

Exhibit No. ISO 2(2)

February 13, 1998

**STEERING COMMITTEE MEETING**

## **GMC Unbundling Study**

### **Stakeholder Steering Committee Meeting**

Friday, February 13, 1998

#### Agenda

- |              |   |
|--------------|---|
| 9:00 - 9:15  | Introduction  |
| 9:15 - 10:30 | Discussion/Conclusion of recommended split of products and services             |
| 10:30-10:40  | Break   |
| 10:40-11:30  | Discussion/Conclusion of recommended user groups                                |
| 11:30-12:00  | Set work scope, resource requirements, split between ISO staff and consultant   |
| 12:00-12:45  | Lunch   |
| 12:45- 1:15  | Finish work scope, etc.   |
| 1:15 - 2:00  | Outline of what goes to the board for 2/24.                                     |
| 2:00 - 3:00  | Timeline, suggestions, process for finalizing scope, next steps, next meetings. |

**Epstein, Michael**

**From:** Ayoub, Vanda on behalf of Fuller, Don  
**Sent:** Tuesday, February 10, 1998 10:06 AM  
**To:** jgkritikson@calpx.com; 'clkebler@calpx.com'; 'lmmiller@calpx.com'  
**Cc:** Schneider, Susan; Smart, Charles A; Epstein, Michael; Miremadi, Ali; Fuller, Don  
**Subject:** GMC Unbundling Study

At the request of the Board, the ISO is conducting a study to determine whether and how the GMC charge should be unbundled

The kickoff meeting was Wednesday, February 4. We are forming a Steering Committee of Stakeholders and believe that a PX representative is needed.

The first Steering Committee meeting is on Friday, February 13 in the Sacramento area.

Please call Vanda Ayoub at (916) 351-4467 to respond whether you want to support this.

*Don Fuller*

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

February 4, 1998 Kickoff Meeting - Prepared by Susan Schneider

- **Meeting Goals**
  - List/Prioritize study objectives
  - Brainstorm on Study Methodologies
  - Agree on project process and schedule
  
- **What it covers**
  - Grid Management
  
- **What it doesn't cover**
  - Embedded transmission costs
  - Transmission maintenance costs
  - Any other physical wires costs

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## GRID MANAGEMENT CHARGE PRICING STUDY

### OBJECTIVES

February 4, 1998 Kickoff Meeting - Prepared by Don Fuller

**1) Cost Efficiency for ISO customers to implement (11 votes)**

- ❖ Identify cost to implement unbundling alternatives including hardware.

**2) ISO Management (5 votes)**

- ❖ Structure prices/products to encourage efficient ISO Management
- ❖ Identify future internal ISO cost-accounting procedures
- ❖ Integrate unbundled model with ISO budget process-give board and customers information

**3) Accuracy (6 votes)**

- ❖ Fine-tune net vs. gross denominator (Volume estimate for GMC)

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### OBJECTIVES

#### 4) Production/Customers Choice (16 votes)

- ❖ Recognize/provide for difference in ISO functions & customer types in future
- ❖ Maximize customer choices of how to meet obligations. (Use ISO services or not)
- ❖ Identify which ISO products can be provided by others.
- ❖ Translate functions into products/prices
- ❖ Identify target markets

#### 5) Revenue Sufficiency (4 votes)

- ❖ Ensure ISO has enough dollars

#### 6) Consistency with other aspects (Example transmission study) (2 votes)

- ❖ Consistent with access charge principles
- ❖ Apply FERC uniform system of Accounts

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## GRID MANAGEMENT CHARGE PRICING STUDY

### OBJECTIVES

#### 7) Fairness/Cost-Shifting (11 votes)

- ❖ Identify discriminatory practices-Assure non discriminatory application of GMC
- ❖ Balance fairness and practicality

#### 8) Cost Occurrence = Cost Causation (26 votes)

- ❖ Rates have time differential and service differential
- ❖ Fair and avoid cost-shifting (People pay for what they get) & (Don't pay for what they don't get)
- ❖ Consider what services can/can't be bypassed
- ❖ Identify major GMC functions
- ❖ Translate functions into products/prices
- ❖ Introduce relevant rate design principle

