Exhibit No.: _____
Commissioner: Peevy
Administrative Law Judges: Walwyn, Halligan and Allen
Witness: Robert Sparks

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

REDACTED OPENING TESTIMONY OF ROBERT SPARKS REGARDING THE LONG TERM PROCUREMENT PLANS OF THE INVESTOR OWNED UTILITIES ON BEHALF OF THE CALIFORIA INDEPENDENT SYSTEM OPERATOR

Submitted by the California Independent System Operator

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June 23, 2003

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My name is Robert Sparks, Lead Grid Planning Engineer in the Grid Planning Department of the California Independent System Operator Corporation (CA ISO). My duties on behalf of the CA ISO and my qualifications are submitted as an attachment to this testimony. I am submitting this testimony on behalf of the CA ISO. The purpose of my testimony is to set forth the CA ISO's recommendations and comments regarding the long-term plans of the Investor Owned Utilities (IOUs or utilities) with respect to the following topics:

- Transmission planning. This testimony will describe the CA ISO's grid planning process, respond to some of the policy comments regarding transmission planning of the utilities in their long-term procurement plans, and describe some of the high priority activities that the CA ISO is participating in to plan a robust backbone transmission system for California.
- The failure of the IOU long-term procurement plans to adequately address the deliverability of resources.

I. TRANSMISSION PLANNING.

A. SUMMARY OF THE CA ISO TRANSMISSION PLANNING PROCESS

The CA ISO is charged with maintaining the reliability of the CA ISO Controlled Grid. The CA ISO Controlled Grid is comprised of transmission facilities and rights turned over to the CA ISO's Operational Control by San Diego Gas and Electric Company (SDG&E), Southern California Edison Company (SCE), Pacifico Gas & Electric Company (PG&E), the City of Vernon, the City of Anaheim, the City of Azusa, the City of Banning, and the City of Riverside (collectively, the Participating

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Transmission Owners or Participating TOs). Along with the CA ISO's responsibility to maintain system reliability, the CA ISO is also charged with planning and expanding the CA ISO Controlled Grid so as to ensure a reliable and efficient transmission system. These functions and responsibilities are codified in the CA ISO Tariff, which is on file and available for public inspection at FERC.

Because transmission planning and expansion are important elements of maintaining reliability and ensuring the efficient use of the CA ISO Controlled Grid, the CA ISO Tariff (CA ISO Tariff section 3.2) and each Participating TO's Transmission Owner tariff provide for a coordinated planning process. As described further below, the coordinated planning process requires that, each year, the CA ISO and the Participating TOs assess the adequacy of the CA ISO Controlled Grid and determine whether additional facilities are required to ensure that energy can be reliably and efficiently delivered to load.

The CA ISO Tariff requires Participating TOs to identify, plan and construct transmission additions within their Service Areas that are determined to be needed. A transmission addition is deemed to be needed if it would promote economic efficiency or is necessary to maintain system reliability. Section 3.2 of the CA ISO categorizes and identifies those projects necessary to reliably deliver energy to load as "reliability driven" transmission projects and those projects deemed to be necessary on the grounds of maximizing the efficiency of the CA ISO Controlled Grid as "economic" transmission projects.

Reliability-driven projects are deemed to be needed if they are necessary to satisfy specified reliability criteria. The CA ISO coordinates the planning of modifications to the CA ISO Controlled Grid to ensure that, at a minimum, they meet the CA ISO Grid Planning Criteria. The CA ISO Grid Planning Criteria incorporate the Western Electricity Coordinating Council (WECC) Reliability Criteria, the North American Electric Reliability Council (NERC) Planning Standards, and local area reliability criteria. Economic projects are deemed to be needed if either 1) the project sponsor commits to pay for the cost of the project, or 2) the proponent or the CA ISO can demonstrate that the benefits of the project to ratepayers exceed its costs.

Because the CA ISO's transmission planning function relates to its responsibilities to maintain a reliable and efficient transmission system, the CA ISO does not focus on a detailed consideration of

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environmental, routing, social and aesthetic factors. The CA ISO believes that these factors are appropriately considered in the CPUC's siting process.

