#### California Independent System Operator Corporation

Request for Proposal
To Develop Principles and Methodologies
to Evaluate and Justify Transmission Projects
to Expand Access to Electricity Markets and Resources

July 2001

California Independent System Operator Corporation, a California non-profit public benefit corporation (the "ISO") is hereby soliciting proposals from all Eligible Consultants to develop Transmission Project Evaluation and Justification Principles and Methodology Recommendations (Recommendations). These Recommendations are expected to provide the basis for the ISO to assess the economic benefits and justify the construction of transmission projects to expand California's access to dispersed and diverse electricity markets and resources, in order to lower the cost of electric service for California consumers.

Responses to this Request For Proposal (RFP) must adhere to the specifications herein and must be received no later than 5:00 PM (PDT) on August 15, 2001. Specific details regarding this RFP are presented in the following pages.

The ISO expressly reserves the right to modify, or withdraw from, the process initiated and described herein. No rights shall be vested in any party, individual or entity by virtue of its preparation to participate in, or its participation in, such process. The ISO expressly reserves the right to modify, for any reason, the schedule and any provision contained herein. The ISO reserves to itself the selection of winning respondents, if any, in the exercise of its sole discretion. No binding commitment shall arise between the ISO and a winning respondent under this RFP until and unless the parties sign documents of agreement that become effective in accordance with their terms. Respondents are advised that this RFP is an ISO Document and hence ISO Alternative Dispute Resolution Procedures apply to any dispute arising hereunder in accordance with Article 13 of the ISO Tariff.

# Request for Proposal To Develop Principles and Methodologies to Evaluate and Justify Transmission Projects to Expand Access to Electricity Markets and Resources

May 2001

#### I. Introduction

The California Independent System Operator Corporation (ISO) is issuing this Request for Proposal (RFP) for consulting services to develop and provide recommendations on principles and a methodology to assess and document the economic justification for transmission projects (Recommendations). These Recommendations are expected to provide the basis for the ISO to evaluate and develop the economic justification for the construction of transmission projects to expand California's access to electricity markets and resources, in order to lower the cost of electric service to California consumers.

To provide potential respondents with necessary information for them to determine whether they should respond, this document sets forth pertinent background information (Articles II through IV), the need for the RFP (Article V), bidding instructions (Article VI), the statement of work (Article VII) and General Terms and Conditions (Article VIII).

#### II. SHORT DESCRIPTION OF THE ISO CONTROLLED GRID

At present, the ISO control area is comprised of three investor-owned transmission systems, Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E). The ISO-controlled grid covers 124,000 square miles or 76% of California, and is the largest in the U.S. in terms of geographic area coverage. In terms of transmission lines (220 kV and above), the ISO control area has about 26,000 circuit miles or 75% of California's installed transmission mileage. The ISO system serves 27 million people (85% of California), with a peak load close to 46,000 MW. Installed generation within the ISO-controlled area is about 41,000 MW.

#### III. PLANNING PROCESS

Under Assembly Bill 1890 (AB 1890), the ISO has a statutory obligation to maintain a reliable and efficient transmission system. In order to satisfy that obligation, the ISO, along with the Participating Transmission Owners (PTOs) and other interested parties, conducts a coordinated planning process through which necessary transmission projects or enhancements are identified and developed. As such, the primary mission of the ISO Grid Planning Department is to plan grid enhancements to meet the reliability needs of the ISO Controlled Grid at minimum cost to the consumer. The ISO Grid Planning Department relies heavily on the PTOs to fulfill this mission. The PTOs file annual expansion programs primarily for the portions of the grid that they own. These annual programs identify and describe the facility additions required, over a minimum five-year planning horizon, to meet ISO Grid Planning Criteria (see below). The ISO reviews and, when necessary, recommends modifications to, the PTOs' proposed additions. If the ISO determines that the PTOs' proposed facilities are necessary and appropriate, the ISO approves the PTOs' plans and directs them to proceed with development of the projects. For transmission projects whose value is greater than \$20 million, the ISO must obtain ISO Governing Board approval. If the ISO recommends modifications to a PTO-proposed project and the PTO does

not accept the ISO recommendations, the ISO's dispute resolution process is initiated. All projects proposed within the ISO Controlled Grid are reviewed by the ISO to ensure that they meet the ISO's needs for reliability (i.e., satisfy the ISO Grid Planning Criteria).

The ISO is a member of two Regional Transmission Groups (RTGs) and the Western Systems Coordinating Council (WSCC). The planning processes of the WSCC and the RTGs have been combined with the ISO planning requirements to form the ISO's Grid Coordinated Planning Process.¹ This process allows the ISO, the transmission owners, or any market participant to recommend system additions. Thus, it is through this coordinated planning process that the ISO ensures a reliable transmission system and one in which the needs of market participants are addressed. The Coordinated Planning Process also provides the ISO with the opportunity to be sure that projects developed by other transmission owners within the WSCC region will not negatively impact the ISO Controlled Grid.

The ISO Grid Planning Department is responsible for ensuring that the following major objectives are realized:

- Reliable interconnection of generation to the ISO Controlled Grid;
- Protecting or enhancing system reliability;
- Improving system efficiency;
- Enhancing operating flexibility;
- Reducing or eliminating congestion; and
- Minimizing need for Reliability Must Run (RMR) contracts for local reliability.

#### IV. ISO GRID PLANNING CRITERIA

The ISO Grid Planning Criteria (Criteria) were developed in an open stakeholder process and approved by the ISO Governing Board on January 20, 1999.<sup>2</sup> The Criteria are comprised of the North American Electric Reliability Council (NERC) Planning Standards and the WSCC Reliability Criteria for Transmission System Planning, with additional specific criteria adhering to the Nuclear Regulatory Commission's (NRC) Nuclear Power Generating Station requirements and ISO stakeholder recommendations. The Criteria are to be applied uniformly and consistently across the ISO Controlled Grid.

#### V. THE NEED FOR A NEW METHODOLOGY AND ANALYTICAL TOOLS

Since May 2000, the ISO and others have recognized that the high prices in the wholesale market and the increasing frequency of system emergencies<sup>3</sup> are the result of a lack of adequate generation and

For more detailed information on the planning process, please refer to the ISO Grid Coordinated Planning Process at <a href="http://www.caiso.com/thegrid/planning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplanning/gridplannin

<sup>&</sup>lt;sup>2</sup> To review the actual language of the Criteria, please refer to the ISO Grid Planning Criteria at <a href="http://www.caiso.com/thegrid/planning/criteria/">http://www.caiso.com/thegrid/planning/criteria/</a>.

In 1998/1999, the ISO declared 8 Stage 1 Emergencies, 6 Stage 2 Emergencies and no Stage 3 Emergency. In 2000, the ISO declared 55 Stage 1 Emergencies, 36 Stage 2 Emergencies and 1 Stage 3 Emergency.

Stage 1 Emergency Notice is declared by the ISO any time it is clear that an Operating Reserve shortfall (less than the WSCC Minimum Operating Reliability Criteria (MORC) minimum) is unavoidable or, when in real-time operations, the Operating Reserve is forecast to be less than minimum after utilizing available resources.

transmission infrastructure. The lack of adequate generation has lead to a supply/demand imbalance that has resulted in high prices and the exercise of market power. The lack of transmission results in an inability to reliably deliver existing generation, prevents access to new generation, and creates locational market power for certain strategically located generation. For example, constraints on Path 15, the critical transmission corridor between Southern and Northern California, have prevented the ISO from delivering supply in the South to Northern California. In fact, these constraints and the ISO's inability to serve load in Northern California were the primary reason that the ISO had to curtail, for the first time ever, firm load last January.

As a result of California's acute supply/demand imbalance and the impact of existing transmission constraints on reliability and access to supplies the California legislature passed Assembly Bill 970 (AB 970) in September 2000. AB 970: (i) acknowledged that "California faces potentially serious electricity shortages over the next two years, which necessitates immediate action by the state"; (ii) sought to stimulate the development of generation and demand side management in California; and (iii) provided that the California Public Utilities Commission should, in consultation with the ISO "Identify and undertake those actions necessary to reduce or remove constraints on the state's existing electrical transmission and distribution system ..." and should "give first priority to those geographical regions where congestion reduces or impedes electrical transmission and supply".

