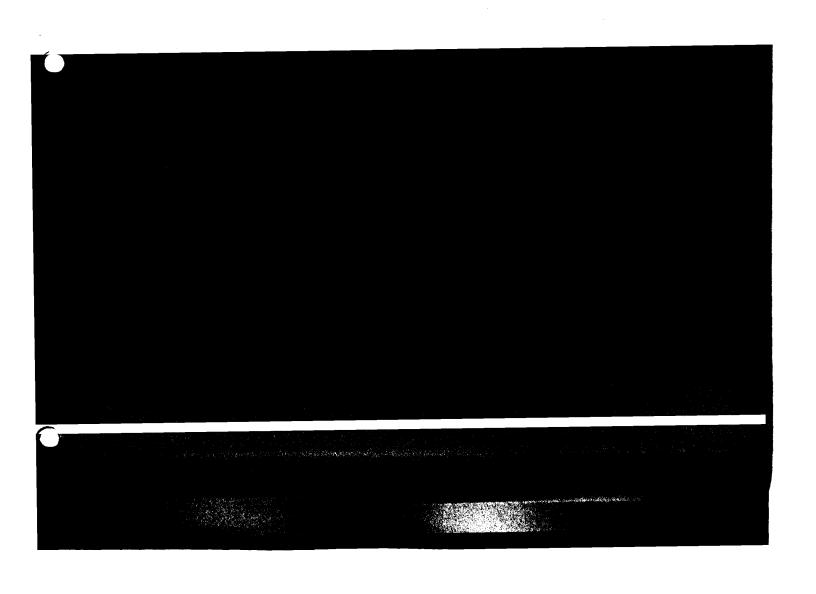
Exhibit No. ISO 2(9)

October 13, 1998

STEERING COMMITTEE CONFERENCE CALL

October 28, 1998

STEERING COMMITTEE MEETING



Leonard, Alice

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Econard, Arce Grabulation February Don

Thursday, October 15, 1998 12:29 PM

Banaghan, Ellen; Jobson, Brian; Ellis, Jack; Barreno, Romulo F; Werner, Michael; Wynne,

Michele; Lucero, Ed; Barkovich, Barbara; Johnson, Roger; Kehrein, Carolyn; Greenleaf,

Steve; Epstein, Michael; Campo, Bobby; 'rmi@aracnet.com'; 'eelsesser@aandellp.com'

Fuller, Don; Schneider, Susan

Subject:

GM Unbundling Steering Committee Conference Call notes

To GMC Unbundling Steering Committee

October 13 Conference call attendees:

David Cohen, Cheryl Beach, Don Fuller, Roger Johnson, Lex Luedtke, Ellen Bnaghan, Steve Greenleaf, Mike Epstein, Ed Lucero, Mike Werner.

To those of you who missed yesterday's call, we spent the call scoping our next key activities, regarding the joint fixed cost issue and functionalization.

I asked the group to begin thinking about what would be an acceptable outcome of the GMC Unbundling activity. I think that this is vital in order to insure that we don't end phase 2 of this study with the same lack of support that we had at the end of phase 1. Please e-mail me your thoughts on this by Thursday of next week, October 22nd.

Note our next meetings of the steering committee in Folsom

Wednesday October 28 9:30-3:30

Friday November 13 8:00-2:00

Prep for October 28 Meeting - Roger is sending Don Fuller the functional diagram used early in the Rudden stakeholder meetings. The ISO will review this and the PW stud recently to provide steering committee description of the systems. This will be mailed to steering committee before the October 28 meeting.

By the end of the meeting on November 13, we must complete our recommendation on possible functionalization. We are scheduled to complete definition of possible billing determinants in December in order to collect data and provide an analysis by Feb. 15. Perhaps we can cover this at the November 13 meeting and do any further work via email or phone. I think December will be busy for all of us.

October 28 GMC Meeting Attendees and objective

Attendees: Steering Committee members, ISO staff, and Cheryl Beach and Ray Czahar from RJ Rudden

Meeting objective: To give steering committee a thorough understanding of ISO budget relative to possible functionalization, i.e. infrastructure vs. operating budget topics, major contracts, etc.

October 28 GMC Agenda:

9:30 - 9:40

Meeting intro and objectives

Don Fuller

9:40 - 10:30

Budget Review

Phil Leiber

10:30 - 12:00 Systems Review

Interrelationships of Cong, ASM, SA/SI, BBS

Ability to separately define systems from budget

Standpoint

Market Operations

12:00 - 1:00

Lunch

1:00 - 1:30

Manual work-arounds

Operations/Settlements

1:30 - 2:30

Functionalization discussion -

Cheryl Beach & group

Start with Rudden work, investigations and decisions

How do we expand?

Some have suggested A/S and congestion, is that enough?

