

September 22, 2003

Attn: Commission's Docket Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

RE: Docket # R.01-10-024, Order Instituting Rulemaking to Establish Policies and Cost Recovery Mechanisms for Generation Procurement and Renewable Resource Development

Dear Clerk:

Enclosed for filing please find an original and five copies of the Reply Brief of the California Independent System Operator Corporation in Docket # R. 01-10-024. Please date stamp one copy and return to California ISO in the self-addressed stamped envelope provided.

Thank you.

Sincerely,

Jeanne M. Solé
Regulatory Counsel

Cc: Attached Service List

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

Order Instituting Rulemaking to Establish
Policies and Cost Recovery Mechanisms for
Generation Procurement and Renewable
Resource Development

R.01-10-024

**REPLY BRIEF OF THE CALIFORNIA INDEPENDENT
SYSTEM OPERATOR**

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Dated: September 22, 2003

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In accordance with California Public Utilities Commission (“CPUC” or “Commission”) Rule 75, the California Independent System Operator (“CA ISO”) respectfully submits its reply brief in this matter. As stated in the CA ISO’s opening brief, the CA ISO’s key interest in this proceeding is definition by the CPUC of a resource adequacy requirement that is clear, effective and enforceable.

I. INTRODUCTION AND SUMMARY

Upon review of the opening briefs in this matter, two general areas cause the CA ISO particularly grave concern. This reply brief addresses these two areas and sets forth several additional points.

The first area of concern is the suggestion or implication by many parties that the CPUC should not require adequate procurement by the utilities. The reasons provided are diverse, including 1) the utilities’ financial condition; 2) the possibility of the introduction of a core/non-core program; 3) the wish by the state to rely in the first instance on energy efficiency, demand response and renewables; 4) the alleged significant level of surplus resources in California and

the West. The second area of concern is the low priority given by a significant number of parties to the need for coordination and a hand-off between the CPUC's resource adequacy requirements and the activities of the CA ISO. If the CPUC were to heed these suggestions and assignment of priorities, the result could be a very anemic resource adequacy requirement that will do little to assure the sufficiency of resources to meet customers' needs or to provide for reliable system operations.

The CA ISO is concerned in particular about the general resistance on the part of many parties to a requirement that the utilities "firm up" their capacity purchases prior to real time. San Diego Gas and Electric Company ("SDG&E") went so far as to suggest that the CPUC's current 5% guideline should be eliminated. The CA ISO would be very concerned about an unbounded ability on the part of the utilities to rely on the spot market for their capacity needs. Thus, the CA ISO considers that there needs to be a limitation on the utilities' ability to rely on the spot market for their capacity needs and a mechanism to enforce it. With such a mechanism in place, the CA ISO agrees with SDG&E that a limitation on the ability of utilities to rely on spot market energy purchases to optimize the value of their portfolio is unnecessary and could foreclose cost-saving opportunities for customers.

As the CA ISO explained in its opening brief, a monthly reliability obligation which requires the utilities to firm up 100% of their peak load plus the applicable planning reserve a month ahead of time would support stable investments in needed infrastructure and would, coupled with appropriate reporting and availability requirements, support a hand-off between the resources procured by the utilities under a CPUC jurisdictional resource adequacy requirement and CA ISO operations. The CA ISO is dismayed at the short shrift given to these issues in the opening briefs of most other parties. Unless coordination and a hand-off are explicitly

addressed, the value of a CPUC resource adequacy requirement will not be fully realized, and the CA ISO will continue to have to operate the system without the information it needs to support reliable system operations and to optimize energy and ancillary service procurement.

Perpetuating this situation benefits nobody.

In addition to these two areas of significant concern, a number of additional points raised in the opening briefs of other parties deserve some discussion. First, the CA ISO reiterates the need for utilities to accurately demonstrate the deliverability of the resources they indicate they will rely on to meet their needs. Transmission constraints are a very real limitation on the ability to deliver resources to load. (Transmission constraints that create deliverability problems can also give rise to substantial congestion charges.) As CA ISO witness Sparks stressed, the utility long-term plans do not even contain the information necessary to undertake a meaningful deliverability analysis. Thus, the claims made by the utilities that the subject is adequately covered in their long-term procurement plans are not accurate. At a very minimum, the CPUC should direct the utilities, on a going-forward basis, to demonstrate that the resources they procure are deliverable to load. With such a requirement formally established by the Commission, all parties can diligently work towards development of a specific deliverability standard and test in the workshop process.

Second, the CA ISO is concerned about any suggestion or implication in the utilities' opening briefs that the CPUC should approve their long-term procurement plans based on the current record. The utilities have agreed to re-file long-term procurement plans in 2004, which are consistent with the resource adequacy framework put into place by the CPUC. The CA ISO supports this approach because the long-term procurement plans filed by the utilities on April 15

do not include sufficient or consistent information from which to conclude that they are adequate.