Importantly, the CA ISO coordinated planning process is flexible in that transmission projects can be proposed by a variety of entities, including the Participating TOs, the CA ISO or any entity who participates in the Energy marketplace through the buying, selling, transmission or distribution of Energy or Ancillary Services. Thus, in the context of the annual grid planning process, any Market Participant can recommend to a Participating TO that it study a project, can recommend to the CA ISO that it direct a Participating TO to study a project, or can step forward to become the sponsor of a transmission project. (Disagreements are subject to alternative dispute resolution (ADR) under the CA ISO Tariff but to date parties have been able to resolve any differences of opinion without resorting to ADR.) Having all these interests participate in the planning process is expected to facilitate the development of a CA ISO Controlled Grid that best meets the needs of all its users and maximizes the potential benefits to the State of California.

The CA ISO coordinated grid planning process provides a public forum where interested stakeholders can participate in the preparation of the Participating TOs' annual transmission expansion plans. The annual transmission expansion plans cover a ten-year planning horizon and identify those areas of the transmission system where enhancements are necessary to satisfy the applicable reliability criteria through the evaluation of the technical merits of various transmission, generation and operating solutions. Participating TOs are required to develop, and submit to the CA ISO, these annual transmission expansion plans for the portion of the grid owned by the Participating TO. The CA ISO reviews the Participating TO's annual transmission expansion plans for accuracy and adequacy in meeting required reliability mandates. During its review of the transmission expansion plans, should the CA ISO find that an individual Participating TO plan does not meet the CA ISO Grid Planning Criteria, or if the CA ISO considers that there may be a potentially economic project that should be assessed, the CA ISO relays its concerns to the Participating TO and may propose changes or additions to a Participating TO's annual plan.

As I mentioned earlier, the CA ISO coordinated planning process is open to all Market

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Participants and is a forum in which their concerns and interests can be considered by the Participating Tos', the CA ISO, and other interested stakeholders. To assure that the Participating TOs' transmission expansion plans can be integrated with each other, the CA ISO also undertakes a grid wide assessment, based on the individual Participating TO plans, to assess the performance of the entire CA ISO controlled transmission grid and identify areas where reliability criteria are not being met. Should violations be found, the CA ISO will require the relevant Participating TO(s) to address them in the following year's transmission expansion planning effort.

Review by the CA ISO of Participating TO expansion plans primarily focuses on whether the projects included in Participating TOs annual transmission expansion plans (including and taking into account new generator interconnections) meet the CA ISO Grid Planning Criteria. In addition, the CA ISO conducts an operational review to ensure that projects meet the CA ISO's need for operational flexibility and the CA ISO requirements for proper integration with the CA ISO Controlled Grid. Finally, the CA ISO examines and reviews the Participating TO's annual transmission expansion plans, including new requests for interconnection to the CA ISO Controlled Grid, with the aim of developing an integrated transmission plan for the entire CA ISO Controlled Grid. In this context the CA ISO may develop and recommend projects that either facilitate a more seamless integration of all the Participating TOs plans or take advantage of larger, regional transmission expansion opportunities with a neighboring control area.

In the process of reviewing reliability-driven projects the CA ISO also evaluates whether proposed projects are cost-effective when compared to other transmission solutions. To the extent a project is proposed for economic reasons rather than reliability reasons, the CA ISO will determine whether the cost of the project should be incorporated into the transmission Access Charge. To be incorporated in the transmission Access Charge, an economic project must be shown to be cost-effective for ratepayers. If a third party proposes to pay the full cost of a project, the CA ISO does not undertake a thorough economic analysis, although it may recommend more economic alternatives. Project sponsors who do not propose to recover their costs through the transmission Access Charge can obtain a proportion of the congestion revenues over a path they propose to upgrade.

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Proposed transmission projects that are estimated to cost less then twenty million dollars can be approved at the CA ISO staff level. Proposed transmission projects that are estimated to cost twenty million dollars and more must be presented to and approved by the CA ISO Governing Board.

If the CA ISO approves a transmission project, the Participating TO is obligated to use its best effort to obtain the regulatory approvals and other arrangements necessary to construct the project. Licensing, design and construction of projects approved by the CA ISO are tracked by the CA ISO to ensure that a project will be in service when needed.