Group discussion, how do we expand,

agenda for November 13 meeting

All

Sent on behalf of Don Fuller by Alice Leonard

Alice Leonard Client Relations (916) 351-4467 aleonard@caiso.com

CNIC Steering Committee - Of. 29, 1998

Name	Organizati	on Thone
Don Fuller RAY CZAMAR	150 CENTRAL EVEN RUDDEN	
Mike Werner David Cohon Jong Maun	RMI FOR CMUA	916. 653.9295 (503) 643-7531 (916) 441-1753
Brian Dayan	CP-150 SMUD C+150	96 351-2168 (96) 732-593 (96) 351-2341
Eteve Greenheat Farouk Nakheeda Chery i Beach	CAISO CAISO Rudden	(916) 351-2166 916-608 579 202 223-188
CHARLES A SMART	CAC/EPUC	415-421-414

^C Memo

To:

GMC Steering Committee

From:

Don Fuller

Date:

10/26/98

Re:

Meeting October 28, 1998

Attached are some preparatory materials for the meeting Wednesday this week.

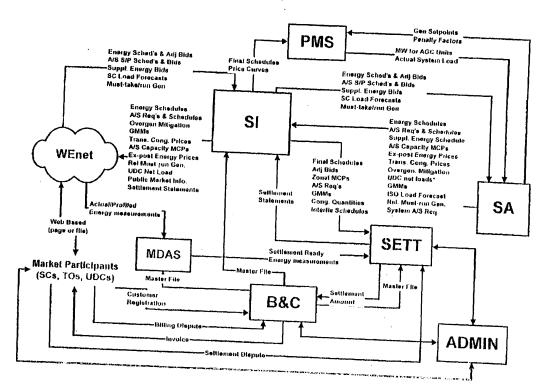
The first page is a flow chart used during the initial Rudden interviews to explain system interrelationships.

The remaining sheets are from the Price Waterhouse June 10 audit on Ancillary Service Management (ASM), Balancing Energy and Ex-post Pricing (BEEP) and Congestion Management Systems (CONG).

See you Wednesday. (Have you confirmed plans to Alice?)

Functional Diagram of the ISO System





California Independent System Operator Corporation Management Assertion - Scheduling Applications (SA) ASM, BEEP and CONG

Ex. No. ISO-2(9), p. 6 of 10

Exhibit 1

Systems Overview

(a) Introduction

The California Independent System Operator Corporation (CAISO or ISO) uses a variety of information systems to support its operations. The objective of this Management Assertion is to summarize the selected processing functions that comprise the automated processes included in the following SA applications:

- A. Ancillary Services Management (ASM)
- B. Balancing Energy and Ex-Post Pricing (BEEP)
- C. Congestion Management (CONG)

The applications which are the subject of this Management Assertion are designed primarily to serve as tools to assist in the decision making processes relating to the operations of the CAISO control area. Manual processes included within the ASM, BEEP and CONG systems are excluded from the scope of this Management Assertion. A general description of the CAISO systems follows and Exhibit 2 provides specific descriptions of ASM, BEEP and CONG.

At the center of the CAISO operational system environment are the Scheduling and Balance of Business systems. The CAISO uses its Scheduling and Balance of Business Systems to provide the following functionality:

- Coordinate the Day-Ahead and Hour-Ahead schedules of business associates;
- Conduct the real time Imbalance Energy market;
- Conduct the Ancillary Services market;
- Settle for deviations from Final Schedules;
- · Charge for transmission related fees;
- Send out and collect/pay for invoices/credits; and,
- Perform administrative functions.

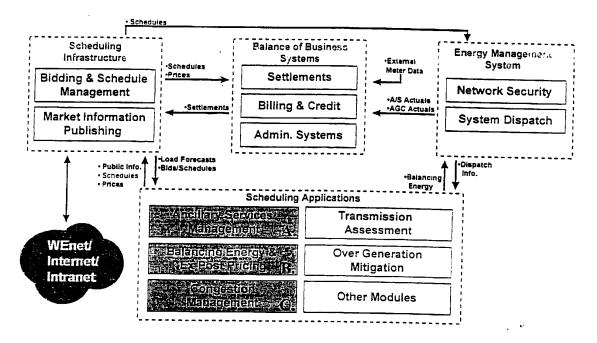
California Independent System Operator Corporation Management Assertion - Scheduling Applications (SA)

ASM BEEP and CONG

Exhibit 1

(b) Systems Overview

The core CAISO Scheduling and Balance of Business Systems are depicted as follows:



The specific applications comprising this Management Assertion are shown in the shaded boxes above, denoted A., B., and C.

Scheduling Infrastructure (SI)

The Scheduling Infrastructure subsystem provides the following functionality:

- Provides the interface between the CAISO and other business associates for scheduling and Ancillary Services;
- Performs/supports data collection, validation, storage, audit, consolidation, transfer and publication;
- Publishes Public Market Information; and.
- Provides the foundation of the Scheduling Applications.