Since the ISO is responsible for the reliability of the transmission system under its control, the primary focus of the ISO planning process thus far has been to ensure that the transmission grid is capable of reliably delivering power to load. Given the radical changes to the energy markets in California over the past eight months, the ISO is convinced that it must now more directly consider market issues in the context of long term grid planning. That is, rather than focussing narrowly on meeting reliability standards, the ISO now believes that when considering how to expand the transmission system, it must proactively consider such issues as access to new generation supplies and mitigation of locational market power. Thus, for example, the current draft of the ISO proposed tariff amendment on long term grid planning requires consideration of access to regional energy markets (e.g., new supplies planned to come on-line around the Palo Verde substation in Arizona) and mitigation of market power in developing a long term plan for the ISO Controlled Grid.<sup>4</sup> Considering these factors requires an analysis of the economic impacts (positive and negative) of any proposed transmission project. While the current ISO Tariff (Section 3.2.1.1) generally contemplates consideration of the "economic benefits" of a proposed transmission facility (as compared to its costs) and outlines a procedure for resolving disputes around such an analysis, the tariff is silent as to the methodology for determining such benefits.

Prior to electric restructuring in California, an economic impact analysis was more straightforward, since both generation and transmission planning were conducted together in an integrated fashion by the vertically integrated utilities. However, as a result of restructuring, California has relied on the market to provide incentives for new generation investment, and the transmission system has been planned to

Stage 2 Emergency Notice is declared by the ISO any time it is clear that an Operating Reserve shortfall (less than 5%) is unavoidable or, when in real-time operations, the Operating Reserve is forecast to be less than 5% after dispatching all resources available.

Stage 3 Emergency Notice is declared by the ISO any time it is clear that an Operating Reserve shortfall (less than 1½%) is unavoidable or, when in real-time operations, the Operating Reserve is forecast to be less than 1½% after dispatching all resources available.

The proposed amendment is available at http://www.caiso.com/docs/09003a6080/09/61/09003a60800961fb.pdf.

facilitate open and non-discriminatory access to the transmission system and a competitive generation market. While the original intent of California policy makers was to rely on market forces to create incentives for expansion of the transmission system, the existing regime has provided little incentive for individual participants to expand the system. As it is, absent more clearly defined rights and benefits for expanding the system, individual parties have no incentive to expand (and pay for) transmission upgrades when others can benefit from such expansion and not pay. Moreover, because of the existing supplydemand imbalance and the existence of locational market power, certain parties may have an incentive not to eliminate transmission constraints. These circumstances require a more proactive role for the ISO in ensuring that the ISO Controlled Grid is expanded in a manner that supports competitive markets and the development of a new approach to assessing the market impacts of potential transmission projects. Specifically, the methodology developed as the ultimate deliverable of this RFP process must enable the ISO to assess the impacts of a specific transmission project on the cost of electric service to electricity consumers within the ISO control area and, where there are significant disparities, to electricity consumers in particular regions within the ISO control area, considering the effect of the transmission project on:

- the competitiveness of supply to serve load within the ISO control area, including reduced potential of suppliers to exercise market power. The intent is to go beyond traditional concentration analysis<sup>5</sup> and assess the impact of the project on the ability of suppliers to be pivotal in California markets and the resulting impacts on prices and costs;
- the competitiveness of the western regional markets (for example, the competition between different load centers for some of the same supply resources). The question here is analogous to the question posed in the previous bullet, but with the focus broadened beyond California to assess regional markets:
- the total cost to serve load within the ISO control area, as well as the total economic surplus (consumer surplus plus producer surplus);
- potential for and economic impacts of involuntary curtailments that might result in resource-limited areas absent the proposed project; and
- the cost of meeting generation reserve requirements.

In addition, in assessing these economic impacts it is necessary to address a number of significant uncertainties that characterize a competitive generation market, including:

- key market structure elements, including the price responsiveness of demand and the portion of demand that is exposed to spot market prices;
- where and when future new generation may be developed;
- the adequacy of fuel supplies to serve new generators in various locations, as well as other operating constraints such as emissions limits; and
- the potential for new generation that may be built within a region to result in stranded costs associated with investment of new transmission to access more remote generation (i.e., the potential for expected benefits of the transmission project to be reduced or unrealized).

Traditional analysis of market power, as contained for example in Department of Justice merger guidelines, focuses primarily on the concentration of ownership of supply, or equivalently, on the market shares of the largest suppliers. This type of market power analysis has proven to be inadequate to assess and mitigate the market power problems that arise in restructured electricity markets.

Evaluating the economic impacts of and providing justification for multi-million dollar transmission investments, particularly investments designed primarily to reap market benefits, in light of these uncertainties requires the formulation of sound analytic principles plus a new methodology, analytical tools, and decision framework. The ISO is issuing this RFP to obtain assistance developing these necessary elements of transmission planning for the restructured environment.

#### VI. BIDDING INSTRUCTIONS

#### VI.A Pre-Bid Questions and Answers

All Bidders, who have acknowledged receipt of this RFP as required in section VI.F herein, are invited to attend a Bidders Conference tentatively scheduled for July 17, 2001 to address questions related to the RFP. Bidders are encouraged to submit any questions they intend to raise at the Bidders Conference for receipt by the ISO at the address specified in section VI.E no later than 5 p.m. PDT on July 12, 2001. The Bidders Conference is intended to be the forum in which questions related to the RFP are addressed.

#### VI.B Proposal Submission Dates

All proposals submitted in response to this RFP must be received at the address specified in section VI.E no later than 5 p.m. PDT on August 15, 2001. Only proposals received on or before 5 p.m. on August 15, 2001 will be considered. The ISO will consider extending the submission date only if this extension is requested at least one week before the initial submission date with adequate reasons supporting the request. Any such extension, if granted, will be granted equally to all bidders.

The ISO reserves the right to change the statement of work prior to the proposal submission date. Any such change will be provided as an addendum to the RFP and will be provided to all parties who have acknowledged receipt of the RFP pursuant to section VI.F. The ISO will consider extension of the submission date if the addendum causes the bidders to require substantially more preparation time. Any such extension will be granted equally to all bidders.

#### VI.C Proposal Contents

Each proposal shall contain a technical part and a pricing part, which shall be separately sealed and clearly labeled. The bidder shall not include any price quotes in the technical package.

- 1. The technical part of the bidder's proposal shall contain the following information:
  - A cover letter executed by an authorized agent of the bidder specifying the contents of the technical portion of the bidder's proposal.
  - A complete, detailed and clear description of the proposed project execution plan to meet all functional requirements of the RFP.
  - A project schedule. This schedule shall form the basis for project implementation if the bidder is the successful bidder.
  - Resumes of the Project Manager and Technical Leads and a Schedule of the time that the bidder commits will be contributed by the Project Manager and each Technical Lead to each of the tasks described in the proposed project execution plan. Resumes should include

experience in technical and economic analyses related to the planning of transmission and generation facilities and, more generally, experience in evaluating the competitiveness of markets.

- Examples of similar studies/reports the consultant has produced on generation and transmission planning.
- 2. The pricing part of the bidder's proposal shall contain the following information:
  - A cover letter executed by an authorized agent of the bidder specifying the contents of the pricing portion of the proposal.
  - Proposed progress payment milestones shall be clearly indicated.

It will be assumed the bidder agrees to the provisions of this RFP, and that the RFP is adequate for bidding purposes, unless exceptions are specifically and clearly listed in the bid.

#### VI.D Acceptance of Proposals

The ISO reserves the right to reject any and all proposals or any portion of a specific proposal and to waive any informalities and irregularities in any proposal received. The ISO reserves the right to award a contract or contracts based on this RFP to respondents other than the lowest bidder. The ISO assumes no obligation, and is not bound to award a contract to any bidder as a result of receiving the bidder's proposal. The ISO reserves the right to amend this RFP and to withdraw this RFP at any time prior to the award of a contract based on this RFP. The bidder assumes the risk that the ISO may reject its bid for any reason, may reject all bids, may make no award, may withdraw the RFP without incurring any liability to the bidder, and may award a contract through a means other than through this RFP process.

#### VI.E Delivery of Proposals

The proposal shall be submitted in two sealed parts: the technical part and the pricing part. The content of each packet shall be clearly marked on the exterior of the package along with the bidder's name and the following designation:

California ISO

Re: Request for Proposal to Develop Principles and Methodologies to Evaluate and Justify Transmission Projects to Expand Access to Electricity Markets and Resources

A total of one unbound signed original and seven (7) signed and sealed copies of the proposal shall be submitted to:

Name:

Attention: Mr. Armando J. Perez (phone: (916) 351-4444)

Fax: (916) 351-2272 e-mail: aperez@caiso.com

Mail Address:

California ISO

P.O. Box 639014 Folsom, CA 95763-9014

Courier Address:

California ISO 151 Blue Ravine Road Folsom, CA 95630

#### VI.F Receipt Acknowledgment

Bidders shall acknowledge receipt of the RFP by fax or e-mail, by 5:00 PM PDT July 9, 2001, to the name specified in Section VI.E.