Third, the CA ISO agrees that it is necessary to define responsibilities for the provision of reserves for all Load Serving Entities (“LSEs”), including Energy Service Providers (“ESPs”) and others, remains open to addressing reserve requirements in its tariff as necessary and consistent with the CA ISO’s obligation to provide open and non-discriminatory access to the transmission system.

Fourth, the CA ISO notes that a necessary prerequisite to the establishment of a firm obligation on the utilities to procure, in the forward market, adequate capacity to meet peak load plus the applicable planning reserve is the establishment of fair and ex ante cost-recovery rules. Such rules are in fact required by state law. Upon review of the opening briefs, the CA ISO concludes that adequate cost-recovery rules for procurement activities pursuant to long-term procurement plans have not yet been defined. This task must be given priority when the utilities file revised long-term procurement plans in 2004.

Finally, the CA ISO concurs with Southern California Edison Company (“SCE”) that it is imperative that the CA ISO and the CPUC harmonize their respective responsibilities as to the addition of transmission infrastructure; and supports the notion that the CPUC should rely on CA ISO determinations of need for transmission projects. In addition, the CA ISO agrees with the California Energy Commission (“CEC”), that the state agencies and the utilities will have to incorporate an overall assessment of the trade-offs between additional transmission, generation or load management into the various planning and procurement process that have been created. A clear mechanism to accomplish this objective is important to assure that this assessment does not delay the construction of needed resources.

In sum, particularly in light of a reluctance on the part of many parties to meaningfully address the myriad of key issues needed to put into place a clear, effective and enforceable resource adequacy requirement, the CA ISO considers that it is imperative that the CPUC step up to the plate and provide meaningful leadership by adopting the recommendations on threshold issues listed in the CA ISO's opening brief. Without such leadership, the current resource balance situation which is portrayed by so many parties as very favorable could quickly degrade and place California customers once again in the untenable position of having to pay very high prices for the resources needed to meet load or forego reliable electric service.

II. THERE ARE NO VALID REASONS TO DELAY THE IMPOSITION OF AN EFFECTIVE RESOURCE ADEQUACY REQUIREMENT WHICH INCLUDES A REQUIREMENT TO PROCURE IN THE FORWARD MARKETS SUFFICIENT CAPACITY TO MEET UTILITIES' RESOURCE NEEDS

As the CA ISO's opening brief sets forth, a resource adequacy requirement is needed 1) to provide, in the long-term, a platform for future investment in California's electric infrastructure; 2) to support, in the shorter-term, reliable system operations; and 3) to mitigate the amount and effect of market power in California's wholesale electricity markets by encouraging utilities to enter into long-term contracts. A resource adequacy requirement should assure that, consistent with their obligation to serve, the utilities secure adequate capacity in forward markets to meet their needs. To support the development of needed resources, it is important that utility reliance on spot markets to meet their capacity needs be appropriately limited, while allowing utilities to optimize the value of their resource portfolio using the spot market for energy trades.

A. Out-standing policy and financial issues should not delay the imposition and enforcement of an effective resource adequacy requirement.

A common theme in the opening briefs of a number of parties are reasons to delay firm action to achieve the objectives of resource adequacy including: 1) the utilities' financial

condition; 2) the possibility of the introduction of a core/non-core program; 3) the wish by the state to rely in the first instance on energy efficiency, demand response and renewables; 4) a claim that there are a huge number of surplus resources so there is no need to take prompt action. The CA ISO certainly acknowledges that these factors, along with others, need to be considered in developing prudent long-term procurement plans by the utilities. The CA ISO itself has highlighted Market Redesign (“MD02”) related issues that should also be considered. However, these factors do not provide a basis for delaying the implementation of a clear and enforceable resource adequacy requirement that requires the utilities to “firm up” procurement of capacity no later than a month ahead, rather than continuing to rely on last minute spot market purchases to meet their needs.

The CA ISO is very worried that if concerns about other policy issues dissuade the CPUC from putting into place the framework that requires utilities to procure sufficient capacity to meet their needs in the forward markets, the result could be insufficient supplies. As the Energy Action Plan notes, “[t]he state needs to ensure that its electrical generation system, including reserves, is sufficient to meet all current and future needs” Exh. 53, Energy Action Plan at 6. The CA ISO’s opening brief lays out in section III.A.1.d., the concern that without mid to long term contracts, existing and new resources that many parties are relying on to contribute towards a surplus of resources in California and the West may not remain in service and are unlikely to be built. Thus, the “surplus” that parties claim supports a delay in putting into place an effective resource adequacy requirement is fragile at best. In order for a favorable resource balance to be maintained, it is necessary for the utilities to enter into adequate mid to long term commitments in order to support the continued orderly development and maintenance of the resources needed to meet load.