Balance of Business System (BBS)

The Balance of Business System provides the following functionality:

- Settles for the difference between "metered" energy and scheduled energy;
- Calculates and invoices settlement amounts, transmission charges, and administration fees;
 and,
- Performs administrative, treasury and accounting functions.

California Independent System Operator Corporation Management Assertion - Scheduling Applications (SA) ASM, BEEP and CONG

Ex. No. ISO-2(9), p. 8 of 10

Exhibit 1

Energy Management System (EMS)

The Energy Management System provides the following functionality with respect to the electricity grid by:

- Dispatching generation;
- Monitoring load flows; and,
- Reporting major electrical component status.

Scheduling Applications (SA)

The Scheduling Applications subsystem provides the following functionality:

- Assesses the balance between energy production and consumption;
- Assesses schedule reliability submitted by Scheduling Coordinators:
- Adjusts schedules in response to energy imbalance, congestion and grid reliability;
- Determines Ancillary Service requirements, schedules and prices via a competitive auction;
- Determines resource Dispatch in response to real time energy imbalance; and,
- Consolidates Final Schedules.

WEnet / Internet / Intranet

WEnet (Western Energy Network), is a private network that facilitates communications and data exchange among the CAISO, Market Participants and the public in relation to the status and operation of the CAISO control area. The WEnet is a gateway for passing information to the Internet web site.

Internet refers to the publicly accessible Internet web site address for the CAISO, which is http://www.caiso.com.

Intranet refers to the internal CAISO network.

(c) The Energy and Ancillary Services Market

The Scheduling Coordinator (SC) is the primary agent for submitting energy schedules to the CAISO. The SC acts on behalf of one or more business associates (for example, generation facilities, utility companies, etc.) to present a set of balanced energy schedules to the CAISO. A balanced energy schedule is one in which the sum of the Generation/Import schedules submitted by the SC for each hour match the Load/Export schedules submitted by the same SC for that hour, including the estimated transmission system losses.

The commodities and mechanisms used by the SC in the CAISO market are the following:

Energy

The electrical energy produced, flowing or supplied by Generation, transmission or distribution facilities.

California Independent System Operator Corporation Management Assertion - Scheduling Applications (SA) ASM, BEEP and CONG

Ex. No. ISO-2(9), p. 9 of 10

Exhibit 1

Ancillary Services (A/S)

Ancillary Services are Generation resources (real or reactive) that must be made available to the CAISO to ensure transport of scheduled energy with acceptable quality (voltage, frequency, harmonic content, etc.) without endangering the security of the transmission network.

Each SC may self provide its pro-rata share of each A/S and bid additional A/S into the CAISO A/S market. Any SC may choose to procure all or part of its A/S obligation from the CAISO through the A/S market.

The ISO Tariff identifies six Ancillary Services:

- Regulation Reserve;
- Spinning Reserve;
- Non-Spinning Reserve;
- Replacement Reserve;
- Voltage Support (not currently auctioned in A/S market); and,
- Black start (not currently auctioned in A/S market).

Schedules

Each SC is required to submit balanced energy schedules such that for each hour the sum of scheduled load and export by each SC equals the sum of effective Generation and effective Import scheduled by the same SC including estimated transmission losses.

Bids

There are a number of different types of bids for energy and services including:

- Energy Bids the price at or above which a Generator has agreed to produce the next increment of Energy;
- Ancillary Services Bids the price at or above which a Generator has agreed to provide A/S capacity and A/S Energy;
- Proxy Energy Bids the price at which a Generator or Load has agreed to self-provide the next increment of Energy or decrement of Demand;
- Adjustment Bids used by the CAISO for transmission Congestion Management; and,
- Supplemental Bids are offered by the SC to the CAISO and are used for real time Dispatch.

Load Forecasts

Load forecasts are forecasts by the CAISO and the SC of future estimated electricity usage.

External Meter Data

Meter data is energy usage data collected by a metering device or an otherwise approved estimating method.

California Independent System Operator Corporation Management Assertion - Scheduling Applications (SA) ASM, BEEP and CONG

Ex. No. ISO-2(9), p. 10 of 10

Exhibit 1

Automatic Generation Control (AGC)

Automatic Generation Control is generation equipment that automatically responds to signals from the CAISO EMS system control in real time to control the power output of Generators.

Dispatch Information

Information pertaining to the operating control of electricity grid including instructions to control Generating Units, transmission lines and equipment, interconnections, other Control Areas, or to curtail demand.

Balancing Energy

The real time change in Generation output or Demand results in an Energy Imbalance in the electricity grid. The SA subsystem provides support, predominately through the BEEP application, for grid operations to respond to balance energy requirements.

Public Information

Public information is posted to the publicly accessible web site on the status and operations of the CAISO and electricity grid.