#### VI.G Price

The bidder's proposal shall provide a firm price quotation for the work proposed to be done therein. The bidder's price quotation shall be firm for a period of 90 days from the final proposal submission date. During the proposal evaluation period, the bidder may be requested to resubmit prices based on agreements and options selected during the evaluation process. The ISO would prefer fixed price proposals but will consider other approaches provided that a detailed estimate of the cost of particular tasks is provided along with a guaranteed ceiling cost amount for completion of the tasks described in this RFP.

The ISO has a limited budget to accomplish the activities set forth in this RFP. Accordingly, as is described in section VI.I below, contracting for some or all of the tasks set forth in this RFP may be through a State Agency or in coordination with a State Agency rather than directly with the ISO, to take advantage of additional sources of funding. Bidders should provide a break down of the price for the different work products requested in this RFP. Bidders should state whether and on what terms they would consider undertaking less than the full complement of activities requested by this RFP. Bidders should indicate any issues that would arise in the case of contracting with a State Agency rather than with the ISO for some or all of the tasks described in this RFP, or working in coordination with a State Agency on some or all of the tasks.

#### VI.H Evaluation

The ISO has formed the Recommendation RFP Steering Committee (Committee) with representatives from the Electricity Oversight Board (EOB), the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), Pacific Gas & Electric Company (PG&E), the Southern California Edison Company (SCE), the San Diego Gas and Electric Company (SDG&E), and ISO Staff. The Committee has three main functions: 1) review and finalize this RFP prior to its release, 2) review and evaluate proposals submitted in response to this RFP and recommend selection of a consultant, and 3) approve the winning consultant's deliverables in performance of the contract. The Committee shall evaluate all proposals received by the time and date specified in Section VI.B hereof. This evaluation shall consider the merits or excellence of the work proposed to be performed, the cost of the proposed work, the flexibility of the bidder to work with/or through a State Agency, and the relevant experience and qualifications of the bidder and the bidder's study team. The bidder should provide in its proposal, the name and phone number of an individual in the bidder's firm that would be available via telephone between 9:00 a.m. and noon pacific daylight time on the morning of August 28, 2001, to answer questions from the Committee that may arise in evaluating the proposals.

#### VI.I Award

The ISO shall make an award of a firm price contract or contracts to the responsible bidder(s) whose proposal is most advantageous to the ISO. For this evaluation, technical quality and responsiveness to the needs discussed in this RFP are of primary importance. If proposals are of equal technical merit and equally responsive to the ISO's needs, then price will become more important.

Given limited ISO funding for the tasks described in this RFP, it is possible that the successful bidder(s) will be asked to consider contracting with a State Agency rather than directly with the ISO for some or all of the tasks described in this RFP to take advantage of additional sources of funding. Even if this is the case, the study approach and schedule described in the following section will apply.

#### VI.J Study Approach and Schedule

The consultant will be responsible for completing the draft Recommendations Report as specified in this statement of work, for presenting and supporting the approval of the report before the Committee, and for presenting and supporting the approval of the report before the ISO Board.

The planned schedule for the completion of the report is as follows:

Contract sent to consultant	08/31/01
Consultant provides progress reports, completed sections	
of the report, or meets with the Steering Committee & ISO staff:	monthly
Consultant completes study and provides draft report to Steering	
Committee & ISO staff for review:	01/10/02
Committee comments to consultant:	02/19/02
Consultant finalizes report and provides to ISO:	03/14/02
Committee approval:	03/28/02

The above schedule is tentative and may be adjusted by the Committee. The main impetus in establishing the time line for this contract is the urgency to ensure future grid adequacy and reliability in the current planning process. Because of this deadline, the successful bidder must commit to meet the above dates for the completion of the draft and final reports.

The consultant should be prepared to work cooperatively with the Committee in undertaking activities in response to this RFP. Committee members will be the point persons for their respective organizations with respect to such activities. It is the responsibility of Committee members and not the consultant to interact with other persons within the organizations represented on the Committee with regards to the activities performed by the consultant in response to this RFP.

#### VI.K Miscellaneous

The awarded contract shall provide for the consultant to submit sections of the report to the ISO as they are completed rather than provide the entire draft report for the first time upon completion of the

- study (January 10, 2002 in the above time line). In the bidder's response, the bidder should describe at what point sections of the report would be provided to the ISO for review.
- With the approval of the ISO, it is acceptable for the bidder to subcontract portions of this work; however, if the bidder does chose to subcontract a portion of the work, the bidder will remain responsible for meeting the project schedule and for the technical quality of all deliverables.
- The ISO does not plan to conduct any new technical studies to support this project.
- Since mid 1999, the ISO has collected data on historical transmission loadings and transmission system capabilities. The ISO also has the tools necessary to extract pertinent information from this database for use in analyses such as that required to support the need for new transmission projects. In addition, the ISO has data on the historical congestion costs for the interzonal transmission paths on the ISO grid.

#### VII. STATEMENT OF WORK

To achieve the objectives of this RFP described in section V, the consultant shall develop recommendations on:

- principles and a methodology to assess and document the economic justification for transmission projects, particularly regional transmission projects designed to facilitate workably competitive wholesale electricity markets in California and ensure future supply adequacy and reliability within the ISO-controlled grid;
- 2. available computational tools (e.g., software packages) suitable for use by the ISO and PTOs in implementing the consultant's recommended approach for evaluating transmission projects; and
- 3. a decision criterion or framework for integrating the various analyses and uncertainties associated with a project into a decision whether or not to move forward in developing the project.

The principles, methodology, computational tools and decision framework recommended by the consultant must enable the ISO and PTOs to provide adequate justification to the ISO Board, the management of the individual transmission owners, and the appropriate federal and state regulatory agencies to approve construction of major transmission projects in those cases where the primary need is economic efficiency for California. The principles, methodology, computational tools and decision framework should be sufficiently flexible to allow for evolving market rules and structure (for example a revised congestion management approach). The principle, methodology, computational tools and decision framework should allow the ISO and PTOs to assess the impacts of a proposed transmission project on the cost of electric service to electricity consumers within the ISO control area and, where there are significant disparities, to electricity consumers in particular regions within the ISO control area.

#### Planning Scenario

To allow the consultant sufficient intellectual freedom to address our need, we have decided not to list several specific and detailed deliverables. Rather we will provide a real life-planning scenario that is intended to aid the consultant in fulfilling the requirements of this project. We believe this planning scenario raises most of the same questions and concerns that must be answered in evaluating any proposed transmission project within the ISO's scope. Below we identify many of these questions and concerns, as well as two important deliverables that should be part of the consultant's final Recommendations. However, by providing this planning scenario to assist the consultant, the ISO does not intend to limit the

consultant's approach to the problem at hand. In particular, the ISO expects the consultant's recommendations to be generally applicable to the problem of evaluating transmission projects in the context of the competitive restructuring of electricity. If significant questions or concerns are generally relevant to the problem but are not raised in the context of the planning scenario due to special features of this scenario, we fully expect the consultant to identify and address these questions and concerns.

For the purpose of responding to this RFP, bidders who wish to refer to the planning scenario in developing their proposed approach to the project are welcome to make use of the documents posted at the Internet address noted below.

We have chosen to use issues addressed in the Southern California Long Term Regional Transmission Study (Study) as the planning scenario.<sup>6</sup> The objective of this Study was to identify regional transmission expansion requirements in the 2008 time frame. The Study results identified a need to build regional transmission facilities to reliably serve load in the 2008 time frame, given the assumption that only one new in-state generating plant (720MW) would be built. The Study recognized that if a sufficient amount of additional new merchant generation is licensed and built within Southern California, the need for additional regional transmission facilities to meet reliability requirements would be postponed. The Study also recognized that, even if not justified purely to meet reliability requirements, regional transmission facilities might be justified from an economic standpoint to lower prices within Southern California. The study concluded that a thorough market study was necessary to assess the economic justification for the potential regional transmission projects identified to access regional energy markets.

We have received some information on proposed new generation that could affect the economic rationale for the regional transmission facilities. Several suppliers have expressed interest in siting plants at various locations within California. The specific projects that have been proposed to date fall mainly in four specific areas:

- 1. just north of Midway Substation in south central California,
- 2. the vicinity around the existing Palo Verde Nuclear Generating Station in southwestern Arizona,
- 3. the general area of southern Nevada, and
- 4. the California-Mexico border region.

#### Questions to be Addressed and Specific Deliverables

Below are some questions and concerns that the ISO believes must be addressed to undertake a responsible assessment of the economic benefits of a proposed transmission project. The winning bidder's Recommendations Report will be expected to provide (1) a complete description of the analyses that should be conducted in performing such an assessment, and (2) the economic and technical rationale underlying the recommended analyses.