Unfortunately, California has experience with delaying investment in needed resources pending the outcome of policy debates about the future of the electric industry, and this experience is not favorable. A review of the history of power plant development is instructive. As is shown in the record of power plant permitting by the CEC, available at the CEC website at http://www.energy.ca.gov/sitingcases/projects_since_1976.html, from 1996 to 1999 when the debate over restructuring of the electric industry raged, there was a hiatus in the development of new resources in California; not one single plant sought a permit from the CEC. This hiatus undoubtedly adversely affected the electric industry in 2000-2001.

Whereas the CA ISO agrees with Dr. Stern that the problems experienced during 2000-01 are not solely attributable to tight resources, tr. (Stern) at 5097:12-19, the CA ISO disagrees that the resource balance had no impact whatsoever, see id. Certainly, the Legislature considered the addition of resources to be one important component of a strategy to relieve the situation as, in 2000 and 2001, it enacted AB 970 and SB 28X to expedite the permitting of new power plants and power plant repowering. Public Resource Code Sections 25,550 and 25,550.5. In its preamble, AB 970 states:

Section 2. The Legislature finds and declares as follows:

- (a) In recent years there has been significant growth in the demand for electricity in the state due to factors such as growth in population and economic activities that rely on electrical generation.
- (b) In the past decade, efforts to construct and operate new, environmentally superior and efficient generation facilities and to promote cost-effective energy conservation and demand-side management have seriously lagged.
- (c) As a result, California faces potentially serious electricity shortages over the next two years, which necessitates immediate action by the state.
- (d) The purpose of this act is to provide a balanced response to the electricity problems facing the state that will result in significant new investments in new, environmentally

superior electricity generation, while also making significant new investments in conservation and demand-site management programs in order to meet the energy needs of the state for the next several years.

(e) It is further the intent of this act to provide assistance to persons proposing to construct electrical generation facilities without in any manner compromising environmental protection.

AB 970, Section 2. It would be a deplorable mistake to allow history to repeat itself by once again allowing a hiatus in the orderly development and maintenance of resources needed to meet projected demand, while policy matters related to the future structure of the electric industry continue to be debated.

The CA ISO notes further that its proposed approach for a resource adequacy requirement provides a significant amount of flexibility: utilities may rely on short-term purchases for 5-10% of their annual capacity requirements provided 100% of their capacity requirements are “firmed up” at least a month in advance. The CA ISO is concerned that additional flexibility to address possible new policies gives undue significance to the risk of policy changes without considering the risk of an erosion of the availability of resources to meet the needs of California electricity users.

Regardless of the ultimate structure of and priorities for the electric industry, resources will be needed to reliably and cost-effectively meet the needs of California electricity users, and it is important to put into place without further delay the resource adequacy framework needed to ensure the availability of these resources.

B. Utilities should not be allowed to rely on spot capacity purchases to meet the resource needs of their customers, but should be allowed to optimize the value of their resource portfolio through spot energy trades.

The CA ISO is also very disappointed by the level of resistance to a requirement that utilities procure sufficient capacity to meet their peak load plus the applicable planning reserve in the forward markets, at least one month ahead of time, rather than relying on spot market purchases and hoping there will be sufficient supplies at the last minute when few alternative options may be available. See tr. (Sheffrin) at 4423: 22-28; 4425: 8-12; 4426: 10-15; 4471: 8-13. If the CPUC heeds the recommendations of many of the parties, progress towards forward procurement of capacity resources by the utilities could be reversed rather than advanced. Certainly, a failure to put into place requirements for forward procurement of capacity needs by the utilities coupled with the elimination of the current Commission guideline to minimize spot purchases and justify purchases above 5% of monthly needs would be a significant step backward.

The CA ISO's proposal for a resource adequacy requirement and its rationale are set forth in great detail in its opening brief. Briefly, the CA ISO considers that utilities should be required to demonstrate "that they have procured (or have a reasonable plan to procure) sufficient capacity to meet 90-95% of their needs" on a year ahead basis. Exh. 87, Opening Testimony of Philip Pettingill and Anjali Sheffrin Regarding Long-Term Procurement Plans of the Investor Owned Utilities on Behalf of the California Independent System Operator ("Pettingill/Sheffrin Opening") at 16. Further, utilities should be required to procure, and to demonstrate that they have procured, sufficient resources to meet 100% of their monthly peak load plus the applicable planning reserve one month ahead of time. *Id.* at 17-18.