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### OBJECTIVES

#### 9) Ease of Use (1 vote)

- ❖ Simple to understand and use for forecasting (Users)
- ❖ Simple and practical to implement

#### 10) Market Efficiency (8 votes)

- ❖ Provide incentives for efficient and reliable use of grid
- ❖ Encourage more use of ISO grid (non users)
- ❖ Limit exemptions from GMC



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## GRID MANAGEMENT CHARGE PRICING STUDY

### METHODOLOGY

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- Use 1998 costs for study, update with 1999 budget costs
- Literature search for relevant unbundling studies
- Look at operating, financial costs separately-big ticket item
- Construct functional matrix of staff time to services
- Determine Incremental/decremental cost to provide services
- Determine customers classes by services
- Embedded vs. incremental marginal analysis
- Consider in forecast of billing (Competition, Willingness to Pay)
- "Good enough" rules
- Bases besides volume (e.g. transactions including SC-to-SC-Trades)
- Look at new products/services (i.e. match SC-SC trades)

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## GRID MANAGEMENT CHARGE PRICING STUDY

### PROCESS

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- Consultant
- Stakeholder with technical help
- "Cross functional" Stakeholder participation
- Consultant firm functional & Stakeholder oversight group
- Alternatives depending on relative weight on objectives
- Stakeholders define scope (e.g. functionalization)
- Pick a consultant/Advisor
- Stakeholders review products/Services
- Stakeholders draw up scope of work-ISO does it
- If too broad considering time-Stakeholders reduce phasing/Scope (Decisions)

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## GRID MANAGEMENT CHARGE PRICING STUDY

February 13, 1998 Steering Committee Meeting - Prepared by Don Fuller

The following is a cut at the study scope and possible splits of products/services and users. This is the result of discussions at the ISO and two meetings today. Susan Schneider could not attend the second meeting so may have subsequent comments on this.

1. In terms of product/service split, we had a hard time. We saw 3 major definable areas; reliability, market operations, and admin. Market Operations includes 8-9 areas that need to be grouped into probably 2-3 larger segments but we didn't reach conclusion at our end on the logic.

A. Reliability, Grid Operations

B. Market Operations

- Day Ahead, Hour Ahead Scheduling
- Congestion Management
- Real-Time/Imbalance Market
- Ancillary Services
- Inter-SC trades
- Existing Contracts
- Settlements
- Market Surveillance

C. Admin (not necessarily a standard definition, but maybe related to special functions, i.e. must-run contract negotiation, implementation)

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## GRID MANAGEMENT CHARGE PRICING STUDY

February 13, 1998 Steering Committee Meeting

### 2. In terms of user groups

- A. PTO
- B. SC
- C. Generators
- D. Existing Operating Entities or Metered Subsystems (transition to PTO)

### 3. Study Scope (Examine the feasibility, and methodology of unbundling the GMC charge)

- A. Determine logic for separating ISO products/services and how to separate charges for these services.
- B. Are there other services the ISO should offer? Are there services provided by the ISO that should be offered by others?
- C. Is there a better (fairer!) method to charge GMC vs. current approach to charge consumption
- D. What are the logical groups of user classes that should be considered?
- E. Set cost information research requirements to accommodate the above.
- F. Investigate relevant unbundling studies, FERC history, etc. for alternate approaches, including advantages and disadvantages.
- G. Be cognizant of ISO revenue requirements and bond financing impact of disrupting current GMC framework.
- H. Determine resource requirements. What can the ISO do internally? What should go to an outside independent consultant.

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## GRID MANAGEMENT CHARGE PRICING STUDY

February 13, 1998 Steering Committee Meeting

### 4. Suggestions for Friday agenda:

- A. Conclude recommended split of product/service grouping
- B. Conclude recommended split of user groupings
- C. Conclude scope of work, resource requirements of ISO staff and consultant
- D. What should be presented to the board on 2/24 and how, incl. schedule for preparation.
- E. Timeline, suggestions, process for finalizing scope, retaining a consultant, finalizing scope, next steps, next meetings,  
etc.