A. What would constitute appropriate and adequate economic justification to support ISO approval of (and Transmission Owner commitment to build) a regional transmission project costing

Details of this Study are available at <a href="http://www.caiso.com/docs/2000/06/16/2000061610404021794.html">http://www.caiso.com/docs/2000/06/16/2000061610404021794.html</a>. Additional, current information on load and generation forecasts is available in joint testimony and supporting documents developed by the ISO/CEC/SDG&E/SCE in a CPUC proceeding Docket no. I 00-11-001. The testimony and supporting documents are available at <a href="http://www.caiso.com/pubinfo/CPUC/index.html">http://www.caiso.com/pubinfo/CPUC/index.html</a>.

hundreds of millions of dollars for the purpose of accessing regional energy markets and enhancing competitiveness in the California markets?

- 1. What component benefits and costs should be assessed and quantified in a thorough economic analysis of a project?
- 2. What practical impediments may make an ideal economic analysis unachievable in practice? For example, can all component benefits and costs be quantified with reasonable certainty? If not, how can qualitative factors be integrated with quantitative analyses in evaluating a project?
- 3. What are the key uncertainties that must be analyzed?
- 4. How should the key uncertainties be analyzed and incorporated into the decision framework? For example, when and why are scenario-based approaches preferable to statistical approaches (e.g., confidence intervals) for incorporating uncertainty?
- 5. What would the analysis look like (i.e. data requirements, methodology, type of analysis, type and interpretation of results)?
- 6. What type of data is required for the analysis and how do we get it?
- 7. Should loss of load probability be a factor? If so, how? If not, what kinds of reliability concepts and measures are more appropriate for transmission expansion planning in the restructured electricity industry?
- 8. How can the analysis and the project decision framework achieve proper balance among Reliability, Economics and Competitive Markets?
- 9. What is a proper balance between the need to undertake adequate analysis and develop adequate justification on the one hand, and the urgency to proceed if necessary, on the other (e.g. project timelines and need)?
- 10. What tools would be needed to perform this analysis?
- B. What analysis should be used to project the availability and impacts of new generation in given locations?
  - 1. How to analyze the probability that generators will carry out their development plans, with regard to capacities, locations, and in-service dates?
  - 2. How to analyze the probable impacts of external factors such as fuel availability, local environmental issues, Not In My Back Yard (NIMBY), and tradeoffs between gas pipelines and electric transmission lines?
  - 3. How to assess the risk of potential stranded investment in new transmission to access out-of-state generation? (i.e. how to ascertain with a reasonable level of certainty that enough new generation will be on line and available to California to justify a new transmission project to access out-of-state power?)
  - 4. How to assess the risk of potential stranded investment in new transmission to access in-state generation? (e.g. develop probability indices, or change focus from stranded investment to increased competition?)
  - 5. How to assess the risk of reduced reliability or economic damage if transmission is not built to access out-of-state, or local generation?

In addition to the above questions which the recommended principles and methodology must address, we have also identified two specific deliverables that are essential to meet the ISO's transmission planning goals and should be included in the consultant's Recommendations:

- 1. Develop a decision criterion or framework to enable the ISO to integrate the various information, analyses and uncertainties associated with a given transmission project into a decision whether or not there is economic justification to proceed with the project (i.e., positive net benefits to California consumers).
- 2. Identify applicable computational tools that are suitable for the ISO and PTOs to use on an ongoing basis to implement the approach recommended by the consultant.

#### VIII. GENERAL TERMS AND CONDITIONS

The bidders should propose a progress payment schedule for completion of the project. The terms and conditions for the contract(s) with ISO to be awarded under this RFP are attached as Exhibit A. Bidders must set forth any proposed material changes to Exhibit A in their response. The terms and conditions for the contract(s) with a State Agency to be awarded under this RFP will be shared and discussed with the successful bidder in the event that the approach of contracting with a State Agency is pursued.

**EXHIBIT A** 

TO THE RFP

# CONSULTING AGREEMENT

This Consulting Agreement ("Agreement") is made as of this 22nd day of February, 200
(the "Effective Date") by and between California Independent System Operator Corporation, a California
non-profit public benefit corporation, ("ISO"), and,, a, a
("Consultant").

Consultant desires to perform, and ISO desires to have Consultant perform, consulting services as an independent contractor to ISO.

NOW, THEREFORE, the parties agree as follows:

#### 1. Services.

- Performance. Prior to each work engagement under this Consulting (a) Agreement, a Work Order shall be executed by the parties describing in detail the consulting services to be performed (the "Services"). Each Work Order shall be in the form attached to and incorporated into this Consulting Agreement as "Exhibit A" and shall be executed by an authorized signatory of the ISO and by an authorized signatory of Consultant. Except as otherwise specifically and expressly provided in a Work Order, the terms and conditions of this Consulting Agreement shall apply to all Services described in each Work Order. Consultant agrees to perform such Services in accordance with this Agreement and each Work Order. Consultant agrees to perform the Services within the guidelines and requirements described in the California ISO Employees Code of Conduct (to the extent applicable to substantially full-time consultants or contractors), the Information Security Policy, and the Fitness for Duty Policy attached as Exhibit B (the "Policies"). Exhibits A and B are hereby attached to and incorporated into this Agreement by reference. In addition, Consultant agrees that it will cause any individual(s) or subcontractor(s) it retains to perform the Services ("Consultant Employees") to perform the services within the guidelines and requirements of the Policies, and to execute the Agreement and Acknowledgement attached to and incorporated into this Consulting Agreement as Exhibit C.]
- (b) Background Investigation and Drug Screening. Consultant agrees to provide sufficient information with regard to the Consultant Employees as described and requested in Exhibit D; to authorize the ISO to conduct an appropriate background investigation of the Consultant Employees to meet the security and safety requirements of the ISO; and to authorize the ISO to conduct a credit check on all Consultant Employees who may have access to systems at the ISO involving the electricity markets overseen or administered by the ISO. Consultant agrees, upon request of the ISO, to cause the Consultant Employees to complete an initial drug screening as described in Exhibit E. Consultant acknowledges that ISO's obligations under this Agreement are contingent upon the successful completion of background investigations and drug screenings of the Consultant Employees. Should the ISO determine, in its sole discretion, that the results of any background investigation or drug screening contains information that could pose a danger to the ISO, its employees, or the markets that it administers or oversees, ISO shall have the right to immediately terminate this Agreement, and ISO shall have no further obligations hereunder. In the event that ISO makes such a determination, Consultant may recommend alternative Consultant Employees, so long as the alternative Consultant Employees are

acceptable to ISO and such Consultant Employees meet the standards set forth in this Section 1. Exhibits D and E are hereby attached to and incorporated into this Agreement by reference.

(c) <u>Payment</u>. As compensation for the performance of the Services, the ISO will pay Consultant on a time and materials basis, up to the maximum amount, if any, stated in the Work Order (the "<u>Maximum Fee</u>"). Subject to the foregoing, the ISO shall reimburse Consultant for all reasonable costs of materials and supplies and overhead incurred by Consultant in connection with the performance of the Services. The ISO will also reimburse Consultant for reasonable and properly documented travel and living expenses so incurred. Consultant shall invoice the ISO on a monthly basis for the number of hours spent in performing the Services and for any reimbursable expenses. The ISO will pay each such invoice no later than thirty (30) days after receipt of such invoice.

#### 2. Relationship of Parties.

- (a) Independent Contractor. Consultant is an independent contractor and is not an agent or employee of ISO. Consultant has no authority to bind ISO by contract or otherwise. Consultant shall perform the Services under the general direction of ISO, but Consultant will determine, in Consultant's sole discretion, the manner and means by which the Services are accomplished, subject to the requirement that Consultant shall at all times comply with applicable law and ISO policy made known by ISO to Consultant. ISO has no right or authority to control the manner or means by which the Services are accomplished. ISO shall provide Consultant with such direction and other information as is reasonably necessary for the successful and timely completion of the Services.
- (b) Employment Taxes and Benefits. All consideration received by Consultant hereunder shall be deemed to be for services rendered as an independent contractor, and not as an employee of ISO. ISO shall not be required to withhold income taxes or pay any employment-related taxes with respect to such compensation. Consultant agrees to indemnify ISO and hold it harmless from and against all claims, damages, losses and expenses, including reasonable fees and expenses of attorneys and other professionals, relating to any obligation imposed by law on ISO to pay any withholding taxes, social security, unemployment or disability insurance, or similar items in connection with compensation received by Consultant pursuant to this Agreement. Consultant will not be entitled to receive any vacation or illness payments, or to participate in any plans, arrangements, or distributions by ISO pertaining to any bonus, insurance or similar benefits for ISO's employees.
- (c) <u>Liability Insurance</u>. Consultant will maintain insurance to protect Consultant from the following: (a) claims under worker's compensation and state disability acts; (b) claims for damages because of bodily injury, sickness, disease or death which arise out of any negligent act or omission of Consultant; and (c) claims for damages because of injury to or destruction of tangible or intangible property, including loss of use resulting therefrom, which arise out of any negligent act or omission of Consultant. The amount of such insurance shall be no less than Two Million Dollars. ISO shall be named as an additional insured on all such policies, and all policies shall contain a waiver of subrogation for the benefit of ISO. If requested by ISO, Consultant shall supply ISO with written evidence of the foregoing coverage prior to commencing performance of the Services.