As explained in the CA ISO's opening brief, this approach provides the utilities a large degree of flexibility to firm up their capacity commitments when market conditions are optimal, while ensuring that surplus supplies, to the extent they exist, are committed to California and are

not diverted elsewhere or available only at very high prices due to adverse conditions such as a West-wide heat wave. Moreover, the month-ahead requirement would ensure that if there are problems looming, the CPUC, the CA ISO and the utilities would have a month to attempt to line up additional supplies or encourage conservation rather than addressing a potential short fall at the last minute in a crisis mode. See Opening Brief of the CA ISO at 39-40.

The level of resistance to an obligation on the part of the utilities to line up sufficient capacity to meet their needs in the forward markets is unwarranted. Ultimately, the utilities must procure sufficient resources to meet the needs of their customers be it in forward markets or relying on CA ISO markets. When purchases are made at the last minute, the range of options available to meet unforeseen circumstances is substantially more narrow than if purchases are made ahead of time. See tr. (Sheffrin) at 4423: 22-28; 4425: 8-12; 4426: 10-15; 4471: 8-13. Thus, no party has given a credible explanation for why it is better to risk last minute purchases of needed capacity rather than to proceed with an orderly procurement of needed resources ahead of the day-ahead and real-time time frames.

To the extent some of the resistance stems from a concern about the burden of making a monthly demonstration, the CA ISO notes that it devised the monthly obligation in order to provide for additional flexibility to rely on short-term capacity purchases. At some point before the spot market time frame, utilities should be required to show that they have secured all the capacity they need to meet their needs. Therefore, if it is draconian to require this demonstration a year-ahead, then, as far as the CA ISO is concerned, a month-ahead would suffice. But if a year-ahead is too far ahead and a month-ahead is too burdensome, the result becomes no enforceable requirement at all. The CA ISO considers this result to be inconsistent with the

utilities' "obligation to serve its customers at just and reasonable rates." Public Utilities Code Section 454.5(d).

In its opening brief, SDG&E argues that the CPUC should in fact eliminate the current 5% guideline adopted in D.02-10-062. SDG&E Opening Brief at 73-76. The arguments put forward by SDG&E for this elimination are similar to the CA ISO's arguments for allowing utilities to optimize the value of their portfolio through spot market energy trades. See CA ISO Opening Brief at 40. As explained in the CA ISO's opening brief, once sufficient capacity is procured and made available to the market, the CA ISO sees no need for restrictions on the use of a competitive spot market for energy to minimize the operating costs of serving load. CA ISO Opening Brief at 38. However, the CA ISO would be very concerned if the sole restriction on reliance on spot markets is eliminated without the creation of a clear and enforceable requirement for utilities to forward procure the capacity needed to meet their peak load plus the applicable planning reserve.

In sum, a resource adequacy regime is meaningless without some requirement that the utilities procure in the forward markets sufficient capacity to meet their customers needs. This is because any target reserve level (regardless of how high or how low) can easily be "met" if utilities are simply allowed to assume that resources will be available to meet their needs in the spot market.

The CA ISO urges the CPUC to adopt a monthly reliability obligation whereby utilities are required to show that they have procured sufficient capacity to meet 100% of their projected peak load plus the applicable planning reserve. This approach is a very reasonable middle ground. On the one hand, it does not unduly limit the ability of utilities to use short-term

capacity purchases and it allows utilities to procure resources for their customers when market conditions are optimal. On the other hand, it precludes the utilities from placing reliable cost-effective service to load at risk by waiting until the last minute to procure the resources needed to serve their customers' load. Elimination of the current guideline to justify spot market purchases above 5% without creation of a requirement to procure sufficient capacity in the forward markets would inappropriately afford the utilities an unlimited authority to (as SCE put it with regards to 2004) fill the open position by any short term means they see fit. See SCE's Long Term Resource Plan Opening Brief at 82.

III. THE VALUE OF A RESOURCE ADEQUACY REQUIREMENT WILL NOT BE FULLY REALIZED UNLESS COORDINATION WITH AND HAND-OFF TO THE CA ISO IS ADDRESSED.

Requiring the utilities to firm up 100% of their peak load plus the applicable planning reserve a month ahead of time could, in addition to supporting stable investments in needed infrastructure, support a hand-off between the resources procured by the utilities under a CPUC jurisdictional resource adequacy requirement and CA ISO operations. This hand-off could be implemented through appropriate reporting and availability requirements. The CA ISO is dismayed at the short shrift given to these issues in the opening briefs of most other parties.

The CA ISO's opening brief lays out the reasons that support the need for a hand-off between utility procurement activities and CA ISO operations. These include 1) the operational problems that result from a failure to make available to the CA ISO accurate information about the resources that have been procured by LSEs to serve their load, see CA ISO Opening Brief sections II, B, 2, and III, C; and 2) supply short-fall problems that could result if the CA ISO does not have the ability to commit resources that have been procured by the utilities in the day ahead and real time time frames as necessary to meet projected load, see CA ISO Opening Brief

section II,B,3 and III., C. Unless coordination and a hand-off are explicitly addressed, these problems will persist and the value of a CPUC resource adequacy requirement will not be fully realized.

