CALIFORNIA ISO

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Released: May 22, 2000

PUBLIC NOTICE:
JOINT AUDIT / FINANCE COMMITTEE MEETING

The Joint Audit/Finance Committee of the California Independent System Operator will meet:

Date: May 24, 2000
Time: 1:30 p.m. – 2:00 p.m.
Location: Offices of the California ISO
Conference Room 101A – 1A & 1B

During the above-noticed meeting, a joint meeting of the Audit / Finance Committees will discuss and possibly take action on the following agenda items:

GENERAL SESSION

1) Public Comment
2) GMC Unbundling - Status
3) New Business Issues and Future Agenda Items

To review General Session agenda documents online go to: http://www.caiso.com/pubinfo/BOG/documents/

All public documents, notices, and information are posted to the Web site as they are provided to the Board of Governors.
The California ISO Web site address is: http://www.caiso.com

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CALIFORNIA ISO

MINUTES
JOINT AUDIT/ FINANCE COMMITTEES MEETING
May 24, 2000
ISO Headquarters
Folsom, California

John McGuire, Chairperson of the Finance Committee and Barbara Barkovich, Chairperson of the Audit Committee, called the joint meeting to order. Roll call was taken and a quorum was present.

ATTENDANCE

The following Committee members were in attendance for the Finance Committee:

John McGuire (Committee Chairperson)
Camden Collins
Richard Ferreira
John Fielder
Karen Johanson
Stacy Roscoe
Ken Wiseman

Others in Attendance:

Greg Blue

All Committee members were in attendance.

The following Committee members were in attendance for the Audit Committee:

Barbara Barkovich (Committee Chairperson)
Richard Ferreira
Carolyn Kehrein

The following Committee members were not in attendance for the Audit Committee:

Bill Carnahan
Stephen Kashiwada
V. John White

Barbara Barkovich was the Chairperson for the joint meeting.

GENERAL SESSION

The following agenda items were discussed:

GMC UNBUNDLING – STATUS

Mike Epstein, Controller, presented the GMC Unbundling Options, as provided in the Board materials. Working since 1998 on an unbundling option, five cost-buckets have been identified: Control Area Services, Scheduling, Congestion, Market Operations and Billing & Settlements. Two potential billing determinants have been identified for each bucket. Two other ISOs have unbundled: PJM has eight buckets and the ISO New England has three buckets. The FERC filing is required by October 31, 2000, which would allow the new rate to be effective January 1, 2001. The proposal will be presented at the June MIF meeting followed by a vote at the June Board meeting. July and August will be devoted to implementation details. The Tariff would be presented to MIF in August and to the Board in September for final approval.

ISO Management recommends a three-bucket GMC. Those buckets and determinants would be Control Area Services (including Scheduling) using Gross Loads including QFs, Congestion Management using Inter-Zonal Schedules, and Market Operations (including Billing & Settlements) using traded volumes of Purchases and Sales of Ancillary Services and Real Time Energy. At the May Unbundling Committee meeting attendees from QFs, Load, IOUs, PX, & other SC agreed that the three-bucket GMC is acceptable, although there was no consensus on the phase in of the QF load. Attendees from the Munis did not feel that they currently were able to express a position on the issues. Roger Smith, Legal & Regulatory, is to supply a white paper to the June GMC Unbundling Committee Meeting and then to the Board.

Mr. Fielder asked to identify the winners and losers in unbundling. Mr. Epstein stated that the impacts on SC groups would be included in the June report. Mr. Regan pointed out that for revenue stability the GMC would need to be reviewed and possibly reset on a quarterly basis.

Mr. Roscoe discussed the rate comparison in the Board memo. Mr. Epstein commented that the rates shown in the memo were additive as they were shown using load as a common denominator.

Ms. Collins thanked the ISO staff for all the comparisons.

Mr. McGuire and Ms. Barkovich commended the ISO staff for bringing the GMC Unbundling effort to its current status.