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

### SCOPE OF WORK

#### BACKGROUND

The California Independent System Operator (CAISO or ISO) is responsible for reliable operation of the transmission grid and to facilitate certain market activities that will provide free and open access to all market participants. The transmission grid under control of the ISO includes facilities owned by Pacific Gas & Electric, San Diego Gas & Electric, and Southern California Edison. The ISO's headquarters are in Folsom, CA, with back-up facilities in Alhambra, CA.

The ISO was chartered by the state of California. It is an independent non-profit corporation with a governing board representing the stakeholders involved in the generation, transmission and consumption of electricity.

The CAISO provides an array of services associated with grid management and reliability (also known as control area functions or services) and facilitation of electricity-related markets (e.g. for balancing energy and ancillary services). The ISO maintains revenue neutrality on all market operations, meaning it acts as an agent for the market, collecting and disbursing funds associated with the markets it operates.

The CAISO will be funded through a Grid Management Charge (GMC) that recovers the annual cost of operating the CAISO, including financing costs, and amortizing the costs of the hardware and software necessary for its operations. The GMC will be assessed on transactions through the CAISO. It has been approved for recovery by the Federal Energy Regulatory Commission, subject to refund once the charge has been adjudicated. One key issue in the FERC proceeding will be the extent to which the CAISO's provision of services may be different for various users of the grid and whether and how the GMC may be unbundled so that these users only pay for services they use. The CAISO is thus undertaking a study that will determine how and to what extent the GMC can be unbundled to reflect differences in services provided.

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

### SCOPE OF WORK

#### STUDY REQUIREMENTS

- A definition of services provided, disaggregated to the extent feasible.
- An analysis of costs to provide the services (largely labor and hardware/software).
- A functionalization of CAISO costs into categories that can be allocated.
- A direct assignment of costs to the services provided, where feasible.
- A valid means of allocating potential substantial joint and common costs among the services where direct assignment is not possible. Some of these joint and common costs are typical in cost of service studies (e.g. A&G expense). Others are not (e.g. running an ancillary services auction for customers that do not wish to self-provide these ancillary services which both provides for needed ancillary services to support the grid and facilitates a marketplace in ancillary services).

The CAISO staff is undertaking an analysis of current costs (based on its 1998 budget) and will map those costs (type and dollar amount) to various services through the creation of a matrix. This study should be completed by the beginning of March 1998. This is the preliminary functionalization study.

In addition, the CAISO has convened a group of stakeholders to oversee the GMC unbundling study, who have made a preliminary attempt to define the set of ISO services. There is not consensus that this is the best possible definition, but it has been accepted as a starting point. This definition process has identified several areas where services span both reliability and market facilitation. On a preliminary basis these services have been listed under both control area services and market facilitation. One major task of the consultant retained to assist in this study will be to develop an appropriate methodology for allocating these costs between the two broad categories of service (or perhaps more, depending on the evolution of the study).

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

### SCOPE OF WORK

#### PRELIMINARY LIST OF SERVICES/PRODUCTS

##### Control Area Operations

- Ancillary services
- Real-time/Imbalance
- Congestion Management
- System Planning – short range and long range
- Operation Studies
- System Security Analysis
- Interface with other Control Areas
- Emergency Management
- Scheduling
- Outage Coordination
- Reliability Must-Run (also admin.)
- Transmission Maintenance Standards
- Metering and Meter Data Analysis
- Treatment of Existing Contracts/Billing and Settlement



# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

### SCOPE OF WORK

#### PRELIMINARY LIST OF SERVICES/PRODUCTS

##### Market Operations

Billing and Settlements (should this be a separate item or allocated to items below?)

Ancillary Services

Congestion Management

Imbalance Energy Market

Market Surveillance

Metering and Meter Data Analysis

##### Administrative

Market Surveillance

Must-run Contracts

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

### SCOPE OF WORK

#### REQUIREMENTS FOR SELECTED CONSULTANT

1. Review lists of services and determine whether additional services should be added. This will take the form of a recommendation to the stakeholder steering committee and CAISO staff.
2. Review the matrix mapping costs to services prepared by the CAISO staff. Possible recommendations for modifications.
3. Perform allocation of direct costs to the final list of services.
4. Develop an allocation methodology for joint and common costs that cannot be directly assigned to the final list of services.
5. As part of tasks 3 and 4, develop a spreadsheet-based allocation model that will be delivered to the CAISO as part of the project work product.
6. Be available to meet with the stakeholder steering committee and others as appropriate to discuss preliminary and final results of study.