The CA ISO is worried that coordination issues will fall through the cracks as utilities argue that the CPUC should not address coordination issues because they should be addressed in the CA ISO tariff and state agencies argue that coordination issues should not be addressed in the CA ISO tariff because they should be addressed at the state level. The state is in the best position to comprehensively address resource adequacy and should do so. Once the core requirements of a resource adequacy program are established, including an *obligation* to make information and resources available to the CAISO, the CA ISO, the state agencies and the utilities can work to determine the precise details of the information exchange and coordination with the CA ISO. If the result of this work is a consensus view that certain elements should be addressed in the CA ISO tariff, the CA ISO understands that it may have to modify aspects of its MD02 proposal to conform to the state's requirements.

The CA ISO reiterates moreover that if a resource adequacy regime is ineffective in assuring that sufficient resources are available to meet customer needs in real time, the CA ISO will continue to face the difficult choice of either paying very high prices to obtain resources at the last minute or curtailing load.

In sum, the hand-off and coordination between the utilities procurement activities and CA ISO operations needs to be explicitly addressed by the CPUC. The possibility that certain requirements may ultimately appropriately be included in the CA ISO tariff does not provide a basis for a failure to address these critical matters.

IV. THE UTILITIES LONG-TERM PLANS DO NOT ADEQUATELY ADDRESS THE DELIVERABILITY OF THE RESOURCES THEY INTEND TO RELY UPON TO THEIR LOADS

The utility opening briefs suggest that the utilities have adequately demonstrated the deliverability of the resources they propose to rely upon to serve their load. The CA ISO disagrees. As CA ISO witness Sparks stressed, the utility long-term plans do not even contain the information necessary to undertake a meaningful deliverability analysis. Moreover, the simplified analysis undertaken by Henwood is insufficient to effectively demonstrate deliverability. The CPUC should direct the utilities, on a going-forward basis, to demonstrate that the resources they procure are deliverable to load through the performance of comprehensive and adequate studies that take into account the activities of all three utilities in coordination with the CA ISO. With such a requirement formally established by the Commission, all parties can diligently work towards development of a specific deliverability standard and test in the workshop process.

The utilities generally claim that their long-term plans adequately address deliverability. As Mr. Sparks testified, however, all of the utility long-term plans include generic resources with no indication of a location. See Exh. 59C, Unredacted Opening Testimony of Robert Sparks Regarding the Long-Term Procurement Plans of the Investor Owned Utilities on Behalf of the California Independent System Operator at 11. As, Mr Sparks testified, an adequate deliverability analysis requires 1) information about the location of specific resources (or at the very least likely scenarios where resources could be located) and 2) a coordinated review of the three utilities' plans including technical studies to assess the resulting loadings on various import paths and internal paths within the CA ISO system. See tr. (Sparks) at 3858: 14-17; 3859: 13-20; 3864: 9-28; 3865: 1-8. As the CA ISO indicated in its testimony, with regards to transmission

constrained areas within California, utilities should be required to show that the combination of internal resources plus the deliverable outside resources they intend to rely upon are sufficient to meet the needs of customers within the constrained area. See Pettingill/Sheffrin Opening at 10.

The CA ISO must note in response to SCE's opening brief, that it does not consider the modeling work by Henwood using the MarketSym software to constitute an adequate deliverability analysis. As explained in SCE's long-term procurement plan:

Market Sym *approximates* the electrical system in the WECC region by dividing the WECC's region into 25 market zones and 42 transmission paths between zones. Within this WECC *approximation*, the California electrical market is modeled by eight zones and 17 paths, and SCE's service territory is modeled by one zone with six paths.

Exh. 10, Southern California Edison Company's Long-Term Resource Plan Testimony – Volume 2 (Redacted) at 26-27 (emphasis added). There is no mention in this passage or any of the other testimony regarding the Henwood modeling work of actual power flow analysis, and in fact, the CA ISO does not understand the Henwood modeling work to include the transmission line and transformer impedance data necessary to accurately calculate power flows on transmission paths and facilities. Without accurate modeling of the transmission system it is impossible to accurately understand the capability of the transmission system to deliver power to load when needed.¹ See tr. (Sparks) 3859: 13-20; 3864 at 9-22.

In contrast, SDG&E's discussion of appropriate deliverability assessments is much more consistent with the CA ISO's view of the matter. As Mr. Korinek explained in his rebuttal testimony:

¹ No support for the adequacy to demonstrate deliverability of modeling work using Henwood MarketSym can be garnered from the fact that Henwood's MarketSym software was utilized by SDG&E in their filing for the proposed Miguel-Mission transmission project reviewed by the Commission in Investigation No. 00-1-001. The Henwood MarketSym modeling work was used to support an economic justification for the Miguel-Mission line; not to demonstrate the deliverability of any particular resource. In fact, as SDG&E itself admitted, notwithstanding any analysis using Henwood's MarketSym software to support the economics of the Miguel-Mission line, "the deliverability of generation additions located on the 230 kV system between Miguel and Tijuana presents unique issues . . ." Exh. 58, Rebuttal Testimony of David M. Korinek at 7.

In regard to deliverability of potential resource additions internal to the SDG&E LRA that are currently in SDG&E's or the ISO's interconnection queues, we have completed (or are in the process of completing) generation interconnection studies that have been (or will be) reviewed by the ISO pursuant to their established tariff procedures. Furthermore, prior to contractually committing to a capacity purchase from any project in our generation study queue that seeks to meet SDG&E reliability needs, we would complete further deliverability analysis for review by the ISO. For other generic resource additions internal to SDG&E's service area that are not presently in the interconnection queue, we have not identified any specific transmission deliverability upgrades in our opening testimony. However, SDG&E intends to develop a transmission plan of service for such resources that will satisfy deliverability requirements. These studies will also be submitted to the ISO for their review. . . .

Furthermore, . . . it is critical that deliverability of a resource located outside an LRA be determined for both normal and emergency conditions. This is necessary because remote resources that can be scheduled for delivery to an LRA under normal operating conditions may not be deliverable during certain transmission contingencies when they are needed to serve the LRA's reliability needs and vice-versa.

Exh. 58, Rebuttal Testimony of David M. Korinek at 7-8.

This passage suggests that SDG&E understands the need for accurate power flow analysis to support a showing of deliverability since power flow analysis is an integral part of study work undertaken in the interconnection and grid planning processes at the CA ISO. The CA ISO concurs with SDG&E that there is a need to address how and when deliverability assessments are to be undertaken in the case of resources to be procured so far into the future that they have no defined location. See Rebuttal Testimony of David M. Korinek at 9-10. These details, however, can be addressed in the workshop process.

As discussed in the CA ISO's opening brief, the CA ISO has ideas on how its interconnection and grid planning processes can be used to support adequate deliverability analyses for purposes of utility long-term procurement plans, and the CA ISO is open to the ideas of other parties to ensure that an effective deliverability requirement can be designed. In the interim, however, it is important that the CPUC understand that the "deliverability" analysis

presented in the April 15 long-term procurement plans is very far from adequate. Therefore, the CPUC should make a threshold decision that “deliverability” must be demonstrated; should direct the parties to address the appropriate technical assessments needed to demonstrate deliverability in the workshops; and should direct the utilities to include adequate deliverability analyses in the revised long-term procurement plans submitted in 2004.

V. THE CPUC SHOULD NOT APPROVE THE UTILITY LONG-TERM PLANS UNTIL THEY ARE REVISED AND REVIEWED IN ACCORDANCE WITH THE RESOURCE ADEQUACY REQUIREMENT RULES ESTABLISHED BY THE CPUC

The Joint Recommendation endorsed by each of the utilities provides that the utilities are to file revised plans in 2004 based on the resource adequacy framework resulting from this proceeding and workshops. Exh. 69, Joint Recommendation of California Energy Commission, Office of Ratepayer Advocates, the Utility Reform Network, Southern California Edison Company, San Diego Gas and Electric Company and Pacific Gas and Electric Company Addressing Reserve Requirements, Energy Efficiency Funding and Long-Term Commitments (“Joint Recommendation”) at Point I.8. The Joint Recommendation goes on to state that “[t]he Commission should initiate in 2004 a process for determining with more specificity the timing and extent of new resource needs for each IOU. The objective of this process is that long-term resource needs would be identified and resource plans in place for each IOU by the end of 2004, leading to new long-term commitments to satisfy such needs, assuming customer base and financial issues are satisfactorily resolved.” Id. at Point III.2. Notwithstanding having endorsed the Joint Recommendation, there are suggestions, or at least implications, in the opening briefs of some of the utilities that the Commission should approve their long-term procurement plans.

The CA ISO would be very concerned about CPUC approval of the utility long-term procurement plans in a manner that forecloses further rigorous analysis of the plans in 2004, when revised plans are presented in a more complete and comparable basis. The CA ISO's opening brief and the section above set forth some of the CA ISO's concerns with the lack of adequate deliverability analysis in the plans. Further, as stated in the CA ISO's opening brief, the CA ISO remains concerned that the April 15 long-term procurement plans do not contain sufficient consistent information for the CPUC to make a determination based on the plans that the utilities will obtain sufficient resources to meet their load in the coming years. Exh. 3, Opening Testimony of Mary Jo Thomas Regarding the Long-Term Procurement Plans of the Investor Owned Utilities on Behalf of the California Independent System Operator ("Thomas Opening") at 2. Finally, as the CA ISO's opening brief details, the April 15 long-term procurement plans fail to adequately assess a number of important matters. See CA ISO Opening Brief, Section VI. Better information on these matters is important to establish a sound strategic direction for procurement by the utilities in the future.