PUBLIC COMMENT

Kermit R. Kubitz, PG&E Legal Department, presented a paper on the potential for partial settlement of QF PGA case, which relates to the GMC unbundling and is included in the Board documents. Mr. Kubitz indicated that a settlement conference was held on March 16, 2000 in Washington, DC on the QF PGA. Mr. Kubitz provided four reasons why the ISO Board may wish to consider whether such a settlement should be accepted by the ISO.

Tony Braun, California Municipal Utility Association, commended the ISO staff on its work to date. Mr. Braun indicated that CMUA supports the unbundling efforts. He suggested that the ISO retain its commitment of equal treatment to various participants, and noted that if the ISO opens the door on concessions it will face a long line of applicants.

Roger Smith, Legal and Regulatory responded to Mr. Kubitz of PG&E that the ISO is preparing a QF/PGA update to the board. He is also working on a white paper on this and other issues to present to the GMC Unbundling Steering Committee. Mr. Smith commented that it might not be appropriate to extend all TAC principles and concessions to the GMC.

Ms. Collins expressed support for the three-bucket approach.

Ms. Barkovich commented that there are other GMC issues that will likely be litigated besides the QF exemption.

Jeffrey Nelsen, SCE, commented on the proposal to charge sellers for a portion of market operations costs. He noted that in some cases the charge could be higher than the energy/ capacity cost.

NEW BUSINESS AND FUTURE AGENDA ITEMS

There was no new business and no future agenda items.

CLOSING

A motion was made, seconded and unanimously approved to adjourn the joint General Session segment of the meeting. Joint committee stands adjourned.

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Memo

To: Audit and Finance Committees

Cc: ISO Board of Governors, ISO Officers

From: Mike Epstein, Controller on behalf of the GMC Unbundling Internal Staff Team

Date: May 12, 2000

Re: ***Options for Unbundling the Grid Management Charge (GMC)***

This memorandum is for Committee review only. No Board action is required on this item.

Background

A stakeholder group (the GMC Unbundling Steering Committee, or "Committee") has been working since early 1998 with the ISO staff to identify, review and reach consensus on approaches to unbundling the Grid Management Charge. We are requesting your comments on the following proposal for unbundling the GMC. This proposal represents the collective efforts of ISO Management and Market Participants over the past two years and reflects the near-consensus position of those participants on the Committee.

The proposal was last discussed at a Committee meeting on April 25, 2000 and was distributed to Market Participants on May 4, 2000 (Attachment A). The Committee also intends to meet on May 22 to further discuss aspects of the proposal. Management will update the Committees and the Board at the May 24-25 meeting as to the issues discussed and outcome of the May 22 meeting. At this time, Management and the Committee intend to request a vote at the June Board meeting regarding the proposed cost buckets and billing determinants of an unbundled GMC. Management and the Committee intend to proceed along the following schedule so that the ISO can file its GMC Unbundling proposal at FERC no later than October 31, 2000.

May 22	Committee – review of issues (e.g., gross vs. net) under discussion in other forums and review ISO proposal and cost allocation (other Committee meetings will be scheduled as needed);
May 24	Audit/Finance Committee – update on unbundling process and proposal;
June 7	Market Issues Forum – discussing policy on cost buckets and billing determinants;
June 21-22	Audit/Finance Committee and Board – recommendation on policy on determination of cost buckets and billing determinants;
July to August	Management and Stakeholders develop implementation details and tariff language;
August 9	Market Issues Forum – Management and the Committee present GMC Tariff filing proposal;
September 6	Audit/Finance Committee and Board – GMC Tariff filing approval;
October 31	FERC – GMC Tariff filing.

Outlined below is a summary of the proposal we will bring before the Board next month and a brief description of the ISO's unbundling efforts to date.