B. POLICY AND COORDINATION ISSUES.

Certain transmission projects require siting authorization from the CPUC in order to be constructed. Different levels of review are required for different types of project. General Order 131-D sets forth the type of review required for different types of projects and circumstances, including which types of projects require Permits to Construct and which require a Certificate of Public Convenience and Necessity (CPCN). It is in this siting context that environmental review of proposed projects and their alternatives is undertaken in accordance with the requirements of the California Environmental Quality Act (CEQA). Without the appropriate siting authorization from the CPUC, a transmission project cannot be built.

Further, in 2000, the CPUC opened a docket (I.00-11-001) to identify high priority transmission projects as it had been directed to do by AB 970. Even though AB 970 required that this identification take place in consultation with the CA ISO and be completed within six months, I.00-11-001 has been on-going since then.

Finally, transmission planning and expansion issues arise in this proceeding because 1) unless there is adequate transmission in place, supplies procured by the utilities may not be capable of being delivered to utility customers (or may cost more if there are associated congestion charges) and 2) in some cases adding transmission to access lower cost resources may be an integral part of the long-term procurement plan of a utility.

Because of these potential areas of overlap it is critically important that the CPUC and the CA ISO coordinate to avoid a duplication of efforts and the possibility of inconsistent results. The CA ISO

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concurs with much of the discussion set forth in Chapter 2, section D of SCE's long-term procurement plan, and with much of the discussion set forth in David M. Korinek's Direct Testimony of SDG&E. In particular, the CA ISO considers that 1) the CPUC should give due deference to CA ISO determinations of need in the context of its CPCN proceedings; 2) docket I.00-11-001 should be closed after the process for identifying transmission facilities that could be needed to access renewables is concluded in the fall of this year; and 3) the CA ISO and the CPUC must cooperate with regards to the CPUC's review of utility long-term procurement plans to ensure that results are optimal.

The CA ISO undertakes an extensive and detailed review of the need for new transmission planning facilities in its annual coordinated planning process that is described above. Having the CPUC undertake an identical review in the context of CPCN applications results in a duplication of efforts and creates the possibility of inconsistent results. Further, a determination by the CPUC to disapprove a project that the CA ISO has determined to be needed makes it difficult for the CA ISO to comply with its statutory responsibility to "ensure efficient use and reliable operation of the transmission grid consistent with achievement of planning and operating reserve criteria no less stringent than those established by the Western Systems Coordinating Council and the North American Electric Reliability Council." Public Utilities Code Section 345. The CA ISO's legal arguments to support deference by the CPUC to CA ISO determinations of need were most recently set forth in the CA ISO's January 23, 2003 petition for rehearing of decision 02-12-066 in docket A.01-03-06.

The most recent CPUC decision on the level of consideration it will give to determinations of need by the CA ISO is D.03-05-038. In D.03-05-038, the CPUC acknowledged that there are public policy reasons that support deference by the CPUC to CA ISO determinations of need, D.03-05-038 at 10, but indicated that nonetheless the CPUC must exercise its independent judgment in assessing the need for transmission projects in CPCN proceedings. Id.

On the same day that it issued D.03-05-038, May 8, 2003, the CPUC also adopted an Energy Action plan that appears to recognize the need for coordination among state agencies with energy responsibilities as to many issues, including the expansion of electricity transmission infrastructure. The California Energy Commission (CEC) and the California Power Authority (CPA) have also adopted this

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document. As to transmission expansion, the Energy Action Plan provides that the CPUC, CPA and the CEC "will collaborate, in partnership with other state, local, and non-governmental agencies with energy responsibilities, in the California Energy Commission's integrated energy planning process to determine the statewide need for particular bulk transmission projects. This collaboration will build upon the California Independent System Operator's annual transmission plan and evaluate transmission, generation and demand side alternatives. It is intended to ensure that state objectives are evaluated and balanced in determining transmission investments that best meet the needs of California electricity users." The Energy Action Plan goes on to recognize the potential for a duplication of efforts in the context of CPCN applications and provides that the CPUC will open a rulemaking to assess this question and explore using the outcomes of the CEC IERP process to determine the need for additional transmission facilities.