In sum, the CA ISO does not consider that the CPUC should approve the current utility long-term procurement plans. Rather the utilities should be required to revise their plans to address outstanding deficiencies consistent with the Commission's threshold decisions and the resource adequacy framework adopted by the Commission. The revised plans should be reviewed in 2004.

VI. CONSISTENT RESOURCE ADEQUACY REQUIREMENTS SHOULD BE ESTABLISHED FOR ALL LOAD SERVING ENTITIES

The Alliance for Retail Energy Markets ("AReM") suggests in its opening brief that the CPUC does not have jurisdiction to impose resource adequacy requirements on ESPs, but that it

may develop guidelines for such requirements to be implemented and enforced by the CA ISO. Opening Brief of the Alliance for Retail Energy Markets at 13-18. The Western Power Trading Forum (“WPTF”) suggests that the CPUC should “take the lead both in developing a common resource adequacy standard” and “working with the ISO to implement that standard for LSEs.” Opening Brief of the Western Power Trading Forum at 9. The CA ISO shares the concern of many parties that there should be consistent resources adequacy requirements applicable to all LSEs, exh. 87, Pettingill/Sheffrin Opening at 13, and remains ready to work with the CPUC and the state to provide for the application of consistent resource adequacy requirements for all LSEs within its control area.

The CA ISO has not researched the extent of the CPUC’s jurisdiction to impose reserve requirements on ESPs, and hence takes no position on the matter. However, as Mr. Pettingill and Dr. Sheffrin testified, the CA ISO is unaware of what entity other than the CPUC or the CA ISO could impose reserve requirements for ESPs. Exh. 87, Pettingill/Sheffrin Opening at 29. Thus, to the extent the CPUC is confident that it has jurisdiction to determine and impose resource adequacy requirements for direct access and community aggregation customers, it should do so. Further, if the CA ISO’s assistance is required to impose consistent resource adequacy requirements on ESPs, community aggregators, municipal utilities and any other LSEs within the CA ISO control area, the CA ISO remain open to working with the CPUC, other state agencies, and stakeholders to place resource adequacy requirements in its tariff in a manner that assures consistent requirements for all LSEs.

VII FAIR AND EX-ANTE COST RECOVERY RULES MUST BE ESTABLISHED FOR UTILITY PROCUREMENT OF NEEDED CAPACITY IN THE FORWARD MARKETS

The CA ISO considers that a necessary prerequisite to the establishment of a firm obligation on the utilities to procure, in the forward market, adequate capacity to meet peak load plus the applicable planning reserve level, is the establishment of fair and ex ante cost-recovery rules. In fact, state law specifically requires the establishment of such rules.

Public Utilities Code Section 454.5(b)(7) specifically requires that utility procurement plans include: “[t]he upfront standards and criteria by which the acceptability and eligibility for rate recovery of a proposed procurement transaction will be known by the electrical corporation prior to execution of the transaction. This shall include an expedited approval process for the commission’s review of proposed contracts and subsequent approval or rejection thereof.”

Public Utilities Code Section 454.5(c) provides that

A procurement plan approved by the commission shall contain one or more of the following features, provided that the commission may not approve a feature or mechanism for an electrical corporation if it finds that the feature or mechanism would impair the restoration of an electrical corporation's creditworthiness or would lead to a deterioration of an electrical corporation's creditworthiness:

(1) A competitive procurement process under which the electrical corporation may request bids for procurement-related services. The commission shall specify the format of that procurement process, as well as criteria to ensure that the auction process is open and adequately subscribed. Any purchases made in compliance with the commission-authorized process shall be recovered in the generation component of rates.

(2) An incentive mechanism that establishes a procurement benchmark or benchmarks and authorizes the electrical corporation to procure from the market, subject to comparing the electrical corporation's performance to the commission-authorized benchmark or benchmarks. The incentive mechanism shall be clear, achievable, and contain quantifiable objectives and standards. The incentive mechanism shall contain balanced risk and reward incentives that limit the risk and reward of an electrical corporation.

(3) Upfront achievable standards and criteria by which the acceptability and eligibility for rate recovery of a proposed procurement transaction will be known by the electrical corporation prior to the execution of the bilateral contract for the transaction.

The commission shall provide for expedited review and either approve or reject the individual contracts submitted by the electrical corporation to ensure compliance with its procurement plan. To the extent the commission rejects a proposed contract pursuant

to this criteria, the commission shall designate alternative procurement choices obtained in the procurement plan will be recoverable for ratemaking purposes.

Further, as set forth in the CA ISO's opening brief, it is necessary to give utilities adequate incentives to forward procure sufficient resources. The opposite effect is likely if 1) there is no clear cost recovery rules for long-term forward procurement and 2) all spot market transactions procured through CA ISO markets are deemed prudent. See CA ISO Opening Brief at 43.

In reviewing the opening briefs, the CA ISO is concerned that the rules for cost recovery of long-term procurement commitments by the utilities are still murky, and certainly do not contain the specificity required in Public Utilities Code Sections 454.5(b) and (c). Consistent with Public Utilities Code Section 454.5(b)(7), the utilities should be required in the first instance to propose a process for cost recovery for resources procured in accordance with their long-term procurement plans that provides for prompt cost recovery, up-front standards for reasonableness review and protection from hindsight review. Utilities should be required to fully address the requirements of Public Utilities Code Sections 454.5(b) and (c) in their revised 2004 plans. Addressing cost recovery should be a high priority as, until a clear ex-ante process is in place, the utilities will continue to have a perverse incentive to rely on transparent CA ISO markets without first contracting for sufficient capacity to meet their needs.

VIII. THE CA ISO, CPUC AND CEC MUST DEVELOP AN EFFICIENT PROCESS FOR IDENTIFICATION AND SITING OF NEEDED TRANSMISSION FACILITIES

The CA ISO concurs with SCE and the CEC that further work is needed to establish an efficient process for the identification and siting of transmission additions in California.

Mr. Sparks' Opening Testimony contains a summary description of the CA ISO's grid planning process. Exh. 60, Redacted Opening Testimony of Robert Sparks Regarding the Long-Term Procurement Plans of the Investor Owned Utilities on Behalf of the California Independent System Operator ("Sparks Opening") at 1-5. As Mr. Sparks describes, the grid planning process is a year long, intensive process, with numerous opportunities for participation by interested stakeholders. *Id.* The process culminates in the submission of plans by the utilities to the CA ISO, and review and approval or disapproval of the projects contained in the plans by the CA ISO, with governing board approval required for projects costing \$20 million or more. *Id.*

The CA ISO agrees with SCE that as a matter of public policy, the Commission should work with the CA ISO to harmonize the Commission's siting responsibilities with the CA ISO's responsibilities for maintaining reliability and undertaking transmission planning. SCE's Long Term Resource Plan Opening Brief at 72. The CA ISO also agrees with SCE that the Commission should do so by relying on a finding by the CA ISO that it has reviewed a project under its mandate to ensure efficient use and reliable operation of the transmission grid, and found that a transmission line was needed. *Id.* at 72-73. The CA ISO's policy and legal arguments for this conclusion have been presented to the CPUC repeatedly, most recently in its January 23, 2003, Petition for Rehearing of Decision 02-12-66. The CA ISO will not reiterate its arguments and analysis here but rather refers the Judge and the Commission to its Petition for Rehearing of Decision 02-12-066. Suffice it to say that the CA ISO agrees with SCE regarding this matter.

Further, the CA ISO agrees with the CEC that the CA ISO, the state agencies and the utilities will have to incorporate an overall assessment of the trade-offs between additional transmission, generation or load management into the various planning and procurement

processes that have been created, including the CA ISO grid planning process, the CEC's Integrated Energy Policy Report process, and the procurement processes. The mechanism for doing this has not yet been well defined. The CA ISO welcomes further dialogue with the utilities and the state agencies to establish where in the various proceedings that relate to planning and procurement, these trade-offs are to be considered in a timely and efficient manner. In this way, the need to assess the relative merits of transmission or generation/load management additions will not delay the construction of needed resources.

In sum, additional dialogue is required to harmonize the respective responsibilities of the CA ISO, the utilities, the CPUC and the CEC in the identification and permitting of new transmission facilities.

VII. CONCLUSION

Creation of a resource adequacy requirement is of overriding importance to provide for reliable and cost-effective electric service to customers in California. Particularly in light of a reluctance on the part of many parties to meaningfully address the myriad of key issues needed to put into place a clear, effective and enforceable resource adequacy requirement, the CA ISO considers that it is imperative that the CPUC step up to the plate and provide meaningful leadership by adopting the recommendations on threshold issues set forth in the CA ISO's opening brief. Without such leadership, the current resource balance situation which is portrayed by so many parties as very favorable could quickly degrade and place California customers once again in the untenable position of having to pay very high prices for the resources needed to meet load or forego reliable electric service.

Respectfully submitted,

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PROOF OF SERVICE

I hereby certify that on September 22, 2003, I served by electronic and U.S. mail, the Reply Brief of the California Independent System Operator Corporation in Docket # R. 01-10-024.

DATED at Folsom, California on September 22, 2003.

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