Proposed Unbundled GMC

The table below outlines the GMC unbundling proposal developed to date by ISO Management and the Committee and proposed to be effective January 1, 2001. The table lists the proposed cost buckets, and billing determinants, together with the percentage of the total GMC that each bucket represents for 1999 and 2000 (estimated):

	Cost Bucket	Billing Determinant	1999 %	1999 Rate	2000 %	2000 Rate
1)	**Control Area Operations**	***Gross Load***	46%	$0.36	48%	$0.40
2)	**Congestion Management**	***Inter-Zonal Schedules***	7%	$0.05	7%	$0.06
3)	**Market Operations**	***Purchases and Sales of A/S Capacity and Real Time Energy***	47%	$0.36	45%	$0.37
	Totals		100%	$0.78	100%	$0.83

CAISO's Commitment to Unbundle

The following is a brief history of the GMC, the ISO's unbundling efforts to date and an assessment of FERC's view of unbundling:

The GMC was initially filed as a formula rate applicable to all loads located in the ISO's Control Area. Holders of Existing Contracts and others objected to the application of the GMC and sought to be excluded from bearing that charge. A settlement was entered to resolve these objections ("Settlement"). The Settlement balanced the interests of those seeking an exclusion from the GMC with those opposing exclusions. Specifically, the Settlement provided that a portion of Existing Contract volumes and certain other volumes would not be assessed the GMC and that the ISO would study the unbundling of the GMC and file a new GMC to be effective beginning in January 1999. The January 1999 filing did not have to establish an unbundled GMC, but the filing was to be made even if no unbundling was proposed so that parties would be able to advance their position regarding unbundling if they disagreed with the ISO's position.

The GMC unbundling study performed by the ISO (the RJ Rudden Study) did not produce the data or a solution that the stakeholders found acceptable. Consequently, on two separate occasions the ISO filed to extend the existing GMC formula. Each extension was accompanied by a commitment by the ISO to continue to study the unbundling of the GMC and to file a new GMC at a specific future date. The most recent extension lasts until January 1, 2001. Although the majority of stakeholders have supported these extensions, Enron and the Western Power Trading Forum have vigorously objected to them, arguing that the extensions violated the Settlement. They also claimed that the exclusions are not justified and that the GMC rate level is excessive. The FERC has acknowledged that the Settlement required the ISO to file a new GMC and thus has made the collection of the GMC subject to refund (since June 7, 1999) and subject to the outcome of the proceeding that will examine the GMC to be effective on January 1, 2001.

FERC Perspective

The prospects that FERC would continue to accept a bundled GMC are slim. As explained in more detail below, in 1999 both PJM and ISO New England submitted to FERC rates that unbundled the cost components of their administrative charges. ISO New England's unbundled rates have been approved and are currently in effect; PJM is attempting to settle the litigation at FERC regarding its rates. Additionally, certain cost components of the ISO's GMC have already been identified in both the original 1998 RJ Rudden study and as support for the ISO's April 1999 FERC filing to extend the GMC. Also of note is PG&E's recent Section 205 filing requesting the authority to pass all ISO charges through to its existing contract holders. PG&E's filing, if effective, will change the Munis incentives regarding unbundling. Given these factors it is highly unlikely that FERC will accept a bundled GMC rate.

Likely FERC Action

First, the ISO must make a filing regarding the GMC this fall. Based on the statements made in the previous FERC decisions, it is almost certain that FERC will set that filing for hearing, whether the filing proposes to unbundle or not. Therefore, issues regarding the GMC will either be resolved as a result of a formal administrative proceeding before FERC or a settlement among the parties to that proceeding. FERC has established a refund effective date of June 7, 1999, which means that the ISO may be required to refund monies to Scheduling Coordinators as a result of the outcome of the FERC proceeding. While the ISO, in the event of a refund obligation, would seek to be made whole through a surcharge, FERC has not yet addressed whether a surcharge may be implemented.

TAC Filing

In March 2000, the ISO Board approved a comprehensive Transmission Access Charge proposal that leaves in place the current GMC rate structure, contemplating that the unbundling of the GMC will be decided in the ISO's Fall 2000 filing. The TAC proposal impacts the GMC only in the following respects: an Existing Rightsholder that elects to become a Participating TO will no longer be eligible for the current exclusion, under the Settlement, of Existing Contract volumes (because its Existing Rights will all be converted). A new Participating TO will be held harmless for ten years for increases in GMC costs resulting from its decision to join the ISO, but not from increases associated with an unbundled GMC.