#### 3. Rights in Work Product.

Except as provided below in this Section 3, original work product first created or produced by Consultant in performing Services under this Consulting Agreement ("Work Product") shall be the property of the ISO and Consultant assigns to the ISO all right, title, and interest in and to such Work Product, including all rights in copyright, patent, trade secret, trademark, or other intellectual property rights. To the extent that such Work Product includes proprietary information, knowledge, methodologies, tools, models, software, procedures, documentation, know-how, processes or other pre-existing materials of Consultant, and all modifications and improvements made thereto, that are specifically listed on the Work Order applicable to such Work Product ("Consultant Materials"), Consultant shall retain ownership of such listed materials but grants the ISO a perpetual, royalty-free, non-exclusive right and license to use such materials in connection with the ISO's use of such Work Product, which shall include the ISO's right to disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, for any purpose, and to have or permit others to do so. Consultant Materials shall be listed on each Work Order at the time of its execution and such list may be amended as appropriate during the term of the Work Order. To the extent that such Work Product includes third party materials, software or intellectual property ("Third Party Materials") that the ISO must license separately, Consultant shall inform the ISO of such license requirement and, if requested by the ISO, assist the ISO in obtaining the appropriate license. Subject to Section 4 of this Consulting Agreement, the provisions of this Section 3 shall not be construed to limit Consultant's right to use for any purpose the residuals resulting from the performance of the Services for the ISO. As used herein, "residuals" shall mean technical information in non-tangible form, which may be developed or retained by persons who have provided Services or have had access to the ISO's information or systems, including ideas, concepts, know-how or techniques contained therein.

#### 4. Confidential Information.

The parties acknowledge that in the course of performing their responsibilities under this Consulting Agreement, they each may be exposed to or acquire information that is proprietary to or confidential to the other party. For purposes of this Agreement, "Confidential Information" of the ISO shall include all information regarding the ISO and its business, products, programming techniques, experimental work, customers, clients and suppliers, and all information regarding the electricity markets overseen or administered by the ISO, and "Confidential Information" of Consultant shall include Consultant Materials, as defined in Section 3, and information that has been marked by Consultant as confidential at the time that such information is made available to the ISO (or, if not marked when made available, is subsequently so marked and identified as confidential to all individuals at the ISO to whom Consultant has made such information available); provided, however, that information described in the last sentence of this Section 4 shall in no event be "Confidential Information". Each party agrees to hold Confidential Information of the other in confidence and not to copy, reproduce, sell, assign, license, market, transfer or otherwise disclose such information to third parties or to use such information for any purpose whatsoever without the express written permission of the other party, other than for the performance of its obligations hereunder. The parties agree to advise their employees, agents and representatives of their obligations to keep the Confidential Information of the other party confidential. The parties shall use reasonable efforts to assist each other in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the forgoing, the parties shall use reasonable efforts to advise each other immediately in the event that either learns or has reason to believe that any person who has had access to Confidential

Information has violated or intends to violate the terms of this Section 4, and will reasonable cooperate in seeking injunctive relief against any such person. Notwithstanding the obligations set forth in this Section 4, the confidentiality obligations of the parties shall not extend to information that: (a) is, as of the time of its disclosure, or thereafter becomes, available to the public through a source other than the receiving party; (b) was known to the receiving party as of the time of its disclosure; (c) is independently developed by the receiving party; (d) is subsequently learned from a third party not under a confidentiality or fiduciary obligation to the providing party; or (e) is required to be disclosed pursuant to a subpoena, court order, or government authority, whereupon the disclosing party shall provide prompt written notice to the other party prior to such disclosure, so that such party may seek a protective order or other appropriate remedy.

#### 5. Indemnification by Consultant.

Consultant shall indemnify ISO and hold it harmless from and against all claims, damages, losses and expenses, including court costs and reasonable fees and expenses of attorneys, expert witnesses and other professionals, arising out of or resulting from (and, at the ISO's option, Consultant will defend ISO against):

- (a) any action by a third party against ISO that is based on any claim that any Services performed under this Agreement, or their results, infringe a patent, copyright or other proprietary right or violate a trade secret; and
- (b) any action by a third party that is based on any negligent act or omission or willful conduct of Consultant and which results in: (i) any bodily injury, sickness, disease or death; (ii) any injury or destruction to tangible or intangible property (including computer programs and data) or any loss of use resulting therefrom; or (iii) any violation of any statute, ordinance, or regulation.

#### 6. Termination and Expiration.

- (a) <u>Breach</u>. Either party may terminate this Agreement in the event of a breach by the other party of this Agreement if such breach continues uncured for a period of ten (10) days after written notice.
- (b) <u>At Will</u>. ISO may terminate this Agreement at any time, for any reason or no reason, by written notice to Consultant.
- (c) <u>Expiration</u>. Unless terminated earlier, this Agreement will expire on the one-year anniversary date of the last payment made by the ISO for Services provided by Consultant under a Work Order issued under this Consulting Agreement.
- (d) <u>No Election of Remedies</u>. The election by ISO to terminate this Agreement in accordance with its terms shall not be deemed an election of remedies, and all other remedies provided by this Agreement or available at law or in equity shall survive any termination.

#### 7. <u>Effect of Expiration or Termination</u>.

Upon the expiration or termination of this Agreement for any reason:

- (a) each party will be released from all obligations to the other arising after the date of expiration or termination, except that expiration or termination of this Agreement will not (i) relieve Consultant of its obligations under Sections 2(b), 3, 4, 5, 8, 9 and 10(a) and (c), (ii) relieve ISO of its payment obligations under Section 1(c), and/or (iii) relieve Consultant or ISO from any liability arising from any breach of this Agreement; and
- (b) Consultant will promptly notify ISO of all Confidential Information, including but not limited to the Work Product created or produced by Consultant under this Consulting Agreement, in Consultant's possession and, at the expense of Consultant and in accordance with ISO's instructions, will promptly deliver to ISO all such Confidential Information or, upon the request of ISO, destroy such Confidential Information and provide the ISO with reasonable evidence of such destruction.

#### 8. <u>Limitation of Liability</u>.

- (a) Except as provided in Section 5 hereof, in the event Consultant is liable for damages to the ISO, or required to indemnify the ISO, in connection with this Agreement, whether arising by negligence, willful misconduct, breach of contract or otherwise, then the ISO may recover its direct damages only, up to a maximum of the aggregate sum of the Maximum Fees specified in all Work Order(s) issued under this Consulting Agreement.
- (b) IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND IN CONNECTION WITH THIS AGREEMENT, EVEN IF THE OTHER PARTY HAS BEEN INFORMED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES AND REGARDLESS OF THE CAUSE OF ACTION ON WHICH ANY SUCH CLAIM IS BASED.
- 9. <u>Dispute Resolution</u>. If a dispute arises out of or relates to this Agreement, or any breach thereof, and if such dispute cannot be settled through direct negotiation within thirty (30) days of one party providing the other party with written notification of such dispute, the parties shall submit the dispute to nonbinding mediation with a mediator mutually agreed upon by the parties. The mediation may be initiated by the written request of either party to the other party and shall commence within fifteen (15) days of receipt of such notice, unless otherwise agreed by the parties. In the event that the mediation fails to resolve the dispute within thirty (30) days of the receipt of mediation notice, the dispute shall be submitted to and settled by arbitration conducted in the County of Sacramento, California, in accordance with the then-current Commercial Arbitration Rules of the American Arbitration Association by three (3) arbitrators appointed in accordance with such rules. The award rendered by the arbitrators shall be final and binding, and judgment may be entered upon it in any court having jurisdiction. Notwithstanding the foregoing, the parties may apply to any court of competent jurisdiction for a temporary restraining order, preliminary injunction or other interim or conservatory relief, as necessary, without breach of this arbitration agreement and without any abridgment of the powers of the arbitrators. Unless otherwise directed by the Consultant or ISO in writing, Consultant shall continue to perform its obligations hereunder during any

mediation or arbitration, provided that ISO continues to perform its obligations hereunder, including but not limited to payment pursuant to Section 1(c) hereof, during any such mediation or arbitration.

