concerned that granting the IOUs unfettered authority to enter into five-year contacts may negatively effect the Commission's intended implementation of its resource adequacy program. This concern arises from two aspects of the Commission's *Interim Opinion*. First, the *Interim Opinion* deferred resolution of the treatment of "intra-control area system" contracts to Phase 2 of the resource adequacy process, which is not scheduled to conclude until mid-2005. (*Interim Opinion* [Draft] at 24.) Intra-control area system contracts that do not specify the physical units the supplier intends to rely on to "back" the contract undermine the ability to ensure that capacity is committed to serve California load. Without the specification of a particular resource or resources supporting the contract, there is no way to ensure that the generation capacity is not being double-counted for resource adequacy purposes, i.e., used to supply the energy contract and a separate availability contract to different LSEs.

This gives a false indication of sufficient capacity. Second, although the *Interim Opinion* 

specifies that capacity resources must be scheduled or bid into the CAISO's markets, the Commission adopted this policy "going forward." (*Interim Opinion* [Draft] at 43.) Contracts executed after completion of Phase 2 must include provisions to satisfy this forward commitment obligation. It is unclear from the *Interim Opinion* whether contracts executed prior to completion of Phase 2 that do not include comparable provisions will be eligible to qualify as a capacity resource. Thus, by authorizing multi-year contracts in this proceeding, without limitation, the IOUs will have approximately 6 months to *potentially* lock-up a considerable portion of their portfolios through 2008 pursuant to contracts that do not allow for the effective implementation of resource adequacy.

The CAISO recognizes that the Commission delegated to Phase 2 workshops the development of criteria for determining the contract eligibility for resource adequacy purposes. However, this proceeding provides the appropriate forum to coordinate the IOUs' AB 57 Procurement Plans with the resource adequacy process. In this regard, the *Interim Opinion* clarified that "[t]o satisfy the energy needs of their customers, LSEs may acquire, contract with and make use of resources that do not qualify for these resource adequacy requirements." (*Interim Opinion* [Draft] at 45.) Accordingly, IOUs, and all LSEs, remain free to contract to meet their energy needs. However, the CAISO recommends that the Commission impose a limitation on IOU contracting for meeting resource adequacy purposes, effective until the issuance of a Commission order on Phase 2, that requires all intra-control area system contracts to specify the physical resource(s) supporting the contract and that such nominal resources will be subject to the scheduling protocols for capacity ultimately adopted by the Commission. This approach grants the IOUs contracting flexibility, but also eliminates the double-counting gaming

possibility and permits the supplier to identify the capacity that will be committed to California upon implementation of resource adequacy.

#### **B.** Electrical Capacity Limits

The CAISO supports modification of the IOUs electrical capacity position and rate-of-transaction limits for electrical capacity to conform to resource adequacy requirements. (See, SCE Opening Brief at 70-73.)

#### C. Spot Market Procurement and Operating Reserve Requirements

SCE requests that the Commission "[s]tate specifically that the target guideline for spot market procurement does not apply to procurement of capacity to meet WECC operating reserve requirements." (SCE Opening Brief at 74-75.) In the absence of any guideline, SCE accurately states that "IOUs may self-provide their operating reserves, allow their operating reserve requirements to be served from the ISO's markets on a day-ahead or hour-ahead basis, or utilize a combination of both." (*Id.* at 75.) Accordingly, the CAISO agrees that if the guideline on spot market purchases includes IOU reliance on the CAISO's ancillary services markets, the flexibility needed for the IOUs to efficiently satisfy their operating reserve requirements will be unduly restricted. This is especially true given that common forecast error may itself result in the need to rely on the spot market for balancing energy in an amount of 2-3% on a particular day, imposing a de facto self-provision requirement and limiting the IOUs' ability to utilize the CAISO's ancillary services markets to fully satisfy their approximately 6-7% operating reserves.<sup>1</sup>

The fact that the 5% spot market guideline is measured on a monthly basis does not mitigate the impact of this example. The requirement to provide operating reserves is a daily obligation and assuming an LSE seeks to procure one-half of its obligation from the CAISO, the LSE is limited to approximately 2% of its energy purchases in the spot market. While this is a reasonable expectation where the spot market functions solely as a "balancing" market, it does potentially limit the ability of an LSE to optimize its portfolio and will likely do so after resource adequacy is instituted. As the Commission has recognized, "a 100% of requirements (peak demand public 15-17%

That said, however, the CAISO does not believe D.03-12-062 is unclear on the scope of its application. The decision "clarif[ies] that this guideline applies to *energy* procurement in Day-Ahead, Hour-Ahead, and Real-Time markets." (D.03-12-062, mimeo at 10 [emphasis added].) The spot market guideline expressly applies to "energy" procurement, not "capacity" procurement, which encompasses operating reserves. Equally important, the issue raised by SCE remains material only until implementation of the resource adequacy planning reserve obligation on June 1, 2006. In the *Interim Opinion*, the Commission recognized that "[s]o long as LSEs have assured sufficient resources in the forward time frame, they can maximize their opportunities in the spot market while minimizing exposure to high prices and volatility." (*Interim Opinion* [Draft] at 38, fn. 11.) The CAISO agrees. To the extent resource adequacy eligibility is contingent on a particular resource making itself available to the CAISO markets, including ancillary services markets, through LSE scheduling or bidding, then the magnitude of an LSEs reliance on spot markets diminishes in importance from a reliability perspective.