Cost "Buckets"

The 1998 RJ Rudden study identified two buckets: (1) Control Area Operations and (2) Market Operations. The Committee subsequently agreed that the Control Area Operations costs could be further divided into three buckets: (1) Control Area Operations, (2) Scheduling, and (3) Congestion Management, and that Market Operations costs could be divided into two buckets (4) Market Operations, and (5) Billing and Settlements. Although another bucket for Existing Contracts was also identified, the bucket did not exceed the threshold (five percent of ISO costs) agreed to by the Committee and it was dropped from consideration. These five buckets were identified in the April 1999 FERC filing.

Comparison with Other ISOs

A summary of the buckets identified in the earlier ISO studies, those utilized in PJM, and ISO New England is presented below. The table lists the cost categories and their respective percentages of total costs.

PJM has unbundled into eight buckets: (1) Control Area Services, (2) Regulation and Frequency Response Service, (3) Capacity Adequacy Service and (4) Capacity Resource and Obligation Management, (which is shown combined under Control Area Operations); (5) Point to Point and Network Import Transmission Service Administration and (6) Internal

Energy Transactions Service (which is shown combined under Scheduling); (7) Fixed Transmission Rights (Congestion Management); and (8) Market Support Services (Market Operations).

The ISO New England has three buckets, Reliability Administration Service (Control Area Operations), Point to Point Transmission Service (Congestion Management) and Energy Administration Service (Market Operations). Market Operations costs are billed to both market buyers and market sellers.

Bucket	RJ Rudden ISO Study 1998	ISO Staff Study 1999	ISO Staff Study 2000	PJM 1999	ISO NE 1999
Control Area Operations	68%	35%	38%	52%	34%
Scheduling	-	11%	10%	11%	-
Congestion Management	-	7%	7%	4%	22%
Market Operations	31%	23%	22%	33%	44%
Billing and Settlements	-	24%	23%	-	-
Totals	100%	100%	100%	100%	100%

Billing Determinants

The Committee proposed the following billing determinants for consideration:

Gross Load - Control Area metered load and exports in MWh **including** all loads served by internal generation
Gross Load without QFs – the same as Gross Load but excluding the QF's load
Net Load - Control Area metered load and exports in MWh **excluding** all loads served by internal generation (Munis' backyard generation, QFs, and CDWR's netting of loads within the hour).
Inter-Zonal Schedules – Final Scheduled Load and Generation in MWh by SC on an Inter-Zonal basis
Traded Volumes – Traded (billed) volumes in MWh of Ancillary Service (A/S) Capacity and Real Time Energy including all purchases and sales
Traded Volumes Purchases Only - the same as Traded Volumes but including only purchases

Appropriate options for applying the determinants were identified as follows:

Bucket	Billing Determinant Options
Control Area Operations	Gross Load or Gross Load without QFs
Scheduling	Gross Load or Net Load.
Congestion Management	Inter-zonal Schedules or Net Load
Market Operations	Traded Volumes or Traded Volumes Purchases Only
Billing and Settlements	Traded Volumes or Traded Volumes Purchases Only

In response to the Committee's input, ISO Management identified its preferred billing determinants.