The CA ISO is pleased that the CPUC has now acknowledged the propriety of affording deference to CA ISO determinations of need in the context of CPCN applications, but it remains concerned that because the CPUC intends to continue to independently assess need in CPCN proceedings, a duplication of efforts, and the possibility of inconsistent results remains. The CA ISO supports further exploration among the state agencies and the CA ISO of approaches to improve coordination regarding the expansion of transmission infrastructure. The CA ISO will participate in the CPUC's rulemaking on the matter and hopes that an efficient, coordinated process can be devised that comports with the respective obligations and areas of expertise of the CA ISO, the CPUC and the CEC, without an undue duplication of efforts.

In addition, the CA ISO supports the concerns raised by SCE about the potential for a duplication of efforts that result from ongoing docket I.00-11-001 given that need determinations (to the extent they continue to be made by the CPUC) must be made with appropriate notice in the context of CPCN applications. Further, the CA ISO is concerned that the proceeding duplicates work underway in the CA ISO's transmission planning process. Now there is the potential for further duplication of effort to the extent transmission planning issues are considered in this docket in the context of developing the best long-term procurement plans for each of the utilities. Thus, the CA ISO considers that it would be

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best to end docket I.00-11-001 when the current phase is concluded for undertaking an assessment of transmission needs to accommodate potential renewables in the state. The CA ISO's thoughts on this matter were discussed in the CA ISO's June 9, Prehearing Conference Statement in docket I-00-11-001 and during the prehearing conference that was held on June 12 and 13.

Finally, as I stated earlier, transmission planning and expansion issues arise in this proceeding because 1) unless there is adequate transmission in place, supplies procured by the utilities may not be capable of being delivered to utility customers (or may cost more if there are associated congestion charges) and 2) in some cases adding transmission to access lower cost resources may be an integral part of the long-term procurement plan of a utility.

To address these concerns, it is important that this proceeding elicit sufficient information about where new resources are to be developed or procured by the utilities to fulfill their procurement responsibilities and this information should be made available to the CA ISO so that it can consider it in the context of its annual transmission planning process. Also, it is important for the CPUC to be informed of activities underway at the CA ISO to assess alternatives to access lower cost resources on a regional basis. The next section of this testimony describes the most important of these activities.

C. HIGH PRIORITY TRANSMISSION ACTIVITIES AT THE CA ISO.

During the recent prehearing conference in docket I.00-11-001, the CA ISO provided a presentation which set forth some of the activities in which the CA ISO is involved to assess transmission needs from a regional perspective and also to explore alternatives to access potentially low cost resources that have been and are being developed in the Southwest and Mexico. The CA ISO is currently exploring opportunities to facilitate a similar effort in the Northwest.

Two processes are underway to assess regional transmission needs in the West, the Seams Steering Group – Western Interconnection – Planning Work Group (SSG-WI-PWG) and the Southwest Transmission Expansion Planning (STEP). Both of these processes are reviewing the need for transmission to access substantial new generation that has been added or is soon to be added in the West, particularly with regards to STEP in the Southwest and Mexico. The CA ISO's objective in participating in these processes is to facilitate the development by September of a long-range regional

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transmission plan that identifies economic projects necessary to integrate new generation into the transmission grid, and to facilitate the development by November of an implementation plan that identifies a logical sequence of transmission projects to accomplish the long-range plan.

The SSG-WI-PWG was created by the three Regional Transmission Organizations ("RTOs") that have been organized or are in the process of being organized in the West: Northwest RTO, West-Connect and the CA ISO. The purpose was to provide a forum to further the development of a robust West-wide interstate transmission system that is capable of supporting a competitive and seamless West-wide wholesale electricity market. The forum is addressing the entire Western Interconnection and participants are conducting production cost studies to identify potential economic system upgrades in the West. STEP is a collaborative process initiated in October 2002 that includes utilities, the CA ISO and any other interested stakeholders. Its purpose is to develop a system to support a competitive, efficient, and seamless west-wide wholesale electricity market. STEP is assessing southern California, southern Nevada, Arizona, and northwest Mexico. To date, between 60 to 100 people have attended STEP meetings. Through the collaborative STEP process, technical studies are being conducted to develop specific projects.

Activities by the SSG-WI-PWG and STEP to assess alternatives to increase transmission capacity to the Southwest and Mexico are particularly important given the substantial additional generation that has been added in the Southwest, Mexico and Southern California. The CA ISO is aware of 6,600 MW of new generation that has or will soon come on line in the Southwest. In addition, 3,140 MWs of new generation has or will soon come on line in Southern Nevada. 1,660 MWs of new generation has or will soon come on line in Mexico near Mexicali. Finally, 2,120 MWs of new generation has or will come on line in Southern California.

In addition, since the SSG-WI-PWG process is reviewing the entire Western Interconnect, it also provides a forum for exploring regional transmission needs to the Northwest. It is the CA ISO's intent to integrate the results of the STEP process into the SSG-WI-PWG effort. The CA ISO recognizes the significance of the STEP process as a successful subregional planning effort that can coordinate development of transmission within the southwest region of the Western Interconnect. The CA ISO

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believes that a companion process similar to STEP must be initiated with interested Pacific Northwest individuals in order to assure the successful development of a comprehensive regional transmission plan for California and our interconnected neighbors in the Pacific Northwest. To this end, the CA ISO is in the process of contacting key Pacific Northwest entities in an effort to initiatea subregional planning process with the Pacific Northwest.

The CPUC should remain abreast of these processes on an ongoing basis to adequately assess the utilities' long-term procurement plans. First, on a very practical level, the CPUC should be aware that the CA ISO is participating with the utilities and interested stakeholders in assessing and identifying the best transmission alternatives to interconnect power from the Southwest and Mexico. The CA ISO expects as a result of this work to have identified the best alternative to accomplish this objective towards the end of this year. Based on this work, the CA ISO expects that one or more utilities will bring to the CA ISO Governing Board for its approval the projects that are determined through these various processes to be the technically superior, most economic alternatives for California. Once the CA ISO Governing Board has approved the projects, they will likely require a CPCN from the CPUC. Pending the results of this work, it would be premature for the CPUC to determine in this proceeding the best alternative to access power from the Southwest and Mexico.

Second, the CA ISO believes it is important for the CPUC to remain abreast of these processes as it considers the best long-term procurement plans for the utilities, as transmission will be an integral component of developing the best plans to meet the needs of the utilities' customers. The CPUC is welcome in both the STEP and the SSG-WI-PWI. Moreover, if the CPUC desires additional information about what is being considered in these processes, the CA ISO would be happy to provide more detailed information.

II. INADEQUACIES IN THE IOUS' LONG-TERM PROCUREMENT PLANS WITH REGARDS TO THE DELIVERABILITY OF RESOURCES

Energy and capacity from a generation resource is delivered to customer load through the high voltage transmission system. The capability of the transmission system to deliver generation to load is limited. In order to ensure that a particular future resource portfolio will be adequate for a given utility, the utility must perform a transmission study under reasonable worst-case conditions that shows that the

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resources can be reliably delivered to the load.

Some local transmission systems are insufficient to serve the local load entirely from resources outside of the area. Generation resources located within these local areas must be dispatched in order to reliably serve the local load. One way to ensure that enough local generation will be available for dispatch is to require a utility with load in the local area to procure a certain percentage of its capacity from the resources located in the local area.

As a general matter, the utilities' long-term procurement plans do not adequately demonstrate deliverability. Some examples of inadequacies follow:

SCE's Preferred Plan includes the XXX.

SDG&E's Balanced Portfolio plan includes XXX.

PG&E's Long Term Plan Base Case includes XXX.

However, none of the plans included a deliverability analysis of the resources or sufficient information for the CAISO to perform a deliverability analysis. More specific locational information is needed in order for the CAISO to analyze the deliverability of these resources. It is understood that the exact location may not be known, but enough information about the location must be provided in order to perform a meaningful transmission deliverability analysis. For example SCE could specify the location XXX.

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