#### 10. Covenants.

- Consultant Employee of any Services provided to the ISO under a Work Order issued under this Agreement, such Consultant Employee shall not, without the ISO's prior written consent, directly or indirectly, in any individual or representative capacity, engage or participate in or provide services to any person or entity participating in the California electricity markets overseen or administered by the ISO, if such services would involve making available to such person or entity any information about the ISO's systems or operations that is not publicly available to other participants in such electricity markets.
- (b) <u>Pre-existing Obligations</u>. Consultant represents and warrants that Consultant is not under any pre-existing obligation inconsistent with the requirements of this Consulting Agreement.
- (c) <u>Solicitation of Employment</u>. Because of the highly sensitive commercial role performed by the ISO in the California electric energy market, Consultant agrees that it will not solicit the services of any of the ISO's employees, consultants, suppliers or customers during the term of this Agreement and for twelve (12) months thereafter.
- (d) <u>Conversion Fee.</u> If the ISO or any of its divisions, parents, subsidiaries, successors or assigns (of this Agreement) employs directly, prior to the date specified on the Work Order, any Consultant Employee on a full or part time basis, other than pursuant to this Agreement, the ISO shall pay the Consultant a <u>"Conversion Fee"</u> in the amount set forth on such Work Order. If the ISO employs such Consultant Employee on a part-time basis, the Conversion Fee shall be based upon the full-time equivalent salary to be paid by ISO. Payments made or due to Consultant pursuant to Section 1(c) of this Agreement for services provided prior to the Consultant becoming so employed shall not be deducted from the Conversion Fee. ISO agrees to provide Consultant with ten days' prior notice of any such hire.]

#### 11 General.

- (a) <u>Assignment</u>. Neither party may assign its rights or delegate its duties under this Agreement either in whole or in part without the prior written consent of the other party. Any attempted assignment or delegation without such consent will be void.
- (b) <u>Equitable Remedies</u>. Because the Services are personal and unique and because Consultant will have access to Confidential Information of ISO, ISO shall have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief without prejudice to any other rights and remedies that ISO may have for a breach of this Agreement.
- (c) <u>Attorneys' Fees</u>. If any action is necessary to enforce the terms of this Agreement, the substantially prevailing party will be entitled to reasonable attorneys' fees, costs and expenses in addition to any other relief to which such prevailing party may be entitled.

(d) <u>Governing Law; Severability</u> . This Agreement shall be governed by and construed in accordance with the laws of the State of California excluding that body of law pertaining to conflict of laws. If any provision of this Agreement is for any reason found to be unenforceable, it shall be modified to reflect the fullest enforceable intent of the parties, or if such modification is not possible, it shall be severed, and the remainder of this Agreement will continue in full force and effect.
(e) <u>Notices</u> . Any notices under this Agreement will be sent by certified or registered mail, return receipt requested, to the address specified below or such other address as the party specifies in writing. Such notice will be effective upon its mailing as specified.
(f) <u>Complete Understanding; Modification</u> . This Agreement, together with the Exhibits hereto, constitutes the complete and exclusive understanding and agreement of the parties and supersedes all prior understandings and agreements, whether written or oral, with respect to the subject matter hereof. Any waiver, modification or amendment of any provision of this Agreement will be effective only if in writing and signed by the parties hereto.
(g) <u>Counterparts</u> . This Agreement may be entered into in counterparts.
IN WITNESS WHEREOF, the parties have signed this Agreement as of the Effective Date.
California Independent System Operator Corporation: CONSULTANT:
By:
Title: Title:
Federal Tax I.D. Number:

Address: \_\_\_\_\_

Address: 151 Blue Ravine Road

Folsom, CA 95630

# EXHIBIT A

The fol	lowing Work Order is issued under and subject to all of the terms and conditions of the Consulting
Agreen	nent dated as of February 22, 2001, by and between the California Independent System Operator
Corpor	ation (the "ISO") and ("Consultant").
	Work Order No
1.	Services to be performed and results to be achieved:
2.	Hourly Consulting Rate:
3.	Maximum Number of Hours:
4.	Maximum Consulting Fee:
5.	Maximum Reimbursable Business Expenses (i.e., air fare, lodging, meals, rental vehicle,
	misc.):
6.	Start Date:
7.	Completion Date: (With option to extend this contract as agreed
	to in writing by both Parties.)
8.	Specific Exceptions, if any, to the terms and conditions of the Consulting Agreement:
9.	List of Consultant Materials:
10.	List of Consultant Employee(s):
11.	Conversion Fee: Should California ISO affect conversion of any of Consultant's
	employees within six (6) months of this Agreement becoming effective, ISO shall pay to
	Consultant a 25% pro-rated buyout fee based upon the first year's base salary (exclusive
	of any incentive pay) as offered to such individual(s) by ISO.
AGREI	ED AS OF
CALIFO	ORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION:
CONSI	ULTANT:

#### **FXHIBIT B**

## **Employees Code of Conduct**

The Code of Conduct for officers, employees and substantially full-time consultants and contractors of the California Independent System Operator Corporation (the "Corporation") shall be as follows:

#### (a) STANDARDS

#### **Non-Participation in Energy Transactions**

- 1. Neither the Corporation, its officers, its employees or its substantially full-time consultants or contractors will act as a broker in connection with any power or energy sale or purchase.
- 2. Neither the Corporation, its officers, its employees or its substantially full-time consultants or contractors will purchase electricity, except for ordinary personal uses, or sell electricity except to the extent necessary to carry out the Corporation's functions.
- 3. Unless a request has been made in writing, supported by specific reasons, and unless prior written approval has been granted by the Governing Board, no officer or employee of the Corporation, and no substantially full-time consultant or contractor to the Corporation, may be an employee, director or attorney for, or a substantially full-time consultant or contractor to, any entity engaged in the generation, transmission, marketing or distribution of electricity (a "Market Entity"). Any such request shall be noticed on the agenda of the meeting of the Governing Board at which action on the request is scheduled to be taken and shall be deemed approved by the Governing Board if at least a majority of the Governors then in office vote in favor of granting such request.
- 4. No person shall become an officer or full-time or part-time employee of the Corporation, and no person shall be hired as a substantially full-time consultant or contractor to the Corporation, unless such person has agreed in writing to dispose of securities owned by such person which were issued by a Market Entity or any affiliate thereof within six (6) months after the time such person is to commence providing services to the Corporation (no later than April 30, 1998, for persons employed by the Corporation on October 30, 1997) in order to assure that such person will not directly or indirectly (e.g., through a family trust, self directed pension or profit sharing plan, or employee benefit plan) own securities issued by a Market Entity or any affiliate thereof. Any question regarding whether particular securities are subject to this divestiture requirement, including shares of mutual funds or other collective investment vehicles owning securities issued by a Market Entity or any affiliate thereof, should be directed to the Corporation's Legal Department.
- 5. No officer or employee of the Corporation, and no substantially full-time consultant or contractor to the Corporation, shall acquire, directly or indirectly (e.g., through a family trust, self directed pension or profit sharing plan, or employee benefit plan) securities issued by a Market Entity or any affiliate thereof. Any questions regarding whether particular securities are subject to this limitation, including shares of mutual funds or other collective investment vehicles owning securities issued by Market Entity or any affiliate thereof, should be directed to the Corporation's Legal Department.

#### **Administration of Tariffs**

6. It is the policy of the Corporation to offer open-access transmission service on a non-discriminatory basis.

- 7. If there is discretion in the application of any tariff provision relating to the transmission of electricity, including, but not limited to, cost, available transmission capacity, scheduling, dispatching, ancillary services or transmission curtailment priority, the Corporation, its officers, employees and substantially full-time consultants and contractors will apply the tariff provision in substantially the same manner to the same or similarly situated persons.
- 8. The Corporation, its officers, employees and substantially full-time consultants and contractors will strictly enforce any tariff provision relating to transmission service which does not, by its terms, provide for the exercise of discretion.
- 9. The Corporation, its officers, employees and substantially full-time consultants and contractors will process all similar requests for transmission in a non-discriminatory manner and without undue delay. The Corporation will maintain for public inspection records of all requests for transmission, when each request was received, and the determination of each request.
- 10. To the extent that the Corporation may grant a waiver of a non-material rule which provides for discretionary waiver, the Corporation will maintain a written log of each waiver of a rule, the circumstances involved, the person authorizing such waiver and the source of authority for such waiver and provide the log for review and copying at the request of any interested person at such person's expense during regular business hours at the Corporation's offices.

#### **Non-disclosure of Transactional Information**

11. The Corporation, its employees, and its substantially full-time consultants and contractors will abide by the Standards of Conduct for Public Utilities set forth in FERC Order 889 and 889A, as those standards are codified in 18 C.F.R. Section 37.1-37.4, as amended, or any successor law.

#### **Use of Information**

12. No employee shall use any non-public information obtained in his or her capacity as an employee for his or her own personal gain or to the detriment of the Corporation except to the extent authorized by the Corporation's bylaws, any law or any court order.