Bucket	Determinant	Comments
Control Area Operations	Gross Load	*Gross Load has been the ISO's position throughout the TAC negotiations and is appropriate for Control Area Operations*

Scheduling	Gross Load	*Gross Load is applicable as the ISO has to schedule for the entire Control Area*
Congestion Management	Inter-Zonal Schedules	*Inter-zonal Schedules was proposed by the ISO's Department of Market Analysis to bill for Congestion.*
Market Operations	Traded Volumes	*Traded Volumes representing the MWh of both purchases and sales of Ancillary Services and Real Time Energy parallels both the other ISOs and commodity markets.*
Billing and Settlements	Traded Volumes	

Due to common billing determinants only three buckets need be defined as follows:

Bucket	Billing Determinant
1) **Control Area Operations** (including Scheduling)	**Gross Load**
2) **Congestion Management**	**Inter-Zonal Schedules**
3) **Market Operations** (including Billing and Settlements)	**Traded Volumes**

Impacts on the ISO and Implementation Estimate

Revenue stability is a significant concern to both the ISO and its bond insurers. Inter-Zonal Schedules and Traded Volumes are less predictable than Gross Load. The ISO must be able to review the projected volumes and recoveries of costs and, if required, adjust rates on a periodic (e.g., quarterly) basis.

Staff believes that a three-bucket GMC could be implemented with a minimum of software changes (probably under $500,000) and two additional staff.

Comments by the Department of Market Analysis

The staff's proposed method represents a reasonable balance between the goal of allocating the GMC based on principles of cost-causation, and the need to develop a straightforward, workable approach that can be implemented by the ISO and understood by market participants. Each of the proposed billing determinants reflects a key driver of the cost "buckets" to be allocated based on these determinants. Although a wide range of factors clearly affect the costs incurred by the ISO in performing these functions, the proposed approach establishes a more direct link between the source of these costs and the way in which these costs are allocated, and thereby provides an overall improvement in the price signals sent to market participants relative to the current approach. For instance, the inclusion of activity in the real time energy market as a key component of the billing determinant for market operations will provide a more accurate reflection of the true costs associated with both supply and demand activity in the real time market.

It should be noted that a decision to propose a three-bucket approach would not foreclose further disaggregation as appropriate in the future. The ISO will continue its practice of tracking costs in approximately 90 different cost categories. Thus, the information necessary for further disaggregation will be available if any individual cost component reaches a level of significance justifying creation of a new bucket.

Within each of the "cost buckets," however, it should be noted that a high portion of the ISO's costs may actually involve sunk and/or fixed costs, which may not vary (except perhaps over the very long run) directly in proportion to the changes in the billing determinant used in allocating these costs. Any such cost allocation scheme in which fixed and/or sunk costs are allocated on a per unit basis invariably creates a situation in which the price that market participants can [illegible] specific activities may significantly exceed the actual marginal cost incurred by the ISO as a result these activities. One notable issue this creates is the potential to provide an excessive incentive for self-provision of A/S. In practice, this may provide an inefficient incentive for other SC's such as the PX to develop alternative markets for A/S that would ultimately be scheduled with the ISO as being "self-provided," to thereby avoid GMC charges associated with purchases of A/S through the ISO's markets. Overall, market efficiency is served by allowing other entities to develop alternative market mechanisms that can "compete" and/or complement the ISO's A/S markets. However, allocating a large portion the sunk and/or fixed costs associated with operating A/S markets on a per unit basis may provide an inefficient price signal for development of such alternatives. As a result, we advise this aspect of the Team's cost allocation proposal be carefully considered by Management, and that the impacts of the proposal once implemented be monitored and periodically re-assessed.

Attendees comments from the April 25, 2000 GMC Unbundling Committee

- **Attendees from QFs, Load, IOUs, the PX, and other SCs –** These attendees found the three bucket GMC acceptable. However, there was no consensus on the phase-in of QF load. The two main approaches were (1) use the TAC methodology for QF load until the issue is decided in another forum or (2) use full QF load at the outset.
- **Attendees from Municipal entities –** These attendees did not feel that they currently were able to express a position on the issues.

Summary

At present, the ISO proposes using a three bucket GMC billed as follows: (1) Control Area Operations using Gross Load, (2) Congestion Management using Inter-Zonal Schedules and (3) Market Operations using Traded Volumes. The ISO must make a FERC filing no later October 31, 2000. The ISO will continue to work with the Committee and Stakeholders to refine this concept for presentation to and action by the Board in June.