#### D. Prohibition Against "Arbitrage" Should Be Eliminated Or Clarified

SCE requests that the Commission "delete the sentence which states that a utility should not 'arbitrage' in energy markets. The term 'arbitrage' could apply to many different situations, and could result in a ban of practices the Commission intended to permit." (SCE Opening Brief at 77.) The CAISO agrees that the term "arbitrage" is too vague and may preclude legitimate opportunities for IOUs to optimize their portfolios in the CAISO's markets. Accordingly, to the extent the Commission can clarify its concern, it should do so by specifying the prohibited behavior. However, the CAISO notes that setting the parameters of appropriate behavior of

reserves) month-ahead forward capacity obligation has energy implications. It will tie up the energy associated with the generator's capacity until the point at which the LSE actually schedules its loads in the CAISO Day-Ahead market. CAISO reasons that this will mean that generators have energy that can only be sold in spot markets, likely

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market participants in the wholesale energy markets operated by the CAISO properly rests with the CAISO under the jurisdiction of the Federal Energy Regulatory Commission. Market rules have been clearly established in the CAISO Tariff. (See, e.g, *Order Accepting Compliance Filing, Subject to Modification, Instituting Section 206 Proceeding, and Establishing Technical Conference*, 109 FERC ¶ 61,087 (Oct. 28, 2004).) Therefore, without further definition as to the nature of the "arbitrage" prohibited, the sentence referenced by SCE should be eliminated to avoid any regulatory uncertainty and potential inconsistency with the CAISO Tariff.

## III. TRANSMISSION PLANNING IN THE LONG-TERM PLANS REQUIRES FURTHER REFINEMENT

As indicated in its Opening Brief, the CAISO acknowledges the effort made by the IOUs to address local reliability issues in their plans. However, the CAISO also believes the effort is incomplete and further enhancements in the LTPPs are needed to fulfill the Commission's objectives. This is especially true with respect to ensuring that transmission needed in conjunction with supply and demand resource plans are identified in a timely manner. The CAISO, therefore, recommended that the Commission improve the next iteration of the LTPPs by requiring additional scenario analysis and by adoption of interim guidelines for local capacity requirements should the resource adequacy process fail to finalize such requirements prior to the 2006 LTPP submissions.

A statement by PG&E in its Opening Brief characterizes the deficiency: "Until the locations, timing and characteristics of the new resources can be identified and incorporated into the resource mix, it is not possible to definitively identify the transmission needed to accommodate them. Nor is it desirable to plan the transmission based on speculation that certain resources may develop." (PG&E Opening Brief at 31.) Given that generation development

decreasing its price." (Interim Opinion [Draft] at 38-39, fn. 12.) Thus, "short-term markets can be valuable in

timeframes are much shorter than transmission development timeframes, transmission development will always lag generation development if transmission owners and regulators wait for generation to begin development before beginning transmission planning and development. Since generation typically does not develop unless load exists to be served, the LSEs can have influence over generation development. In order to ensure that long-lead time transmission projects are built in time to ensure economic operation of the grid and that all resources needed for resource adequacy purposes are deliverable, LSEs should be required to develop conceptual long-term resource plans that include locational information for all resource additions. This, in turn, will allow the IOUs to identify which scenarios will require additional transmission. Using all publicly announced resource development plans and other available information, LSEs could submit a few scenarios for potential resource additions as part of their LTPPs. Complete resource plans from all LSEs within the region could then be compiled to allow the IOUs to perform long-term transmission planning assessments for the purpose of developing a long-term plan. After a couple of iterations, a long-term coordinated resource and transmission plan for the region could be developed that would provide guidance for transmission expansion.

meeting energy requirements in a least-cost manner." (Id.)

#### IV. CONCLUSION

The CAISO respectfully requests that the Commission adopt a decision that incorporates, or is otherwise consistent with, the substance of the arguments set forth above and in the CAISO's Opening Brief.

November 1, 2004

Respectfully Submitted:

By: /s Grant A. Rosenblum

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#### **CERTIFICATE OF SERVICE**

I hereby certify that I have served, by electronic mail, a copy of the foregoing Reply Brief of The California Independent System Operator Corporation on Long-Term Plans of Investor Owned Utilities to each party in Docket No. R.04-04-003.

Executed on November 1, 2004, at Folsom, California.

/s Charity N. Wilson

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