#### General

- 13. Corporation officers, employees and substantially full-time consultants and contractors shall comply with all laws and regulations applicable to the conduct of the business of the Corporation and this Code of Conduct. Officers, employees or substantially full-time consultants or contractors who become aware of any illegal or improper conduct on the part of another officer, employee or substantially full-time consultant or contractor, or conduct inconsistent with this Code of Conduct, shall promptly report such conduct to their supervisor or the General Counsel of the Corporation.
- 14. Corporation officers, employees and substantially full-time consultants and contractors shall not put themselves in a position in which their personal interests and those of the Corporation might be in conflict or which might interfere with the officer's, employee's, consultant's or contractor's ability to perform his or her job as well as possible.
- 15. Corporation officers, employees and substantially full-time consultants and contractors shall not use any Corporation property or services for personal gain and shall not remove or dispose of the materials, supplies or equipment of the Corporation without proper authority.
- 16. Corporation officers, employees and substantially full-time consultants and contractors shall not accept any form of gratuity which would tend to affect, or give the appearance of affecting, their judgment in the performance of their duties. Food, refreshments and entertainment in the course of a luncheon, dinner, other meeting or corporate event, and non-cash gifts, such as pens, pencils, note pads, calendars, clothing or gifts received as a promotional matter or for a special occasion, are examples of acceptable gratuities. Cash in

any form or amount is not considered an acceptable gift and is explicitly forbidden. Such individuals shall keep a personal written record of all forms of gratuities with an individual value of \$50 or more ("Recordable Gratuities") they do accept. In no event may an officer, employee or substantially full-time consultant or contractor accept Recordable Gratuities with an aggregate value in excess of \$250 per source per year.

- 17. Corporation officers, employees and substantially full-time consultants and contractors shall not give or offer to give gratuities in any form to anyone for the purpose of influencing their judgment in the performance of their duties.
- 18. Corporation officers, employees and substantially full-time consultants and contractors shall not use funds or resources of the Corporation in support of any political party or candidate for elected office. A Corporation officer, employee or substantially full-time consultant or contractor may not use his or her position, authority, or influence with the Corporation for the purpose of affecting the result of an election or a nomination or a party or public office. An officer, employee or substantially full-time consultant or contractor shall not directly or indirectly coerce, attempt to coerce, command or advise another officer, employee or substantially full-time consultant or contractor, to pay, lend, or contribute anything of value or to contribute personal services to a party, committee, organization, agency or person for political purposes.
- 19. Corporation officers, employees and substantially full-time consultants and contractors with responsibility to initiate or modify entries in the Corporation's accounting records shall perform such duties in accordance with management's directions and in conformance with the Corporation's accounting policies and procedures.
- 20. Corporation officers, employees and substantially full-time consultants and contractors shall not, except as may be allowed by a recognized legal privilege or appropriate assertion of confidentiality, withhold information from or give false or misleading information to anyone conducting duly authorized investigations or audits of or relating to the Corporation or its business.
- 21. Corporation officers, employees and substantially full-time consultants and contractors shall not discriminate against anyone on any unlawful basis, including sex, race, religion, color, national origin, sexual orientation, age, medical condition, physical or mental disability, HIV or AIDS condition, marital status, veteran status, or family leave status.
- 22. Corporation officers, employees and substantially full-time consultants and contractors shall not be under the influence of alcohol, or possess, use or be under the influence of illegal drugs while on the job or during work hours, including meal breaks.

#### (b) IMPLEMENTATION

- 1. The Corporation will inform and train its officers, employees and substantially full-time consultants and contractors in appropriate provisions of federal and state law. The Corporation will direct all of its officers, employees, and substantially full-time consultants and contractors to comply with appropriate provisions of federal and state law. The Corporation will monitor its officers, employees and substantially full-time consultants and contractors, and will conduct periodic reviews to ensure continued compliance. The Corporation will instruct its officers, employees and substantially full-time consultants and contractors to contact their supervisors or the General Counsel of the Corporation if they have any questions regarding applicable federal or state law or this Code of Conduct.
- 2. The Corporation will distribute copies of this Code of Conduct to all of its officers, employees and substantially full-time consultants and contractors. Copies of this Code of Conduct will be provided to any new officer, employee and substantially full-time consultant and contractor as part of an orientation process. The Corporation will direct all of its officers, employees and substantially full-time consultants and contractors to comply with this Code of Conduct. All officers, employees and substantially full-time

consultants and contractors shall be required to complete an annual disclosure questionnaire regarding compliance with this Code of Conduct and investments in Market Entities; provided, however, that the Governing Board may determine that certain categories of non-management employees, consultants and contractors of the Corporation shall not be required to complete such questionnaire or may complete an abbreviated questionnaire.

- 3. The Governing Board of the Corporation will evaluate the Corporation's experience and refine these procedures, if necessary, to ensure continued compliance with this Code of Conduct.
- 4. The Audit Committee shall monitor compliance with this Code of Conduct and shall make a compliance report to the full Governing Board at least annually.
- 5. Any officer, employee or substantially full-time contractor or consultant of the Corporation shall be subject to discipline for failure to comply with all applicable federal and state laws or for failure to comply with this Code of Conduct. Discipline may take the form of reprimand, suspension without pay, limitation in the scope of responsibilities, monetary fines, or termination, in accordance with policies approved by the Governing Board.
- 6. The Governing Board shall adopt guidelines and policies for granting waivers of compliance with paragraph (a)(3) of this Code of Conduct.

## **Information Security Policy**

#### POLICY SCOPE

This Information Security Policy encompasses all Independent System Operator (ISO) networks, gateways, frontends, information systems, applications and computer-based tools to ensure the adequate security, confidentiality, availability, privacy and integrity of our information assets. It covers all ISO employees (full time, part time and temporary), consultants and contractors.

The Information Security Policy and Supporting Security Standards and Guidelines comply with, reinforce, and compliment existing regulations and tariffs that govern the ISO, as well as existing State and Federal laws regarding the security of information assets. Adherence by all ISO employees, consultants and contractors to the Information Security Policy and Supporting Security Standards and Guidelines will help demonstrate the ISO is exercising due care by taking adequate precautions to address information security matters. In turn, it will help to maintain public trust and address liability issues.

#### INFORMATION SECURITY POLICY

Information is a critical and valuable asset for the ISO. Protecting information assets from unauthorized, incorrect or accidental access, use, modification, destruction or disclosure is essential to the ISO's performance and survival. Security measures must be used regardless of the media on which information is stored (paper, hard drives, transparencies, etc.), regardless of the systems which process it (workstations, portable PCs, servers, voice mail systems, etc.), or regardless of the methods by which it is moved (electronic mail, telephone or face-to-face conversation, diskette or other removable media, etc.).

All ISO networks, information systems, applications, and practices must be designed, developed, built, configured and maintained in such a way that users have access to all information and every tool required to do their job and nothing else. Management of the department that has ownership of the information assets will classify that information based on its criticality, sensitivity, and value to the business or the customer per the Supporting Security Standards and Guidelines. The intent is to properly protect information assets from security threats such as error, fraud, embezzlement, sabotage, terrorism, extortion, industrial espionage, privacy intrusions, service interruptions, denial of service and natural disasters. In addition, sensitive communications with internal and outside legal Counsel may need to be additionally marked "Privileged and Confidential, Attorney/Client Communications" to ensure that communication privileges are maintained.

ISO employees, consultants and contractors have a fundamental responsibility and obligation to do their part in securing the information assets entrusted to them.

Each employee, consultant and contractor is responsible for the following:

- Understanding and complying with the Information Security Policy.
- Understanding and applying the Supporting Security Standards and Guidelines.
- Understanding and applying rules and standards controlling the access to and use of ISO premises, equipment and computing resources.
- Understanding and applying rules and standards regarding software use and copyright protection.
- Understanding and applying rules and standards governing the secure handling of information assets.

Noting and reporting to your immediate Supervisor or to the Director of Information Security any variance from established security procedures, and ensuring that the appropriate group has taken corrective action. An employee, consultant or contractor should make a further report to the Director of Information Security or, alternately, a Counsel in the ISO Legal Department if corrective action has not been taken.

All reports of variances from established security procedures will be treated confidentially and any reprisal against a reporting ISO employee, consultant or contractor will not be tolerated.

Every employee will receive sufficient training to meet his or her security responsibilities and obligations. In addition, they will have access to necessary information regarding security efforts and news. Violation of the Information Security Policy is a serious offense and may be subject to disciplinary action, up to and including dismissal.

The ISO's networks, information systems, office automation system, applications, Internet, electronic and voice mail systems are for authorized company business use. Abusive use, offensive use, misuse or obstructive use of company resources may result in disciplinary action, up to and including dismissal. Personal use shall be limited to inoffensive, non-obstructive and non-disruptive use and with local management approval. All information stored or processed in ISO's communications and computing resources belongs to the ISO and is subject to inspection without notice.