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Attachment A

GMC Unbundling Options

May 24, 2000

Audit and Finance Committees and Market Participants

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Where We Are

Initially Identified 5 Buckets

- Control Area Services
- Scheduling
- Congestion
- Market Operations
- Billing and Settlements

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Identified Potential Billing Determinants

• Control Area	Gross Load with QFs Gross Load without QFs
• Scheduling	Gross Load with QFs Net Load
• Congestion	Inter-Zonal Schedules Charges for Congestion
• Market Operations	Purchases and Sales of A/S & Real Time Energy Purchases only of A/S & Real Time Energy
• Billing & Settlements	Purchases and Sales of A/S & Real Time Energy Purchases only of A/S & Real Time Energy

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Summary of Buckets & Cost Percentages

	California ISO				
	Rudden 1998	ISO 1999	ISO 2000	PJM 1999	NE 1999
Control Area	68%	35%	38%	52%	34%
Scheduling	-	11%	10%	11%	-
Congestion	-	7%	7%	4%	22%
Market Ops	31%	23%	22%	33%	44%
Billing & Settlements	-	24%	23%	-	-

Note: 2000 CAISO bucket %'s based on applying 1999 percentages to 2000 budget
PJM has 8 buckets but they have been consolidated to 4 for comparison with the CAISO

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Where We Are Going

Unbundling Drivers

- FERC filing required by 10/31/00
- New Rate to be effective 1/1/01
- Current rate subject to refund from 6/7/99
- PJM & ISO New England in the process of unbundling their respective GMCs
- FERC not likely to accept current settlement methodology
- Must develop unbundled GMC proposal

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Proposed Schedule

• May 22	Committee - review of issues (e.g., gross v net) under discussion in other forums and review ISO proposal & cost allocation
• May 24-25	Audit/Finance Committee - update
• June 7	MIF - policy on buckets & determinants
• June 21-22	Board - policy on buckets & determinants
• July - Aug	Stakeholders - implementation details
• Aug 9	MIF - GMC Tariff filing
• Sept 6-7	Board - Tariff Approval

– other dates as needed by Unbundling Committee

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Management Recommendation

Three Bucket GMC

- Control Area Services (including Scheduling) using Gross Loads including QFs
- Congestion Management using Inter-Zonal Schedules
- Market Operations (including Billing & Settlements) using traded volumes of Purchases and Sales of Ancillary Services and Real Time Energy

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Rationale

- Control Area (Reliability) Services procured for and benefit all Load in Control Area
- Scheduling combined with Control Area Services because the scheduling all Control Area Load is required
- Inter-Zonal schedules require Congestion Management whether Congestion occurs or not
- Both purchases and sales benefit from administration/facilitation of markets. Costs should be borne by both parties in the market
- Billing and settlements part of running markets and therefore combined with Market Operations

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RATES

	1999	2000
• Bundled GMC		
Loads billed per GMC settlement in MWh	204M	216M
rate per billable MWh	$0.78	$0.83
• Unbundled GMC		
Control Area Services		
Estimated CAISO Gross Loads in MWh	243M	255M
rate per MWh of Load	$0.30	$0.34
Congestion Management		
Estimated Inter-Zonal Schedules in MWh	159M	165M
rate per MWh of Inter-Zonal Schedule	$0.07	$0.07
Market Operations		
Traded volumes of buys & sells in MWh	106M	110M
rate per MWh of activity (A/S & RT)	$0.70	$0.74

Note: Estimated 1999 data based on annualized 9 month data. 2000 data estimated on 6% increase in 1999 data.

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GMC Unbundling Committee

Attendees comments

QFs, Load, IOUs, PX, & other SCs

- 3 bucket GMC is acceptable
- No consensus on Phase in of QF load
  - Use TAC methodology until issue decided in other forum
  - Use full load initially

Munis

- did not feel that they currently were able to express a position on the issues

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Next Steps

- Presentation to MIF (sent to market participants)
- Refinement by Committee/Stakeholders
- Presentation to Audit/Finance Committee & Board