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

### SCOPE OF WORK

#### REQUIREMENTS FOR SELECTED CONSULTANT

The selected consultant must be able to present itself as a neutral party to the stakeholder interests involved in this matter. For this reason, the CAISO and the steering committee have determined that they have a strong preference for retaining a consultant that 1) is not currently working for any California market participant, and that 2) does not have an extensive history of propounding a particular point of view with respect to the allocation of transmission and control area services in interactions among California utilities and between the utilities other parties using the California grid. Thus all respondents are requested to present information on their current clients who are California market participants and on long-standing client relationships with California market participants.

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

## GRID MANAGEMENT CHARGE PRICING STUDY

### SCOPE OF WORK

#### SCHEDULE

There is a very tight schedule for this study, since it will be used in the FERC proceeding on the CAISO's GMC. The preliminary schedule for achieving this result is:

<b>First Draft Report</b>	<b>June 19, 1998</b>
<b>Stakeholder Comments</b>	<b>July 7, 1998</b>
<b>Final Draft Report</b>	<b>July 15, 1998</b>
<b>Final Stakeholder Review</b>	<b>August 1, 1998</b>
<b>Report to Governing Board</b>	<b>August 15, 1998</b>

While this schedule is subject to some modification, the final date for delivery to the Governing Board is critical to the ability to present the report during the FERC GMC proceeding this fall.

It is anticipated that a consultant will be selected by the March 18, 1998, ISO Governing Board meeting. An RFP will be mailed out the beginning of March with a roughly ten-day turnaround period. Interviews will be conducted very quickly in order to meet the deadline imposed by the Board meeting.

## Scope of Service for GMC Unbundling Study

### Two Part Unbundling Study:

#### **Phase A. Determination of services, customer groups, and costs to be allocated.**

1. Define the services the ISO currently offers.
2. Define any additional services the ISO may offer in the future.
3. Determine test period for the cost study.
4. Will the ISO's O&M costs and facility costs be properly booked into a uniform system of accounts for this study?
5. The various ISO facilities (software, hardware, communication programs, etc.) need to be functionalized into categories that can be readily allocated.

The above will give us an understanding of the purpose of each software, hardware, and communication program

- Do sub-functionalization studies need to be performed for the various facilities and why?
  - What allocation methods will be used to allocate the various functionalized and sub-functionalized categories?
6. Functionalize O&M costs consistent with the functionalized facility costs.
  7. How will Administrative and General expenses be functionalized and allocated (human resource costs, purchasing costs, medical insurance, regulatory commission expenses, consulting fees, etc) ?

8. Develop a cost allocation cost matrix showing the following:
  - Vertical column
    - O&M costs by function
    - Facility costs by function (rate base)
      - the manner in which facility costs are allocated will determine the finance cost or cost of capital that will be allocated to each service class
  - Horizontal column
    - ISO services to which costs are allocated

Matrix will show what costs supports or benefits each service.

9. Make a final determination of what services need to used and separately billed.
10. Determine what billing determinants will be used to recover each unbundled cost.
  - Are these billing determinants readily available?
11. Steering committee reviews the results of Phase A.
12. Take final service recommendations to the Board so that we can proceed to phase B of the study.

**Phase B. Derivation of a cost allocation study and rate design for each unbundled service**

1. Determine the actual facility costs by functions.
2. Determine the facility costs by sub-function if necessary.
3. Determine the O&M expenses by function.
4. Functionalize Administrative and General expenses so that these costs can be allocated to functions and services.
5. Derive cost allocation factors by function.

6. Allocate functional costs to each service
7. Derive billing determinants.
8. Derive a rate for each applicable service.
9. Steering committee reviews the results of Phase B.
10. Present Results to the Board