Communications by electronic or voice mail, the Internet and facsimile are, by the nature of the technology involved, accessible to others and must not be considered private. Exercise caution when communicating information on these systems. Unless encrypted, information classified as ISO RESTRICTED must not be sent over these systems.

The Internet is a valuable tool to improve productivity. All users must observe proper user etiquette at all times. When accessing the Internet from ISO resources, employees, consultants and contractors must take extra precautions when sending electronic mail or posting messages. Users found abusing, misusing, obstructing workflow processes or downloading inappropriate information or material from the Internet or any other on-line service may be subject to disciplinary action, up to and including dismissal.

The Supporting Security Standards and Guidelines provide security requirements and technical specifications in support of the Information Security Policy. They also provide definitions and information to assist ISO employees, consultants and contractors comply with the Information Security Policy. The Information Security Services Group (ISS), under the leadership of the Chief Information Officer, is responsible for developing and maintaining the security policy, standards, education and training. ISS will work with the appropriate departments to develop, implement and maintain viable security standards. This will help ensure the standards are current with the technology and the environment.

To obtain a temporary variance from the established Policy, Standards and Guidelines, a Waiver Request must be completed and submitted to the ISS and have the concurrence of the Director of Information Security. The Waiver Request must include:

- 1. A summary of the project.
- 2. A description of the compelling business or technological reason for the variance.
- 3. A risk assessment with proposed security measures and procedures.
- 4. A Transition Security Plan, which includes a date when the variance will end and the project will be in compliance. The project's Director and the Director of Information Security Services must sign the plan.
- 5. The officer overseeing the project, as well as the officer of any department affected by the variance, must sign an acknowledgement and acceptance of residual risk to approve the variance.

The ISS will file all original Waiver Requests. Non-compliance under any other circumstances is as a serious offense and may be subject to disciplinary action, up to and including dismissal.

In addition, the ISS is responsible for the overall ISO Business Continuity Policy and Plans (BCPP). ISS will work with all departments to develop, implement, maintain and test the ISO BCPP. These documents will compliment, comply with, enhance and reinforce the Information Security Policy and Supporting Security Standards and Guidelines.

If you have any questions or need clarification of the Information Security Policy or Supporting Security Standards and Guidelines, please contact the Senior Information Security Manager of the Information Security Services Department.

# **Fitness for Duty Policy**

It is the policy of the Independent System Operators (ISO) to have a work environment free from the manufactures, distribution, dispensation, possession, or use of alcohol or illegal drugs. This policy prohibits the use, possession, offer to sale, or being under the influence of alcohol or illegal drugs during working hours, including lunch and break periods; or on company property at any time.

Employees who violate this policy and anyone not complying with the following listed responsibilities will be subject to disciplinary action up to and including termination.

Employment will be contingent on passing a pre-employment drug screening. Employees may be subject to drug testing if conduct indicates a reasonable suspicion of illegal drug use.

#### **Guidelines**

- 1. Read, understand, and abide by the company policy.
- 2. Notify your supervisor of any criminal drug statute conviction for a violation in the workplace no later than 5 days after such conviction.
- 3. Be willing to satisfactorily participate in a drug/alcohol abuse assistance or rehabilitation program if convicted for a violation of this policy.
- 4. Notify your immediate supervisor if you are under a physician's care and taking prescription drugs that may impair work performance.
- 5. Refrain from the use of any substances (drugs or alcohol) that would impair work performance.

#### **Top Management Responsibilities**

- 1. Establish and maintain a list of federal, state, and local health, law enforcement, or other agencies which deal with drug/alcohol rehabilitation and employee assistance programs. Provide an ongoing drug/alcohol education program about the dangers of drug and alcohol abuse in the work place.
- 2. Ensure the employees convicted of a criminal statue with respect to the manufacture, distribution, dispensation, possession, or use of a controlled substance in the work place are either offered drug rehabilitation, or upon refusal to participate in such, are disciplined, up to and including termination of employment.

#### **EXHIBIT C**

# **Policy Agreement and Acknowledgement**

I,following materials:	, hereby acknowledge that I have received copies of and have read the
Conduct")  • California ISO Information Sec	tem Operator Corporation ("ISO") Employees Code of Conduct ("Code of rity Policy ("Security Policy") Policy ("Fitness for Duty Policy")
I hereby agree to comply in full wit Duty Policy.	all requirements of the Code of Conduct, the Security Policy, and Fitness for
Signature	 Date

#### EXHIBIT D

#### BACKGROUND CHECK INFORMATION

I understand that background information verifications will be conducted by California ISO, or its agent. I understand that these verifications will be related to the services I have contracted to deliver and may include, but are not limited to, Consumer Credit Reports specifically designed for employment purposes, criminal history, civil cases in which I have been a principal, driving records, Workers Compensation claims, previous employment history, educational history (including Grade Point Average), and other public records.

I authorize, without reservation, any party or agency contacted by California ISO, or its agent, to furnish the above-mentioned information to California ISO. I have read this entire document, and I understand that by signing I am releasing all those parties from any and all liability. Furthermore, I agree to indemnify and hold harmless both California ISO and the agency completing the background check from and against any and all claims, demands, or liabilities, including court costs and attorney's fees. By my signature I am also voluntarily agreeing to all these conditions and giving my permission to perform this background verification.

Name:		
(Last)	(First)	(Middle)
AKA/Maiden Name:		
Social Security		
Number:	Date of Birth:	
Driver's License		
Number:	State Issued:	
Current Address:		
City, State, Zip:		
Home	Other	
Phone: <u>( )</u>	Phone: ( <u>)</u>	

PLEASE PRINT CLEARLY!

	History:			
	Please list all country, states and counties in which	ou have lived or worked in th	e last (7)	years.
	Answers to questions below are not a bar to esta the requirement of the contract. Give details of "			idered on
	the requirement of the contract. Give actuals of	yes unswers to items 1, 2 of	Yes	No
1	Do you have relatives employed by California ISO or wh	n are members of	( )	( )
•	California ISO Board of Governors? If yes, li		, ,	( )
2.	Have you ever been discharged from employment or re	=		( )
	Have you ever been convicted of a misdemeanor or a fe	_	( )	( )
	offense, date, and penalty of each conviction.	, , ,		
	Give Details of "yes" answers to items 1,2 or 3 abov	<u>e:</u>		
	Employer (i.e., your consulting firm):			
	ISO Contracting Supervisor:			
		To be completed by H.R.		
	Type of Background:			
	PMS	Criminal ()		
	SI	Credit ( )		
	SA	Education ( )		
	BBS	License ( )		
	MDAS	Employment ( )		

I hereby certify that the above information is true and complete and I authorize California ISO, or its agent, to verify this information. I agree and understand that any misstatements or omissions of material facts herein may result in the termination of my placement with Cal-ISO. I understand that continuation

of my placement is contingent upon passing a criminal background check, credit reference check, employment verification, education verification, and License verification when applicable.

Applicant's	
Signature:	Date:
I request a copy	of my credit report as delivered to the California ISO ("X" or initial)
I do not request	a copy of my credit report as delivered to the California ISO ("X" or initial)

You have a right to request information regarding the nature and scope of any background verifications done on behalf of the California ISO. In the event that adverse action is taken as a result of information you believe to be erroneous, you must inform your employer or contracting agency within sixty (60) days of the time that the report is tendered to the California ISO. You will be provided with a copy of the disputed information and a method of contacting the agent completing the background check.

#### **EXHIBIT E**

# **Pre-Employment Drug Screening**

It is the policy of the California Independent System Operator (ISO) to require an initial drug screening before a contractor may begin performing services for the ISO.

Please contact the following lab in your area to make an appointment for your drug screening. Your appointment should be made within two weeks.

#### Folsom Area

The Lab – Folsom (located in the Wal-Mart Shopping Center) 1008-4 Riley Street Folsom, CA 95630 (916) 983-3522

Hours:

Monday-Friday: 7 am-6 pm Saturday: 8 am-2 pm

Directions:

Take Blue Ravine Rd to Riley St Turn Left onto Riley St Wal-Mart Shopping Center will be on your left-hand side The Lab is located between Office Max & The Food Source

#### Alhambra Area

Healthcare Partners Medical Group 3144 Santa Anita Avenue El Monte, CA 91733 (626) 444-0333

Hours:

24 Hours a day

Directions:

<u>Please contact The Healthcare Partners directly for specific directions from your location.</u>

# **Emergency Contact**

Name:
In case of emergency:
FIRST CONTACT
Name:
Relationship:
Home Phone:
Business Phone:
SECOND CONTACT
Name:
Relationship:
Home Phone:
Business Phone:
In case of emergency, do you wish your own physician notified?
If so, please complete the following.
Doctor:
Address:
Telephone: