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November 8, 2002

The Honorable Magalie R. Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Dear Secretary Salas:

The California Independent System Operator Corporation ("ISO") hereby submits an original copy of its 2003 Grid Management Charge ("GMC") informational rate filing ("Informational Filing").¹ Six additional courtesy copies of the Informational Filing are also enclosed. In addition, two extra copies are enclosed to be stamped and returned to our messenger. The enclosed materials are submitted to the Commission on an informational basis in accordance with the terms of the Offer of Settlement and Settlement Agreement submitted to the Commission on October 17, 2002 in Docket Nos. ER02-250-000, *et al.* ("GMC Settlement Agreement").

I. PURPOSE OF THIS INFORMATIONAL FILING AND PROCEDURAL BACKGROUND

This Informational Filing sets forth the basis for the ISO's GMC rates effective as of January 1, 2003. The unopposed GMC Settlement was filed by the ISO on behalf of the Sponsoring Parties² to the settlement on October 17, 2002. Article IV of the GMC

¹ Capitalized terms not otherwise defined herein are used in the sense given in the Master Definitions Supplement, Appendix A to the ISO Tariff.

² The Sponsoring Parties of the GMC Settlement Agreement were: the ISO, Pacific Gas and Electric Company, and Southern California Edison Company. The GMC Settlement Agreement was either supported or unopposed by all active participants in Docket Nos. ER02-250-000, *et al.*, including Commission Staff and the staff of the California Public Utilities Commission, both of which submitted comments in support of the GMC Settlement Agreement.

Settlement Agreement specified the GMC rates for calendar year 2002 and provided that the ISO could recover a revenue requirement of up to \$239,200,000 through an increase in rates if necessary without making a filing under Section 205 of the Federal Power Act, provided that certain conditions were met. These conditions are:

1. The gross revenue requirement, *i.e.*, the revenue requirement as reduced by any surplus funds in the ISO's Operating and Capital Reserves Account, may not exceed \$239,200,000;
2. That gross revenue requirement by service category, to be recovered by the ISO's 2003 GMC rates, may not exceed:

\$138,585,863 for Control Area Services ("CAS"),
\$27,787,380 for Congestion Management ("CONG"), or
\$72,826,757 for Ancillary Services and Real Time Energy Operations ("ASREO");
3. The ISO may not propose a change in the three service categories, *i.e.*, CAS, CONG, and ASREO; and
4. The gross revenue requirement excluding the effect of the Operating and Capital Reserves Account, *i.e.*, the ISO's revenue requirement *before* reduction by any surplus funds in the ISO's Operating and Capital Reserves Account, may not exceed \$246,000,000.

These following breakdown demonstrates that the ISO has met the above conditions:

1. The ISO's 2003 gross revenue requirement, *i.e.*, the revenue requirement as reduced by any surplus funds in the ISO's Operating and Capital Reserves Account, is: \$237,600,371.
2. The gross revenue requirements for the ISO's 2003 GMC by service category are (rounded to the nearest dollar)

CAS: \$137,856,869
CONG: \$27,400,521
ASREO: \$72,342,982
3. The three service categories remain for 2003 and the structure of the three billing determinants has not changed from the structure in effect under the GMC Settlement Agreement.

4. The gross revenue requirement excluding the effect of the Operating and Capital Reserves Account, *i.e.*, the ISO's revenue requirement *before* reduction by any surplus funds in the ISO's Operating and Capital Reserves Account, is \$245,857,076.

II. CONTENTS OF INFORMATIONAL FILING

- This Transmittal Letter
- Attachment A – 18 C.F.R. § 35.13 Cost Statements
- Attachment B – Cost Allocation Matrix & Documentary Support
- Attachment C – ISO Budget Process Documents
- Attachment D – Certificate of Service

III. COMMUNICATIONS

Correspondence and other communications regarding this filing should be directed to:

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IV. OVERVIEW OF THE DEVELOPMENT OF THE ISO'S 2003 GMC RATES

Budget Process

The ISO operated an open budget process that provided opportunity for stakeholders to comment on the proposed budget. This process was enhanced from prior years. The budget process began in July and was completed in October. A brief overview of the steps in the process follows.

In July, the ISO's various divisions began preparation of their proposed budgets for 2003. These budgets were reviewed internally and modified through several iterations. By September, a proposed preliminary comprehensive budget was completed,

posted to the ISO's website, and presented to the ISO Governing Board ("Board") in an open, public session. In October, the proposed budget was discussed further at a public budget workshop. Subsequently, a Board teleconference was held to receive comments from stakeholders on the budget. Stakeholders were invited to submit written comments for discussion at the Board meeting for approval of the budget. The budget was approved by the Board on October 24, 2002.

Components of the Revenue Requirement

Budgeted operating and maintenance ("O&M") spending remains flat at \$171.8 million, the level specified for calendar year 2002 in the GMC Settlement Agreement. The capital budget of \$22 million is unchanged from 2002, and is funded entirely from the revenue requirement. In 2002, the capital budget was to be funded from a combination of proceeds from a bond offering, and directly through the revenue requirement. Debt service and cash funded capital expenditures increase by \$8.4 million as a result of the inability to offer bonds. The Capital & Operating Reserves Account is fully funded, and provides for a credit toward the 2003 revenue requirement of \$8.3 million, an increase of \$9.9 million from 2002. Combining these and other factors results in a reduction in the revenue requirement of \$1.6 million, compared to the level for 2002.

Preparation of the O&M Budget

The objective in developing the O&M budget was to arrive at a budget that declined or was held flat from the 2002 spending level. To accomplish this, each ISO division was asked to identify spending reductions of 7% from the 2002 spending level for continuing programs. Additionally, those divisions separately identified any new spending requirements. The ISO officers reviewed all such spending changes, and arrived at a flat budget for 2003. This includes new spending for changes in employee salary costs, spending related to MD02,³ and other changes.

Capital Budget Composition

The capital budget of \$22 million will fund MD02 and other projects. Approximately 70% of the capital budget is expected to be spent on MD02. The balance is expected to be spent on a variety of other necessary projects including facility reliability upgrades. As in past years, the actual projects accomplished in 2003 may differ from those used to develop the overall budget estimate, as priorities could change during 2003. Individual projects undergo a comprehensive internal review process before

³ "MD02" is the shorthand used to identify the ISO's efforts to redesign its markets at the direction of the Commission. That proceeding is ongoing in Docket Nos. ER02-1656-000, *et al.*

spending commences, and projects in excess of \$1 million must be approved by the ISO Governing Board.

Calculation of the Operating & Capital Reserves Account and Revenue Credit

Schedules showing the calculation of Operating and Capital Reserves Account credit are included in this Informational Filing. The calculation includes two parts: the first determines the updated reserve balance as of December 31, 2001. This is necessary because the previous calculation of this reserve balance is an estimate as of November 2, 2001. A significant difference between the estimated and actual balance was related to the collection of fines and penalties. The second part of the calculation is a forecast of the reserve balance as of December 31, 2002. This incorporates anticipated 2002 expenses, revenues, and other items affecting the reserve balance. The most significant item in this calculation is the reversal of \$23 million in penalties that were recognized as revenue in 2001, due to the anticipated use of a lower gas index price in the ongoing refund case proceedings, which will have an effect on the ultimate level of fines that ISO is able to retain. The ending reserve balance at December 31, 2002 is compared to the reserve requirement for each GMC service category, which is 15% of the 2003 O&M budget for such category. For each GMC service category, a credit to reduce the 2003 revenue requirement is available. In total, this credit is \$8.3 million, compared with a deficit of \$1.6 million in 2002.

Allocation of Total ISO Costs to the GMC Service Categories

The same process has been used to allocate costs as in previous years. The cost allocation process is described in the attached documents.

GMC Service Categories

No changes to the GMC service categories are proposed at this time. The ASREO (or "Market Operations," as that charge was called in 2001) service category for 2003 does not include a charge on ancillary services self-provision, as was proposed in the 2002 rate filing, but dropped in the October 2002 GMC Settlement Agreement. Some changes to the billing determinants may be necessary later in 2003 as a result of MD02. Specifically, the ASREO service category will likely need to be modified to include day-ahead energy market volumes, when such a market commences in 2003. The timing of the commencement of the day-ahead market is uncertain at this time, and accordingly, the ISO will make any necessary adjustments prior to when the market is scheduled to commence. Similarly, a change to the Congestion Management service category will be necessary with the MD02 move to locational marginal pricing ("LMP"). Again, this will be addressed closer to the implementation date for that market design element.

Development of the Billing Determinant Forecasts

The billing determinant forecasts were developed by analyzing historical data available through September 2002 and projecting this data through 2003 using assumptions as to the activity levels for next year. For CAS, with the billing determinant of Control Area Gross Load & exports, a load growth factor of 2% was assumed. The 2002 figures were adjusted to exclude Sacramento Municipal Utility District volumes, as that entity formed its own control area in June 2002. In total, volumes are forecast to drop by approximately 1.7% from the budgeted level in 2002. Year 2002 volumes were lower than budgeted primarily due to lower exports in 2002 as compared with 2001 (which was used as the basis for the 2002 forecast).

For CONG, with the billing determinant of net inter-zonal scheduled load, volumes are assumed to drop about 4% from levels seen in 2002 (which were used to set the rates in the GMC Settlement Agreement). The forecast also assumes that these volumes will continue through 2003. When LMP is implemented, these volumes will disappear, but as the timing of that element is uncertain, no change is assumed for 2003 at this time.

For ASREO, with the billing determinant of purchases and sales of real time energy and ancillary services, volumes are expected to decrease by 12% from the level used in the GMC Settlement Agreement. This is anticipated due to several factors, including low usage of the ISO's Ancillary Services markets, and the implementation of penalties for uninstructed deviations under MD02.

V. GMC RATES

The following is a breakdown of the ISO's GMC rates to be effective on January 1, 2002.

For CAS, the rate is \$0.569/MWh, compared to 2002 rate of \$0.553/MWh in the GMC Settlement Agreement. The minor increase is due to lower volumes, and the fact that the 2002 rate was lowered through the one-time application of Amendment 33 fines.

For CONG, the rate is \$0.320/MWh, compared to the 2002 rate of \$0.312/MWh in the GMC Settlement Agreement. The minor increase is due to volumes, which are anticipated to be slightly lower than in 2002.

For ASREO, the rate is \$1.296/MWh, compared to the 2002 settlement rates of \$0.957/MWh for the period January 1, 2002 through August 31, 2002, \$1.048/MWh for the period September 1, 2002 through October 31, 2002, and \$1.158/MWh for the period November 1, 2002 through December 31, 2002. The increase is due to volumes, which

are anticipated to decline further from 2002 levels, as noted above. Additionally, the 2002 rates were lowered through the one-time application of Amendment 33 fines, which are not available to the same degree in 2003.

The ISO's 2003 GMC rates breakdown as follows:

	<u>CAS</u>	<u>CONG</u>	<u>ASREO</u>
Cost Allocation	58.0%	11.5%	30.4%
Revenue Requirement (after Operating and Capital Reserves Account factored in)	\$137,856,869	27,400,521	72,342,982
Volumes	242,386,230 MWh	85,562,339 MWh	55,809,257MWh
Rate ⁴	\$0.569/MWh	\$0.320/MWh	\$1.296/MWh

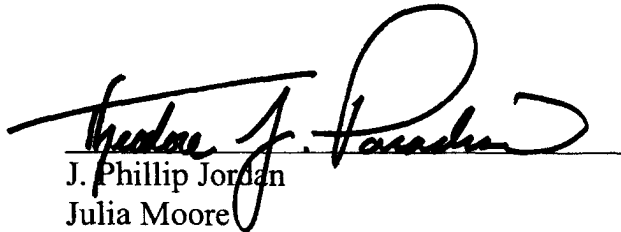
⁴ Rounded to the nearest tenth of a cent.

SERVICE

Copies of this Informational Filing have been served on all ISO Scheduling Coordinators, the California Energy Commission, the California Electricity Oversight Board, the California Public Utilities Commission, and on all parties listed on the Official Service List in the proceeding in Docket Nos. ER02-250-000, *et al.*, including Commission Staff. In addition, electronic copies of the this Informational Filing are being distributed to the electronic distribution list utilized by the active participants to the proceeding in Docket Nos. ER02-250-000, *et al.*

Questions regarding the calculations in this filing should be directed to Philip Leiber at the ISO. He can be reached at (916) 351-2168.

Respectfully submitted,



The signature is a cursive, handwritten name in black ink, appearing to read 'Theodore J. Paradise'.

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18 C.F.R. § 35.13 Cost Statements

California Independent System Operator
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For the year ended 12/31/2001

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California Independent System Operator
Statement AA
Balance Sheet
December 31, 2001

In Thousands

Line No.	Account Description	Balance at Beginning of Year	Balance at End of Year	Line No.
Utility Plant				
1	Utility Plant	\$204,812	\$232,126	1
2	Less: Accumulated Depreciation and Amortization	91,710	140,284	2
3	Net Utility Plant	113,102	91,841	3
Other Property and Investments				
4	Special Funds	25,093	46	4
5	Total Other Property and Investments	25,093	46	5
Current and Accrued Assets				
6	Cash - Unrestricted	44,176	131,665	6
7	Special Deposits	29,692	108,701	7
8	Customer Accounts Receivable	45,786	42,919	8
9	Prepayments	2,951	1,408	9
10	Accrued Utility Revenues	0	0	10
10.5	Other	674	2,682	10.5
11	Total Current and Accrued Assets	123,279	287,375	11
Deferred Debits				
12	Unamortized Debt Expense	877	680	12
13	Other	(4)	130	13
14	Total Deferred Debits	873	811	14
14	Total Assets and Other Debits	<u>\$262,347</u>	<u>\$380,073</u>	14

Notes:

Line 4

ISO Market Related Funds temporarily held pending distribution to market participants.

Line 8: Differs from amount in Form 1 by \$1,929.

Post audit error of \$1.929 million was identified, and accordingly, receivable and net income differs by this amount.

California Independent System Operator
Statement AA
Balance Sheet
December 31, 2001
Unaudited
In Thousands

Line No.	Account Description	Balance at Beginning of Year	Balance at End of Year	Line No.
Proprietary Capital				
15	Unappropriated Retained Earnings	(\$68,346)	(\$27,502)	15
16	Total Proprietary Capital	(68,346)	(27,502)	16
Long-Term Debt				
17	Bonds	293,000	261,300	17
18	Notes Payable	0	0	18
18.5	Other Long Term Debt	0	6,994	18.5
19	Net Long-Term Debt	293,000	268,294	19
Current and Accrued Liabilities				
20	Accounts Payable	28,369	28,611	20
21	Taxes Accrued	159	1,178	21
22	Interest Accrued	0	0	22
22.5	Other	8,204	108,701	
23	Total Current and Accrued Liabilities	36,732	138,490	23
Deferred Credits & Other Non-Current Liabilities				
24	Other	961	791	24
	Total Deferred Credits	961	791	
25	Total Liabilities and Other Credits	\$262,347	\$380,073	25

California Independent System Operator
Statement AB
Income Statement
For the Period Ending December 31, 2001

In Thousands

Line No.	Account Description	Balance at End of Year	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
	<u>Utility Operating Income</u>					
1	Operating Revenues	261,640	\$121,591	\$20,757	\$119,292	1
2	Operating Expenses:					2
3	Operating Expenses	131,953	70,701	8,757	52,494	3
4	Maintenance Expenses	24,311	10,976	3,827	9,509	4
5	Depreciation Expenses	48,575	19,916	5,829	22,830	5
6	Taxes Other Than Income Taxes	481	224	34	223	6
7	Total Utility Operating Expenses	205,320	101,817	18,447	85,056	7
8	Net Utility Operating Income	56,320	19,775	2,310	34,236	8
	<u>Other Income and Deductions</u>					
9	Interest Income	4,054	1,946	365	1,743	9
10	Miscellaneous Non-operating Income	0	0	0	0	10
11	Miscellaneous Income Deductions	(1,602)	(769)	(112)	(721)	
12	Total Other income and Deductions	2,453	1,177	253	1,023	
	<u>Interest Charges</u>					
13	Interest on Long-term Debt	14,680	5,953	1,762	6,965	13
14	Amortization of Debt Discount and Expense (including FAS 133)	3,248	1,299	325	1,624	14
15	Other Interest Expense	0	0	0	0	15
16	Total Interest Charges	17,929	7,252	2,086	8,590	16
17	Net Income	<u>\$40,844</u>	<u>\$13,700</u>	<u>\$476</u>	<u>\$26,669</u>	17

Notes:

"Congestion Management" is equivalent to "Interzonal Scheduling" as that category was named in 2001.

California ISO calculates its rates using the debt service coverage principle. Depreciation is not used in the calculation. Instead, actual debt service principal and interest costs are recovered through the rate.

"Net income" is prior to cash funded capital expenditures, and the difference between debt service and depreciation expense.

Accordingly, this statement is not the basis upon which the GMC rates are calculated.

Line 1: Revenue differs from Form 1--post audit error of \$1.929 million was identified.

Lines 3-4: Excludes \$1.6 million in internally capitalized O&M costs for capital projects.

Line 11: \$1,602 represents internal O&M costs capitalized as a fixed asset (CWIP) related to software development projects.

Line 14: Includes non-cash item: mark to market of interest rate swap: \$3,052. This item is excluded from Operating Reserve Calculation.

Line 17: Revenue differs from Form 1--post audit error of \$1.929 million was identified, and accordingly, net income differs by \$1.929 from the amount reported on the Form 1.

California Independent System Operator
Statement AC
Retained Earnings
December 31, 2001

In Thousands

Line No.	Account Description	Amount	Line No.
<u>Unappropriated Retained Earnings</u>			
1	Unappropriated Retained Earnings - Beginning of Year	(\$68,346)	1
2	Balance Transferred from Income (Account 433)	40,844	2
3	Appropriations of Retained Earnings (Account 436)	<u>0</u>	3
4	Unappropriated Retained Earnings - End of Year	<u>(\$27,502)</u>	4
<u>Appropriated Retained Earnings</u>			
5	Appropriated Retained Earnings - Beginning of Year	\$0	5
6	Increase in Appropriations of Retained Earnings	0	6
7	Decrease in Appropriations of Retained Earnings	<u>0</u>	7
8	Appropriated Retained Earnings - End of Year	<u>\$0</u>	8

Note:

As a not-for-profit, public benefit corporation, the California ISO does not have "retained earnings" in the sense that this term is typically used.

California Independent System Operator
Statement AD
Cost of Plant
December 31, 2001
In Thousands

Line No.	Functional Classification	Average Balance	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$0	\$0	\$0	\$0	1
2	Intangible	171,024	80,381	17,102	73,541	2
3	General	<u>47,445</u>	<u>22,299</u>	<u>4,744</u>	<u>20,402</u>	3
4	Total Plant	<u>\$218,469</u>	<u>\$102,680</u>	<u>\$21,846</u>	<u>\$93,943</u>	4

		Balance		Simple	
		12/31/00	12/31/01	Average 1/	
5	Transmission	\$0	\$0	\$0	5
6	Intangible	159,180	182,868	171,024	6
7	General	<u>45,632</u>	<u>49,257</u>	<u>47,445</u>	7
	Total	204,812	232,125	218,469	

1/ Averages for Transmission, Intangibles and General are based on a beginning-of-period, and end-of-period simple average.

California Independent System Operator
Statement AE
Accumulated Depreciation and Amortization
December 31, 2001
In Thousands

Line No.	Functional Classification	Average Balance	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$0	\$0	\$0	\$0	1
2	Intangible	89,474	36,684	10,737	42,053	2
3	General	<u>26,522</u>	<u>10,874</u>	<u>3,183</u>	<u>12,465</u>	3
Total Accumulated Depreciation and Amortization		<u>\$115,996</u>	<u>\$47,558</u>	<u>\$13,920</u>	<u>\$54,518</u>	

		Balance		Simple	
		12/31/00	12/31/01	Average 1/	
4	Transmission	\$0	\$0	\$0	4
5	Intangible	68,192	110,756	89,474	5
6	General	<u>23,517</u>	<u>29,528</u>	<u>26,522</u>	6
		91,709	140,284	115,996	

1/ Averages for Accumulated Depreciation and Amortization are based on a beginning-of-period, and end-of-period simple average.

California Independent System Operator
Statement AF
Deferred Credits
December 31, 2001

In Thousands

Line No.	Account Description	Amount	Line No.
1	Post-retirement Liability	\$ 250	1
2	Supplemental Executive Retirement Plan Liability	230	2
3	Other Deferred Credits	<u>311</u>	3
4	Total Deferred Credits	\$ 791	

California Independent System Operator
Statement AG
Specified Plant Accounts and Deferred Debits
December 31, 2001
In Thousands

Line No.	Functional Classification	Balance		Average 1/ Balance	Line No.
		12/31/00	12/31/01		
	<u>Account 181 - Unamortized Debt Expense</u>				
1	General	\$877	\$680	\$779	1
2	Total - Specified Plant Accounts and Deferred Debits	<u>\$877</u>	<u>\$680</u>	<u>\$779</u>	2

1/ Averages for Deferred Debits are based on a beginning-of-period, and end-of-period simple average.

California Independent System Operator
Statement AH
Operation and Maintenance Expenses
December 31, 2001
In Thousands

Line No.	Description	Amount	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$42,995	\$28,959	\$5,235	\$8,801	1
2	Customer Accounts	7,130	726	151	6,253	2
3	Customer Service and Informational	2,548	385	132	2,031	3
4	Administrative and General	103,591	51,606	7,066	44,919	4
5	Total	<u>\$156,264</u>	<u>\$81,677</u>	<u>\$12,584</u>	<u>\$62,004</u>	5

California Independent System Operator
Statement AH
Operation and Maintenance Expenses
December 31, 2001
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Services	Congestion Management	Market Operations/ Ancillary Services Real Time Energy Operations	Line No.
<u>Transmission Expenses - Operation</u>							
1	560	Operation Supervision and Engineering	\$4,692	\$3,932	\$279	\$482	1
2	561	Load Dispatching	\$23,791	\$18,995	\$1,716	\$3,080	2
3	566	Miscellaneous Transmission Expenses	\$0	\$0	\$0	\$0	3
4		Total Operation	\$28,483	\$22,927	\$1,994	\$3,562	4
<u>Transmission Expenses - Maintenance</u>							
5	568	Maintenance Supervision and Engineering	\$14,512	\$6,032	\$3,240	\$5,239	5
6		Total Maintenance	\$14,512	\$6,032	\$3,240	\$5,239	6
7		Total Transmission Expenses	\$42,995	\$28,959	\$5,235	\$8,801	7

California Independent System Operator
Statement AH
Electric Operating and Maintenance Expenses
December 31, 2001
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Congestion Management	Market Operations/ Ancillary Services Real Time Energy Operations	Line No.
<u>Customer Accounts Expenses - Operation</u>							
8	901	Supervision	\$358	\$82	\$25	\$250	8
9	902	Meter Reading Expenses	\$1,907	\$214	\$3	\$1,689	9
10	903	Customer Record and Collection Expenses	\$4,536	\$429	\$123	\$3,983	10
11	905	Miscellaneous Customer Accounts Expenses	\$330	\$0	\$0	\$330	11
12		Total Customer Accounts Expenses	<u>\$7,130</u>	<u>\$726</u>	<u>\$151</u>	<u>\$6,253</u>	12
<u>Customer Service and Informational Expenses - Operation</u>							
13	907	Supervision	\$0	\$0	\$0	\$0	13
14	908	Customer Assistance Expenses	\$2,548	\$385	\$132	\$2,031	14
15	909	Informational and Instructional Advertising Expenses	\$0	\$0	\$0	\$0	15
16		Total Customer Service - Informational Expenses	<u>\$2,548</u>	<u>\$385</u>	<u>\$132</u>	<u>\$2,031</u>	16

California Independent System Operator
Statement AH
Electric Operating and Maintenance Expenses
December 31, 2001
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Congestion Management	Market Operations/ Ancillary Services Real Time Energy Operations	Line No.
<u>Administrative and General Expenses - Operation</u>							
17	920	Administrative and General Salaries	\$22,200	\$10,893	\$1,616	\$9,690	17
18	921	Office Supplies and Expenses	\$5,772	\$2,894	\$387	\$2,491	18
19	923	Outside Services Employed	\$14,143	\$7,097	\$1,127	\$5,919	19
20	924	Property Insurance	\$600	\$307	\$44	\$249	20
21	925	Injuries and Damage	\$376	\$192	\$27	\$156	21
22	928	Regulatory Commission Expenses	\$6,760	\$3,461	\$493	\$2,805	22
23	930	Miscellaneous General Expenses	\$244	\$128	\$19	\$96	23
24	931	Rents	\$43,696	\$21,689	\$2,765	\$19,242	24
25		Total Operation	\$93,791	\$46,663	\$6,480	\$40,649	25
<u>Administrative and General Expenses - Maintenance</u>							
26	935	Maintenance of General Plant	\$9,800	\$4,944	\$586	\$4,270	26
27		Total Maintenance	\$9,800	\$4,944	\$586	\$4,270	27
28		Total Administrative and General Expenses	<u>\$103,591</u>	<u>\$51,606</u>	<u>\$7,066</u>	<u>\$44,919</u>	28
29		Total Operating and Maintenance Expenses	<u>\$156,264</u>	<u>\$81,677</u>	<u>\$12,584</u>	<u>\$62,004</u>	29

California Independent System Operator
Statement AH
Operation and Maintenance Expenses

December 31, 2002
In Thousands

Line No.	FERC Account	Description	Total	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	930	Recruiting/ Advertising	\$34	\$21	\$4	\$10	1
2		Total	\$34	\$21	\$4	\$10	2

California Independent System Operator
Statement AH
Operation and Maintenance Expenses
Itemization of Miscellaneous General Expenses - Account 930.2
December 31, 2001
In Thousands

<u>Line No.</u>		<u>Description</u>	<u>Total</u>	<u>Control Area Services</u>	<u>Congestion Management</u>	<u>Market Operations/ Ancillary Services & Real Time Energy Operations</u>	<u>Line No.</u>
1	930	Board Compensation and Expenses	\$153	\$78	\$11	\$64	1
2		Total	\$153	<u>\$78</u>	<u>\$11</u>	<u>\$64</u>	2

California Independent System Operator
Statement AI
Wages and Salaries
December 31, 2001
In Thousands

Line No.	Description	Amount	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$30,634	\$21,793	\$3,324	\$5,517	1
2	Customer Accounts	5,817	609	141	5,068	2
3	Customer Service and Informational	2,078	312	104	1,662	3
4	Administrative and General	21,559	10,647	1,568	9,343	4
5	Total	<u>\$60,088</u>	<u>\$33,361</u>	<u>\$5,136</u>	<u>\$21,591</u>	5

California Independent System Operator
Statement A1
Wages and Salaries
December 31, 2001
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
<u>Transmission Expenses - Operation</u>							
1	560	Operation Supervision and Engineering	\$2,900	\$2,566	\$123	\$212	1
2	561	Load Dispatching	\$20,258	\$16,258	\$1,424	\$2,576	2
3	566	Miscellaneous Transmission Expenses	\$0	\$0	\$0	\$0	3
4		Total Operation	\$23,158	\$18,824	\$1,546	\$2,787	4
<u>Transmission Expenses - Maintenance</u>							
5	568	Maintenance Supervision and Engineering	\$7,476	\$2,968	\$1,777	\$2,730	5
6		Total Maintenance	\$7,476	\$2,968	\$1,777	\$2,730	6
7		Total Transmission Salary Expenses	\$30,634	\$21,793	\$3,324	\$5,517	7

California Independent System Operator
Statement AI
Wages and Salaries
December 31, 2001
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
<u>Customer Accounts Expenses - Operation</u>							
8	901	Supervision	\$331	\$76	\$23	\$232	8
9	902	Meter Reading Expenses	\$1,266	\$134	\$3	\$1,129	9
10	903	Customer Record and Collection Expenses	\$4,050	\$399	\$114	\$3,536	10
11	905	Miscellaneous Customer Accounts Expenses	\$171	\$0	\$0	\$171	11
12		Total Customer Accounts Expenses	<u>\$5,817</u>	<u>\$609</u>	<u>\$141</u>	<u>\$5,068</u>	12
<u>Customer Service and Informational Expenses - Operation</u>							
13	907	Supervision	\$0	\$0	\$0	\$0	13
14	908	Customer Assistance Expenses	\$2,078	\$312	\$104	\$1,662	14
15		Total Customer Service - Informational Ex	<u>\$2,078</u>	<u>\$312</u>	<u>\$104</u>	<u>\$1,662</u>	15

California Independent System Operator
Statement A1
Wages and Salaries
December 31, 2001
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
<u>Administrative and General Expenses - Operation</u>							
16	920	Administrative and General Salaries	\$21,559	\$10,647	\$1,568	\$9,343	16
17	921	Office Supplies and Expenses	\$0	\$0	\$0	\$0	17
18		Total Operation	\$21,559	\$10,647	\$1,568	\$9,343	18
<u>Administrative and General Expenses - Maintenance</u>							
19	935	Maintenance of General Plant	\$0	\$0	\$0	\$0	19
20		Total Maintenance	\$0	\$0	\$0	\$0	20
21		Total Administrative and General Salaries	\$21,559	\$10,647	\$1,568	\$9,343	21
22		Total Operating and Maintenance Salaries	\$60,088	\$33,361	\$5,136	\$21,591	22

California Independent System Operator
Statement AJ
Depreciation and Amortization Expenses
December 31, 2001
In Thousands

Line No.	Functional Classification	2001 Average Depreciable Cost of Plant	Annual Depreciation Rate	Amount of Expense	Control Area Services	Congestion Management	Market Operations/ Ancillary Services Real Time Energy Operations	Line No.
1	Transmission	\$0	0.00%	\$0	\$0	\$0	\$0	1
2	General	47,445	12.67%	6,011	2,465	721	2,825	2
3	Intangibles	<u>171,024</u>	24.89%	<u>42,564</u>	<u>17,451</u>	<u>5,108</u>	<u>20,005</u>	3
4	Total	<u>\$218,469</u>		<u>\$48,575</u>	<u>\$19,916</u>	<u>\$5,829</u>	<u>\$22,830</u>	4

Note:

Allocated using 2002 debt service allocation factors.

California Independent System Operator
Statement AK
Taxes Other Than Income Taxes
December 31, 2001
In Thousands

Line No.	Account Description	Total	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	Property Taxes	481	224	34	223	1
2	Total Taxes Other Than Income Taxes	<u>\$481</u>	<u>\$224</u>	<u>\$34</u>	<u>\$223</u>	2
 <u>Employer Payroll Taxes</u>						
3	FICA	\$2,392				3
4	Medicare	720				4
5	California State Tax	<u>135</u>				5
6	Total Taxes	<u>\$3,248</u>				6

California Independent System Operator
Statement AL
Working Capital
December 31, 2001
In Thousands

Line No.	Month/Year	Average Working Cash	Control Area Services	Congestion Management	Market Operations/ Ancillary Services Real Time Energy Operations	Line No.
1	December-00	\$21,000	\$10,973	# \$1,691	# \$8,337	1
2	January-01	21,200	\$11,077	# \$1,707	# \$8,416	2
3	February-01	17,710	\$9,254	# \$1,426	# \$7,031	3
4	March-01	18,750	\$9,797	# \$1,509	# \$7,444	4
5	April-01	45,750	\$23,905	# \$3,683	# \$18,162	5
6	May-01	52,210	\$27,280	# \$4,203	# \$20,727	6
7	June-01	53,870	\$28,148	# \$4,337	# \$21,386	7
8	July-01	36,360	\$18,998	# \$2,927	# \$14,435	8
9	August-01	57,760	\$30,180	# \$4,650	# \$22,930	9
10	September-01	40,490	\$21,156	# \$3,259	# \$16,074	10
11	October-01	42,150	\$22,024	# \$3,393	# \$16,733	11
12	November-01	41,170	\$21,512	# \$3,314	# \$16,344	12
13	December-01	<u>36,000</u>	<u>\$18,810</u>	<u># \$2,898</u>	<u># \$14,292</u>	13
14	13-Month Total	<u>\$484,420</u>	<u>\$253,114</u>	<u>\$38,996</u>	<u>\$192,310</u>	14
15	13-Month Average	<u>\$37,263</u>	<u>\$19,470</u>	<u>\$3,000</u>	<u>\$14,793</u>	15

Note:

Average working cash approximates ISO Operating Reserve balance.

California Independent System Operator
Statement AM
Construction Work in Process
December 31, 2001
In Thousands

Line No.	Functional Classification	Average Balance	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$0	\$0	\$0	\$0	1
2	Intangible	14,108	6,631	1,411	6,066	2
3	General	<u>3,527</u>	<u>1,658</u>	<u>353</u>	<u>1,516</u>	3
4	Total Plant	<u>17,636</u>	<u>\$8,289</u>	<u>\$1,764</u>	<u>\$7,583</u>	4

		Balance		Simple	
		<u>12/31/01</u>	<u>12/31/02</u>	<u>Average 1/</u>	
5	Intangible	15,536	12,681	14,108	5
6	General	<u>3,884</u>	<u>3,170</u>	3,527	6
	Total	19,420	15,851		

1/ Averages for Construction Work in Process are based on a beginning-of-period, and end-of-period simple average.

California Independent System Operator
Statement AN
Notes Payable
December 31, 2001
In Thousands

Line No.	Date	Amount	Line No.
1	01/01/01	\$0	1
2	01/31/01	0	2
3	02/28/01	0	3
4	03/31/01	0	4
5	04/30/01	0	5
6	05/31/01	0	6
7	06/30/01	0	7
8	07/31/01	0	8
9	08/31/01	0	9
10	09/30/01	0	10
11	10/31/01	0	11
12	11/30/01	0	12
13	12/31/01	0	13
14	Total	<u>\$0</u>	14
15	Average Balance	<u>\$0</u>	15

California Independent System Operator
Statement AO
Rate for Allowance for Funds Used During Construction
12/31/01

This Statement was not prepared because the ISO does not intend to request a return on funds used during construction.

California Independent System Operator
Statement AP
Federal Income Tax Deductions - Interest
12/31/01

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AQ
Federal Income Tax Deductions - Other than Interest
12/31/01

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AR
Federal Tax Adjustments
12/31/01

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AS
Additional State Income Tax Deduction
12/31/01

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AT
State Tax Adjustments
12/31/01

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AU
Revenue Credits
December 31, 2001
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Congestion Management	Market Operations/ Ancillary Services	Line No.
						Real Time Energy Operations	
1	456	Other Operating Revenue					1
2		Grid Management Charge	218,288	100,314	16,936	101,038	2
3		MCI Subscriber Charges	0	0	0	0	3
4		WSCC Security Coordinator Fees	900	900	0	0	4
5		SC Application Fees	3	2	0	1	5
6		Fines and Penalties	42,450	20,376	3,820	18,253	6
7		Total Operating Revenue (Account 456)	<u>\$261,640</u>	<u>\$121,591</u>	<u>\$20,757</u>	<u>\$119,292</u>	7
8		Total Revenue Credits	<u>\$261,640</u>	<u>\$121,591</u>	<u>\$20,757</u>	<u>\$119,292</u>	8
9	419, 421, 431	Interest & Other Income					9
11		Interest and Dividend Income	2,500	1,200	225	1,075	11
12		Interest Inc on Bond Funds	900	432	81	387	12
13		Gains on Investments	235	113	21	101	13
14		Miscellaneous Non-Oper Income	173	83	16	75	14
15		Arbitrage Rebate Lbty Exp	247	118	22	106	15
16		Total Interest & Other Income	<u>\$4,054</u>	<u>\$1,946</u>	<u>\$365</u>	<u>\$1,743</u>	16
17		Non Cash Items: Deductions from Operating Reserve Calculation					17
18		Arbitrage Rebate Lbty Exp	247	118	22	106	18
19		Total Non-Cash Items	<u>\$247</u>	<u>\$118</u>	<u>\$22</u>	<u>\$106</u>	19

California Independent System Operator
Statement AV
Cost of Capital
December 31, 2001
In Thousands

<u>Line No.</u>	<u>Component</u>	<u>Capitalization Amount</u>	<u>Capitalization Ratio</u>	<u>Component Cost</u>	<u>Weighted Component Cost</u>	<u>Line No.</u>
1	Long-Term Debt	\$261,300	100%	6.47%	6.47%	1

Long Term Debt Reconciliation:

Debt Outstanding at 1/1/2001:	293,000
Debt Retired During 2001:	(31,800)
Debt Issued During 2001:	-
Total Debt Outstanding 12/31/2001:	<u>261,200</u>

Average capital cost noted above is calculated by dividing interest expense by average outstanding debt.

California Independent System Operator
Statement AW
Cost of Short-Term Debt
December 31, 2001
In Thousands

Line No.	Type of Short-term Financing	Balance End of Year 12/31/01	Interest Rate	Interest Charges on an Annual Basis	Line No.
1	Line of Credit	\$0	N/A	0	1
2	Total, All Short-Term Debt	\$0	N/A	0	2

Note:

The ISO did not incur short-term debt costs in 2001.

California Independent System Operator
Statement AX
Other Recent and Pending Rate Changes
12/31/01

The California ISO implemented an unbundled GMC, effective 1/1/2001.

See Statement BG, BH

California Independent System Operator
Statement AY
Income and Revenue Tax Rate Data
12/31/01

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement BA
Wholesale Customer Rate Groups

Control Area Services

This category is responsible for managing the Control Area and the ISO Controlled Grid to "keep the lights on," i.e., ensure safe, reliable operation of the transmission grid and dispatch of bulk power supplies in accordance with regional and national reliability standards, including, but not limited to:

- performing operation studies;
- system security analyses;
- transmission maintenance standards;
- system planning to ensure overall reliability;
- integration with other Control Areas;
- emergency management;
- outage coordination;
- transmission planning; and
- scheduling generation, imports, exports, and wheeling in the Day-Ahead and Hour-Ahead of actual operations.

Congestion Management (previously
"Interzonal Scheduling")

Provides for the administration of Congestion management. Congestion exists when power flowing on a transmission path exceeds the transmission path capacity. Congestion management is conducted by the ISO during the scheduling process and results in the economic rationing of transmission service in order to prevent congestion. Currently provides for only interzonal congestion.

Market Operations / Ancillary
Services and Real Time Energy
Operations

Provides for ancillary service and real-time energy related services, including, but not limited to: providing open and non-discriminatory access for market making activities for participants through Ancillary Services auctions and Energy balancing services, Posting of market information; Market surveillance and analysis; administration of self provision of ancillary services; Settlement, billing, and metering related to the above;

The above are not wholesale customer rate groups per se, but are the categories of service provided by the California ISO.

California Independent System Operator
Statement BB
Allocation of Demand and Capability Data

The California ISO does not allocate costs to wholesale services based on allocation demand and capability data. Services are allocated based on energy data which is provided in Statement BD.

California Independent System Operator
Statement BC
Reliability Data

The California ISO does not maintain data for generating capacity reserves.

California Independent System Operator
Statement BD
Allocation of Energy and Supporting Data

Period I: Actual
Billable Quantities (MWh)

Line No.		Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations
1	Jan	20,866,019	6,480,464	13,452,739
2	Feb	18,726,287	5,318,393	13,316,834
3	Mar	20,564,315	5,842,217	11,847,271
4	Apr	18,733,132	5,761,919	10,953,532
5	May	21,095,581	5,791,935	10,465,734
6	Jun	20,922,499	6,346,920	8,924,529
7	Jul	22,505,115	6,960,162	7,547,313
8	Aug	23,035,644	7,284,050	7,177,991
9	Sep	20,079,250	6,375,279	5,888,591
10	Oct	19,225,939	6,406,781	5,640,005
11	Nov	17,883,866	6,677,315	5,360,027
12	Dec	23,440,374	6,701,249	5,669,350
13	Total	247,078,021	75,946,684	106,243,915
14	Average	20,589,835	6,328,890	8,853,660

Notes:

California Independent System Operator
Statement BE
Specific Assignment Data

Cost allocation factors were presented in the ISO's 2001 GMC filing.
Statement BK provides results of cost allocation.

California Independent System Operator
Statement BF
Exclusive Use Commitments of Major Power Supply Facilities

This statement is not applicable to the California ISO. It owns no generation and has no exclusive use commitments.

California Independent System Operator
Statement BG
Revenue Data to Reflect Changed Rates

N/A for Period I

California Independent System Operator
Statement BH
Revenue Data to Reflect Present Rates

Line No.		Period I Billable Quantities (MWh)			Period I Revenues \$			Total
		Control Area Services	Congestion Management	Market Operations / Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Market Operations / Ancillary Services and Real Time Energy Operations	
	Rate \$/MWh				\$ 0.406	\$ 0.223	\$ 0.951	
1	Jan	20,866,019	6,480,464	13,452,739	\$ 8,471,604	\$ 1,445,143	\$ 12,793,555	\$ 22,710,302
2	Feb	18,726,287	5,318,393	13,316,834	7,602,872	1,186,002	12,664,309	21,453,183
3	Mar	20,564,315	5,842,217	11,847,271	8,349,112	1,302,814	11,266,755	20,918,681
4	Apr	18,733,132	5,761,919	10,953,532	7,605,651	1,284,908	10,416,809	19,307,368
5	May	21,095,581	5,791,935	10,465,734	8,564,806	1,291,602	9,952,913	19,809,320
6	Jun	20,922,499	6,346,920	8,924,529	8,494,535	1,415,363	8,487,227	18,397,125
7	Jul	22,505,115	6,960,162	7,547,313	9,137,077	1,552,116	7,177,495	17,866,688
8	Aug	23,035,644	7,284,050	7,177,991	9,352,472	1,624,343	6,826,269	17,803,084
9	Sep	20,079,250	6,375,279	5,888,591	8,152,176	1,421,687	5,600,050	15,173,913
10	Oct	19,225,939	6,406,781	5,640,005	7,805,731	1,428,712	5,363,645	14,598,089
11	Nov	17,883,866	6,677,315	5,360,027	7,260,850	1,489,041	5,097,386	13,847,277
12	Dec	23,440,374	6,701,249	5,669,350	<u>9,516,792</u>	<u>1,494,379</u>	<u>5,391,552</u>	16,402,722
13	Total	247,078,021	75,946,684	106,243,915	\$ 100,313,677	\$ 16,936,111	\$ 101,037,964	\$ 218,287,751
14			2002 Revenue Requirement		<u>\$100,313,677</u>	<u>\$16,936,111</u>	<u>\$101,037,964</u>	<u>\$218,287,751</u>
15			Difference		\$ (0)	\$ -	\$ -	(\$0)

Note:

Revenue recognized in 2001 from previous bundled GMC was \$82,395.42
Revenues reported in audited financial statements was overstated by \$1,926,577.

California Independent System Operator
Statement BJ
Summary Data Tables
December 31, 2001
In Thousands

Line No.	Item	Total	Table	Data Source	Line No.
1	Total Plant in Service				1
2	Intangible Plant in Service	\$171,024		AD	2
3	General Plant in Service	\$47,445		AD	3
4	Accumulated Depreciation and Amortization				4
5	Intangible Depreciation and Amortization	\$89,474		AE	5
6	General Depreciation and Amortization	\$26,522		AE	6
7	Total Deferred Credits	\$311		AF	7
8	Unamortized Debt Expense	\$779		AG	8
9	Transmission Expense- O&M	\$42,995		AH	9
10	Customer Accounts Expense	\$7,130		AH	10
11	Customer Service & Information Expense	\$2,548		AH	11
12	Administration & General Expense	\$103,591		AH	12
13	Transmission Expense- Labor	\$30,634		AI	13
14	Customer Accounts Expense - Labor	5,817		AI	14
15	Customer Service & Information Expense - Labor	2,078		AI	15
16	Administration & General Expense - Labor	21,559		AI	16
17	Transmission - Depreciation Expense	0		AJ	17
18	General - Depreciation Expense	\$6,011		AJ	18
19	Intangibles - Depreciation Expense	\$42,564		AJ	19
20	Taxes Other Than Income Taxes	481		AK	20
21	Employer Payroll Tax	3,248		AK	21
22	Working Capital: Average	\$37,410		AL	22
23	Construction Work In Progress- Average- Total	17,636		AM	23
24	Notes Payable - Average	\$0		AN	24
25	Fed Income Tax Deductions - Interest	N/A		AP	25
26	Fed Income Tax Deductions - Other than Interest	N/A		AQ	26
27	Fed Income Tax Adjustments	N/A		AR	27
28	Additional State Income Tax Deduction	N/A		AS	28
29	State Tax Adjustments	N/A		AT	29
30	Other Operating Revenues	\$261,640		AU	30
31	Cost of Capital	6.47%		AV	31
32	Cost of Short Term Debt	\$0		AW	32
33	Allocation of Demand and Capability Data	N/A		BB	33
34	Allocation of Energy and Supporting Data: Billing Determinant in MWh				34
35	Control Area Services	247,078		BD	35
36	Congestion Management	0		BD	36
37	Ancillary Services and Real Time Energy Operations	0		BD	37
38	Specific Assignment Data	N/A		BE	38
39	Revenue Data to Reflect Changed Rates				39
40	Control Area Services	\$ -		BG	40
41	Congestion Management	\$ -		BG	41
42	Ancillary Services and Real Time Energy Operations	\$ -		BG	42
43	Revenue Data to Reflect Existing Rates			BH	43
44	Control Area Services	\$ -		BH	44
45	Congestion Management	\$ -		BH	45
46	Ancillary Services and Real Time Energy Operations	\$ -		BH	46

California Independent System Operator
Statement BK
Electric Utility Department Cost of Service, Total and as Allocated
12/31/01
In Thousands

Line No.	Description	Amount	Control Area Services	Congestion Management	Market Operations/ Ancillary Services & Real Time Energy Operations	Line No.
1	Grid Management Charge Revenue Collected (Statement AU)	\$218,288	\$100,314	\$16,936	\$101,038	1
2	Operating Expenses					2
3	Transmission (Statement AH)	\$42,995	\$28,959	\$5,235	\$8,801	3
4	Customer Accounts (Statement AH)	7,130	726	151	6,253	4
5	Customer Service and Informational Expenses (Statement AH)	2,548	385	132	2,031	5
6	Administrative and General (Statement AH)	103,591	51,606	7,066	44,919	6
7	Taxes Other Than Income Taxes (Statement AK)	481	224	34	223	7
8	Total Operating Expenses	\$156,745	\$81,901	\$12,618	\$62,226	8
9	Less: Other Revenues					9
10	Interest Earnings (Statement AU)	\$ 4,054	\$1,946	\$365	\$1,743	10
11	Other Earnings (Statement AU)	43,353	21,278	3,821	18,254	11
12		\$47,407	\$23,224	\$4,186	\$19,998	12
13	Net Operating Expenses	\$109,338	\$58,677	\$8,432	\$42,229	13
14	Net Revenues	\$108,950	\$41,637	\$8,504	\$58,809	14
15	Less: Debt Service and Cash Funded CapEx (Statement BK)					15
16	Principal Reserve Funding	\$32,233	\$13,072	\$3,868	\$15,293	16
17	Interest Reserve Funding	14,680	\$5,953	\$1,762	\$6,965	17
18	Cash Funded CapEx	\$19,459	10,994	779	7,686	18
19	Total Debt Service and Cash Funded CapEx	\$66,373	\$30,019	\$6,408	\$29,945	19
20	Less: Non-Cash Items (Statement AU)	247	118	22	106	
21	Operating Reserve Contribution	\$42,330	\$11,499	\$2,073	\$28,758	21
22	<u>GMC Revenue Collected</u>	<u>\$218,288</u>	<u>\$100,314</u>	<u>\$16,936</u>	<u>\$101,038</u>	22
23	<u>2001 Annual Volume (000 MWh) - By Service</u>		<u>247,078</u>	<u>75,947</u>	<u>106,244</u>	23
24	<u>Grid Management Charge - By Service</u>		<u>\$0.406</u>	<u>\$0.223</u>	<u>\$0.951</u>	24

Note:

The factors used to allocate total ISO costs to the categories of service are documented in the ISO's Cost Allocation Matrix

Line 16,17

Debt service is allocated to ISO service categories based on an analysis of how borrowed funds were (or are anticipated to be) spent.

Line 18

Actual use of reserve for Cash funded CapEx, plus cost of internal ISO staff labor capitalized and excluded from O&M costs.

Line 21

Actual reserve contribution used in calculation of Operating Reserve credit for 2003.

California Independent System Operator
Support for Cost Allocations by ISO Cost Center: Total Costs
For Year Ended December 31, 2001

Center	FERC Shor	Actual 2001	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Total
1351	408	429,134	52%	8%	40%	223,150	34,331	171,654	429,134
1511	560	2,495,721	70%	11%	19%	1,747,005	274,529	474,187	2,495,721
1521	560	2,169,993	100%	0%	0%	2,169,993	-	-	2,169,993
1441	561	-	50%	7%	44%	-	-	-	-
1542	561	1,456,778	88%	12%	0%	1,281,965	174,813	-	1,456,778
1543	561	2,915,380	85%	3%	12%	2,478,073	87,461	349,846	2,915,380
1544	561	4,266,717	75%	10%	15%	3,200,038	426,672	640,008	4,266,717
1545	561	6,950,919	80%	5%	15%	5,560,735	347,546	1,042,638	6,950,919
1546	561	1,025,666	100%	0%	0%	1,025,666	-	-	1,025,666
1547	561	527,738	70%	11%	19%	369,416	58,051	100,270	527,738
1548	561	147,350	70%	11%	19%	103,145	16,208	27,996	147,350
1549	561	2,803,757	70%	11%	19%	1,962,630	308,413	532,714	2,803,757
1554	561	754,221	80%	10%	10%	603,377	75,422	75,422	754,221
1555	561	1,293,461	80%	10%	10%	1,034,769	129,346	129,346	1,293,461
1558	561	-	94%	0%	6%	-	-	-	-
1559	561	284,104	80%	10%	10%	227,283	28,410	28,410	284,104
1561	561	(72,406)	85%	3%	12%	(61,545)	(2,172)	(8,689)	(72,406)
1562	561	75,609	85%	3%	12%	64,268	2,268	9,073	75,609
1563	561	618,141	85%	3%	12%	525,420	18,544	74,177	618,141
1564	561	219,443	75%	10%	15%	164,582	21,944	32,916	219,443
1565	561	36,413	75%	10%	15%	27,310	3,641	5,462	36,413
1566	561	257,088	100%	0%	0%	257,088	-	-	257,088
1461	568	1,731,943	97%	2%	1%	1,679,984	34,639	17,319	1,731,943
1463	568	20,859	48%	6%	46%	10,012	1,252	9,595	20,859
1544	568	304,914	75%	10%	15%	228,686	30,491	45,737	304,914
1558	568	1,988,919	94%	0%	6%	1,869,583	-	119,335	1,988,919
1564	568	-	75%	10%	15%	-	-	-	-
1565	568	-	75%	10%	15%	-	-	-	-
1566	568	-	100%	0%	0%	-	-	-	-
1751	568	1,229,323	20%	30%	50%	245,865	368,797	614,662	1,229,323
1752	568	2,367,042	20%	30%	50%	473,408	710,113	1,183,521	2,367,042
1753	568	1,555,569	20%	30%	50%	311,114	466,671	777,784	1,555,569
1755	568	628,894	20%	30%	50%	125,779	188,668	314,447	628,894
1756	568	1,133,465	33%	33%	34%	375,093	375,093	383,279	1,133,465
1757	568	492,350	20%	30%	50%	98,470	147,705	246,175	492,350
1711	901	357,311	23%	7%	70%	82,182	25,012	250,118	357,311
1462	902	1,857,952	10%	0%	90%	185,795	-	1,672,157	1,857,952
1662	902	30,239	35%	10%	55%	10,583	3,024	16,631	30,239
1711	903	77,011	23%	7%	70%	17,713	5,391	53,908	77,011
1721	903	437,335	0%	0%	100%	-	-	437,335	437,335
1722	903	-	0%	0%	100%	-	-	-	-
1723	903	597,958	0%	0%	100%	-	-	597,958	597,958
1724	903	1,032,013	0%	0%	100%	-	-	1,032,013	1,032,013
1725	903	1,215,486	0%	0%	100%	-	-	1,215,486	1,215,486
1731	903	1,175,447	35%	10%	55%	411,407	117,545	646,496	1,175,447
1722	905	330,153	0%	0%	100%	-	-	330,153	330,153
1741	908	2,532,282	15%	5%	80%	379,842	126,614	2,025,826	2,532,282
1111	920	889,589	52%	8%	40%	462,586	71,167	355,836	889,589
1311	920	496,630	0%	0%	100%	-	-	496,630	496,630
1321	920	750,429	51%	7%	42%	384,219	54,781	311,428	750,429
1331	920	552,388	51%	7%	42%	282,823	40,324	229,241	552,388
1351	920	592,846	52%	8%	40%	308,280	47,428	237,138	592,846
1361	920	445,381	52%	8%	40%	231,598	35,630	178,152	445,381
1411	920	431,847	48%	6%	46%	207,287	25,911	198,650	431,847
1422	920	2,110,993	51%	7%	42%	1,080,829	154,103	876,062	2,110,993
1424	920	614,085	50%	5%	45%	307,042	30,704	276,338	614,085
1431	920	429,539	48%	6%	46%	206,179	25,772	197,588	429,539
1432	920	263,353	48%	6%	46%	126,410	15,801	121,143	263,353
1441	920	566,718	50%	7%	44%	281,659	37,970	247,089	566,718
1442	920	2,461,277	48%	6%	46%	1,181,413	147,677	1,132,187	2,461,277

California Independent System Operator
Support for Cost Allocations by ISO Cost Center: Total Costs
For Year Ended December 31, 2001

Center	FERC Short	Actual 2001	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Total
1451	920	848,808	48%	6%	46%	407,428	50,929	390,452	848,808
1467	920	632,649	100%	0%	0%	632,649	-	-	632,649
1468	920	590,624	51%	7%	42%	302,399	43,116	245,109	590,624
1471	920	1,107,772	48%	6%	46%	531,731	66,466	509,575	1,107,772
1611	920	553,292	51%	7%	42%	283,286	40,390	229,616	553,292
1631	920	2,484,522	51%	7%	42%	1,272,075	181,370	1,031,076	2,484,522
1641	920	1,138,535	20%	10%	70%	227,707	113,853	796,974	1,138,535
1661	920	805,515	35%	10%	55%	281,930	80,551	443,033	805,515
1811	920	408,329	58%	11%	31%	237,019	44,871	126,438	408,329
1821	920	450,110	58%	11%	31%	259,843	49,415	140,853	450,110
1831	920	95,708	62%	11%	27%	59,317	10,643	25,748	95,708
1841	920	1,044,001	61%	11%	28%	637,432	114,537	292,032	1,044,001
1851	920	343,165	58%	11%	31%	198,105	37,674	107,386	343,165
1861	920	405,154	58%	11%	31%	233,890	44,479	126,785	405,154
1111	921	52,289	52%	8%	40%	27,190	4,183	20,916	52,289
1311	921	21,030	0%	0%	100%	-	-	21,030	21,030
1321	921	41,723	51%	7%	42%	21,362	3,046	17,315	41,723
1331	921	17,726	51%	7%	42%	9,075	1,294	7,356	17,726
1351	921	74,631	52%	8%	40%	38,808	5,970	29,852	74,631
1361	921	215,825	52%	8%	40%	112,229	17,266	86,330	215,825
1411	921	52,924	48%	6%	46%	25,404	3,175	24,345	52,924
1422	921	58,835	51%	7%	42%	30,123	4,295	24,416	58,835
1424	921	1,302,295	50%	5%	45%	651,148	65,115	586,033	1,302,295
1431	921	60,727	48%	6%	46%	29,149	3,644	27,934	60,727
1432	921	46,496	48%	6%	46%	22,318	2,790	21,388	46,496
1441	921	2,467,307	50%	7%	44%	1,226,251	165,310	1,075,746	2,467,307
1442	921	158,403	48%	6%	46%	76,033	9,504	72,865	158,403
1451	921	189,027	48%	6%	46%	90,733	11,342	86,953	189,027
1467	921	31,560	100%	0%	0%	31,560	-	-	31,560
1468	921	37,193	51%	7%	42%	19,043	2,715	15,435	37,193
1471	921	112,326	48%	6%	46%	53,917	6,740	51,670	112,326
1611	921	49,834	51%	7%	42%	25,515	3,638	20,681	49,834
1631	921	192,589	51%	7%	42%	98,605	14,059	79,924	192,589
1641	921	98,420	20%	10%	70%	19,684	9,842	68,894	98,420
1651	921	-	51%	7%	42%	-	-	-	-
1661	921	15,937	35%	10%	55%	5,578	1,594	8,765	15,937
1811	921	22,658	58%	11%	31%	13,152	2,490	7,016	22,658
1821	921	127,954	58%	11%	31%	73,866	14,047	40,041	127,954
1841	921	236,500	61%	11%	28%	144,399	25,946	66,155	236,500
1851	921	14,452	58%	11%	31%	8,343	1,587	4,523	14,452
1861	921	24,835	58%	11%	31%	14,337	2,727	7,772	24,835
1111	923	-	52%	8%	40%	-	-	-	-
1311	923	13,597	0%	0%	100%	-	-	13,597	13,597
1321	923	1,316,709	51%	7%	42%	674,155	96,120	546,434	1,316,709
1331	923	88,623	51%	7%	42%	45,375	6,469	36,779	88,623
1351	923	195,899	52%	8%	40%	101,867	15,672	78,359	195,899
1361	923	313,953	52%	8%	40%	163,255	25,116	125,581	313,953
1411	923	508,116	48%	6%	46%	243,896	30,487	233,734	508,116
1422	923	2,481,481	51%	7%	42%	1,270,518	181,148	1,029,815	2,481,481
1424	923	282,647	50%	5%	45%	141,323	14,132	127,191	282,647
1431	923	231,171	48%	6%	46%	110,962	13,870	106,339	231,171
1441	923	267,584	50%	7%	44%	132,989	17,928	116,666	267,584
1442	923	303,241	48%	6%	46%	145,556	18,194	139,491	303,241
1451	923	532,866	48%	6%	46%	255,775	31,972	245,118	532,866
1468	923	54,068	51%	7%	42%	27,683	3,947	22,438	54,068
1471	923	166,062	48%	6%	46%	79,710	9,964	76,388	166,062
1611	923	553	51%	7%	42%	283	40	229	553
1631	923	3,641,484	51%	7%	42%	1,864,440	265,828	1,511,216	3,641,484
1641	923	890,474	20%	10%	70%	178,095	89,047	623,332	890,474
1661	923	31,330	35%	10%	55%	10,965	3,133	17,231	31,330

California Independent System Operator
Support for Cost Allocations by ISO Cost Center: Total Costs
For Year Ended December 31, 2001

Center	FERC Short	Actual 2001	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Total
1811	923	293,743	58%	11%	31%	170,507	32,279	90,957	293,743
1821	923	178,401	58%	11%	31%	102,988	19,585	55,827	178,401
1841	923	1,450,332	61%	11%	28%	885,525	159,115	405,692	1,450,332
1851	923	590,947	58%	11%	31%	341,146	64,876	184,925	590,947
1861	923	72,897	58%	11%	31%	42,082	8,003	22,812	72,897
1331	924	599,563	51%	7%	42%	306,976	43,768	248,819	599,563
1841	930	34,276	61%	11%	28%	20,928	3,760	9,588	34,276
1651	930		51%	7%	42%	-	-	-	-
1651	930	153,018	51%	7%	42%	78,345	11,170	63,503	153,018
1351	931	1,996,942	52%	8%	40%	1,038,410	159,755	798,777	1,996,942
1361	931	99,294	52%	8%	40%	51,633	7,944	39,718	99,294
1424	931	8,663,984	50%	5%	45%	4,331,992	433,199	3,898,793	8,663,984
1431	931	6,026,960	48%	6%	46%	2,892,941	361,618	2,772,401	6,026,960
1351	935	1,882,070	52%	8%	40%	978,676	150,566	752,828	1,882,070
1361	935	1,071,084	52%	8%	40%	556,964	85,687	428,434	1,071,084
1422	935	5,992	51%	7%	42%	3,068	437	2,487	5,992
1424	935	6,443,545	50%	5%	45%	3,221,773	322,177	2,899,595	6,443,545
1441	935	269,330	50%	7%	44%	133,857	18,045	117,428	269,330
1451	935	82,277	48%	6%	46%	39,493	4,937	37,847	82,277
1641	935	43,860	20%	10%	70%	8,772	4,386	30,702	43,860
1321	408	(0)	51%	7%	42%	(0)	(0)	(0)	(0)
1331	408	2,081	51%	7%	42%	1,066	152	864	2,081
1311	408	50,231	0%	0%	100%	-	-	50,231	50,231
1751	560	7,786	20%	30%	50%	1,557	2,336	3,893	7,786
1513	560	1,498	70%	11%	19%	1,049	165	285	1,498
1512	560	15,251	70%	11%	19%	10,676	1,678	2,898	15,251
1545	560	2,208	80%	5%	15%	1,766	110	331	2,208
1711	561	9,245	23%	7%	70%	2,126	647	6,472	9,245
1751	561	628	20%	30%	50%	126	188	314	628
1756	561	10,773	33%	33%	34%	3,565	3,565	3,643	10,773
1752	561	651	20%	30%	50%	130	195	325	651
1511	561	24,393	70%	11%	19%	17,075	2,683	4,635	24,393
1541	561	188	70%	11%	19%	132	21	36	188
1754	568	150,901	20%	30%	50%	30,180	45,270	75,450	150,901
1554	561	48,000	80%	10%	10%	38,400	4,800	4,800	48,000
1555	568	216	80%	10%	10%	173	22	22	216
1542	568	3,354	88%	12%	0%	2,951	402	-	3,354
1541	901	387	70%	11%	19%	271	43	74	387
1461	902	18,431	97%	2%	1%	17,878	369	184	18,431
1555	903	346	80%	10%	10%	277	35	35	346
1751	908	696	20%	30%	50%	139	209	348	696
1756	908	15,149	33%	33%	34%	5,013	5,013	5,123	15,149
1541	920	69	70%	11%	19%	48	8	13	69
1662	920	375,484	35%	10%	55%	131,419	37,548	206,516	375,484
1465	920	90,738	34%	0%	66%	30,851	-	59,887	90,738
1463	920	220,421	48%	6%	46%	105,802	13,225	101,394	220,421
1541	921	200	70%	11%	19%	140	22	38	200
1545	921	570	80%	5%	15%	456	29	86	570
1547	921	23	70%	11%	19%	16	3	4	23
1548	921	101	70%	11%	19%	70	11	19	101
1741	921	237	15%	5%	80%	35	12	189	237
1831	921	24,721	62%	11%	27%	15,321	2,749	6,651	24,721
1221	921	585	52%	8%	40%	304	47	234	585
1421	921	1,823	51%	7%	42%	933	133	757	1,823
1463	921	16,510	48%	6%	46%	7,925	991	7,595	16,510
1465	921	2,076	34%	0%	66%	706	-	1,370	2,076
1662	921	2,139	35%	10%	55%	749	214	1,176	2,139
1321	922	15	51%	7%	42%	8	1	6	15
1662	923	4,095	35%	10%	55%	1,433	410	2,252	4,095
1549	923	1,530	70%	11%	19%	1,071	168	291	1,530

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For Year Ended December 31, 2001

Center	FERC Short	Actual 2001	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Market Operations/ Ancillary Services and Real Time Energy Operations	Total
1722	923	4,860	0%	0%	100%	-	-	4,860	4,860
1753	923	21,845	20%	30%	50%	4,369	6,554	10,923	21,845
1831	923	29,725	62%	11%	27%	18,423	3,306	7,997	29,725
1467	923	701	100%	0%	0%	701	-	-	701
1465	923	10,720	34%	0%	66%	3,645	-	7,075	10,720
1545	561	136,615	80%	5%	15%	109,292	6,831	20,492	136,615
1211	923	325	52%	8%	40%	169	26	130	325
1432	923	113,890	48%	6%	46%	54,667	6,833	52,390	113,890
1421	923	875	51%	7%	42%	448	64	363	875
1463	923	48,739	48%	6%	46%	23,395	2,924	22,420	48,739
1331	925	375,951	51%	7%	42%	192,487	27,444	156,020	375,951
1631	928	6,759,610	51%	7%	42%	3,460,920	493,452	2,805,238	6,759,610
1111	930	39,357	52%	8%	40%	20,466	3,149	15,743	39,357
1331	930	16,853	51%	7%	42%	8,628	1,230	6,994	16,853
1831	930	-	62%	11%	27%	-	-	-	-
1751	568	2,903,829	20%	30%	50%	580,766	871,149	1,451,915	2,903,829
1441	931	26,907,657	50%	7%	44%	13,373,105	1,802,813	11,731,738	26,907,657
1631	931	1,595	51%	7%	42%	817	116	662	1,595
1555	935	604	80%	10%	10%	484	60	60	604
1432	935	1,120	48%	6%	46%	538	67	515	1,120
		156,745,441				81,900,924	12,618,193	62,226,324	156,745,441

Note:

Derivation of the allocation factors for the ISO's costs are documented on the ISO's Cost Allocation Matrix.

This worksheet documents the mapping, or translation of the cost percentages to the FERC accounts used in this Section 35.13 filing.

California Independent System Operator
Support for Cost Allocations by ISO Cost Center
For Year Ended December 31, 2001

Cost Center	Cost Center Name	Control Area Services	Congestion Management	Market Operations/Auxiliary Services and Real Time Energy Operations
1111	CEO General	52.0%	8.0%	40.0%
1211	Human Resources/CEO	52.0%	8.0%	40.0%
1221	Corporate Services	52.0%	8.0%	40.0%
1231	Facilities	52.0%	8.0%	40.0%
1311	CFO General	0.0%	0.0%	100.0%
1321	Accounting	51.2%	7.3%	41.5%
1331	Treasury and Financial Planning	51.2%	7.3%	41.5%
1341	Settlements and Billing	0.0%	0.0%	100.0%
1342	Settlements Application Support	0.0%	0.0%	100.0%
1343	Preliminary Settlements	0.0%	0.0%	100.0%
1344	Final Settlements	0.0%	0.0%	100.0%
1361	Corporate Services (transferred from 1221)	52.0%	8.0%	40.0%
1351	Facilities (transferred from 1231)	52.0%	8.0%	40.0%
1411	IT General	48.0%	6.0%	46.0%
1421	Application Services	51.2%	7.3%	41.5%
1422	Application Dev. & Support Center	51.2%	7.3%	41.5%
1423	Project Office	40.0%	50.0%	10.0%
1424	IT Assets, Contracts & Change Mgmt	50.0%	5.0%	45.0%
1431	End User Support Services	48.0%	6.0%	46.0%
1432	Computing & Telecom Svcs	48.0%	6.0%	46.0%
1441	Telecommunication Services	49.7%	6.7%	43.6%
1442	Production support (newly created, split from 1463)	48.0%	6.0%	46.0%
1451	Information Security	48.0%	6.0%	46.0%
1461	Operational Data Support	97.0%	2.0%	1.0%
1462	Field Data Acquisition	10.0%	0.0%	90.0%
1463	Operations Systems	48.0%	6.0%	46.0%
1464	Generation Control Project	96.0%	4.0%	0.0%
1465	Systems Eng. & Admin	34.0%	0.0%	66.0%
1466	Data Quality Group	40.0%	0.0%	60.0%
1467	Operational Applications	100.0%	0.0%	0.0%
1468	Corporate Application Support (newly created, split fr	51.2%	7.3%	41.5%
1471	Info Architectures & Technology	48.0%	6.0%	46.0%
1511	Operations - General	70.0%	11.0%	19.0%
1512	Managing Director of Engineering	70.0%	11.0%	19.0%
1513	Managing Director of Operations	70.0%	11.0%	19.0%
1521	Grid Planning	100.0%	0.0%	0.0%
1541	VP Operations	70.0%	11.0%	19.0%
1542	Outage Coordination	88.0%	12.0%	0.0%
1543	Operations Engineering	85.0%	3.0%	12.0%
1544	Scheduling	75.0%	10.0%	15.0%
1545	Grid Operations/Dispatch	80.0%	5.0%	15.0%
1546	Security Coordination	100.0%	0.0%	0.0%
1547	Engineering & Maintenance	70.0%	11.0%	19.0%
1548	OSAT	70.0%	11.0%	19.0%
1549	Operations Training	70.0%	11.0%	19.0%
1551	Market Operations	20.0%	30.0%	50.0%
1552	Manager of Markets	20.0%	30.0%	50.0%
1553	Manager of Applications	20.0%	30.0%	50.0%
1554	Operations R&D	80.0%	10.0%	10.0%
1555	Operations Support	80.0%	10.0%	10.0%
1559	Operations Applications Support	80.0%	10.0%	10.0%
1556	Market Planning	0.0%	50.0%	50.0%
1557	Market Support & Development	40.0%	10.0%	50.0%
1558	Transmission Facilities	94.0%	0.0%	6.0%
1561	Operations Engineering-South (new from 1543)	85.0%	3.0%	12.0%
1562	Operations Engineering-North (new from 1543)	85.0%	3.0%	12.0%
1563	Coordinated Operations	85.0%	3.0%	12.0%
1564	Operations Scheduling (transfer from 1544)	75.0%	10.0%	15.0%
1565	Prescheduling and Support (new from 1544)	75.0%	10.0%	15.0%
1566	Regional Coordination (new from 1546)	100.0%	0.0%	0.0%
1611	General Counsel	51.2%	7.3%	41.5%
1631	Legal & Regulatory	51.2%	7.3%	41.5%
1641	Market Surveillance:	20.0%	10.0%	70.0%
1651	Board of Governors (transferred from 1831)	51.2%	7.3%	41.5%
1661	Compliance (part of 1731)	35.0%	10.0%	55.0%
1662	Compliance Audits (Part of 1731)	35.0%	10.0%	55.0%
1711	Client Services-General	23.0%	7.0%	70.0%
1721	Settlements and Billing	0.0%	0.0%	100.0%
1722	Settlements Application Support	0.0%	0.0%	100.0%
1723	(Did not exist in budget)	0.0%	0.0%	100.0%
1724	Preliminary Settlements	0.0%	0.0%	100.0%
1725	Final Settlements	0.0%	0.0%	100.0%
1731	Contracts & Compliance	35.0%	10.0%	55.0%
1741	Client Relations:	15.0%	5.0%	80.0%
1751	Market Operations (moved from 1551)	20.0%	30.0%	50.0%
1752	Manager of Markets (moved from 1552)	20.0%	30.0%	50.0%
1753	Manager of Applications (moved from 1553)	20.0%	30.0%	50.0%
1754	Market Operations- deleted	20.0%	30.0%	50.0%
1755	Business Solutions (newly created)	20.0%	30.0%	50.0%
1756	Market Quality	33.1%	33.1%	33.8%
1757	Market Integration	20.0%	30.0%	50.0%
1811	VP Corporate and Strategic Devt. - General	58.0%	11.0%	31.0%
1821	Communications	57.7%	11.0%	31.3%
1831	Strategic Development	62.0%	11.1%	26.9%
1841	Human Resources	61.1%	11.0%	28.0%
1851	Office of Strategic Services	57.7%	11.0%	31.3%
1861	Regulatory Policy	57.7%	11.0%	31.3%

California Independent System Operator
Support for Cost Allocations by ISO Cost Center: Salary Costs
For Year Ended December 31, 2001

Center	FERC_Short	Salaries	Control Area Services	Congestion Management	Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Market Services / Ancillary Services and Real Time Energy Operations	Total
1111	920	889,589	52%	8%	40%	462,586	71,167	355,836	889,589
1311	920	496,630	0%	0%	100%	-	-	496,630	496,630
1321	920	749,998	51%	7%	42%	383,999	54,750	311,249	749,998
1331	920	552,388	51%	7%	42%	282,823	40,324	229,241	552,388
1351	920	592,846	52%	8%	40%	308,280	47,428	237,138	592,846
1361	920	445,381	52%	8%	40%	231,598	35,630	178,152	445,381
1411	920	431,847	48%	6%	46%	207,287	25,911	198,650	431,847
1422	920	2,110,993	51%	7%	42%	1,080,829	154,103	876,062	2,110,993
1424	920	614,085	50%	5%	45%	307,042	30,704	276,338	614,085
1431	920	429,539	48%	6%	46%	206,179	25,772	197,588	429,539
1432	920	263,353	48%	6%	46%	126,410	15,801	121,143	263,353
1441	920	566,718	50%	7%	44%	281,659	37,970	247,089	566,718
1442	920	2,507,594	48%	6%	46%	1,203,645	150,456	1,153,493	2,507,594
1451	920	848,808	48%	6%	46%	407,428	50,929	390,452	848,808
1461	568	1,529,684	97%	2%	1%	1,483,794	30,594	15,297	1,529,684
1462	902	1,235,797	10%	0%	90%	123,580	-	1,112,217	1,235,797
1463	568	20,859	48%	6%	46%	10,012	1,252	9,595	20,859
1467	920	632,649	100%	0%	0%	632,649	-	-	632,649
1468	920	590,624	51%	7%	42%	302,399	43,116	245,109	590,624
1471	920	1,107,772	48%	6%	46%	531,731	66,466	509,575	1,107,772
1511	560	1,113,965	70%	11%	19%	779,775	122,536	211,653	1,113,965
1521	560	1,786,347	100%	0%	0%	1,786,347	-	-	1,786,347
1542	561	1,356,492	88%	12%	0%	1,193,713	162,779	-	1,356,492
1543	561	2,753,971	85%	3%	12%	2,340,875	82,619	330,477	2,753,971
1544	561	4,123,664	75%	10%	15%	3,092,748	412,366	618,550	4,123,664
1544	568	304,914	75%	10%	15%	228,686	30,491	45,737	304,914
1545	561	6,716,966	80%	5%	15%	5,373,573	335,848	1,007,545	6,716,966
1546	561	990,392	100%	0%	0%	990,392	-	-	990,392
1547	561	259,904	70%	11%	19%	181,933	28,589	49,382	259,904
1548	561	100,965	70%	11%	19%	70,676	11,106	19,183	100,965
1549	561	1,834,724	70%	11%	19%	1,284,307	201,820	348,598	1,834,724
1554	561	440,885	80%	10%	10%	352,708	44,089	44,089	440,885
1555	561	1,109,394	80%	10%	10%	887,515	110,939	110,939	1,109,394
1559	561	141,965	80%	10%	10%	113,572	14,197	14,197	141,965
1561	561	(79,013)	85%	3%	12%	(67,161)	(2,370)	(9,482)	(79,013)
1562	561	59,838	85%	3%	12%	50,862	1,795	7,181	59,838
1563	561	63,695	85%	3%	12%	54,140	1,911	7,643	63,695
1564	561	148,779	75%	10%	15%	111,584	14,878	22,317	148,779
1564	568	-	75%	10%	15%	-	-	-	-
1565	561	33,511	75%	10%	15%	25,133	3,351	5,027	33,511
1565	568	-	75%	10%	15%	-	-	-	-
1566	561	201,546	100%	0%	0%	201,546	-	-	201,546
1566	568	-	100%	0%	0%	-	-	-	-
1611	920	553,292	51%	7%	42%	283,286	40,390	229,616	553,292
1631	920	2,484,032	51%	7%	42%	1,271,824	181,334	1,030,873	2,484,032
1641	920	1,138,535	20%	10%	70%	227,707	113,853	796,974	1,138,535
1661	920	805,515	35%	10%	55%	281,930	80,551	443,033	805,515
1662	902	30,239	35%	10%	55%	10,583	3,024	16,631	30,239
1711	901	330,719	23%	7%	70%	76,065	23,150	231,503	330,719
1711	903	77,011	23%	7%	70%	17,713	5,391	53,908	77,011
1721	903	399,857	0%	0%	100%	-	-	399,857	399,857
1722	905	171,162	0%	0%	100%	-	-	171,162	171,162
1723	903	516,352	0%	0%	100%	-	-	516,352	516,352
1724	903	963,319	0%	0%	100%	-	-	963,319	963,319
1725	903	1,003,147	0%	0%	100%	-	-	1,003,147	1,003,147
1731	903	1,089,891	35%	10%	55%	381,462	108,989	599,440	1,089,891
1741	908	2,078,073	15%	5%	80%	311,711	103,904	1,662,458	2,078,073

California Independent System Operator
Support for Cost Allocations by ISO Cost Center: Salary Costs
For Year Ended December 31, 2001

Center	FERC_Short	Salaries	Control Area Services	Congestion Management	Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Market Services / Ancillary Services and Real Time Energy Operations	Total
1751	568	245,213	20%	30%	50%	49,043	73,564	122,606	245,213
1752	568	2,221,269	20%	30%	50%	444,254	666,381	1,110,635	2,221,269
1753	568	1,411,508	20%	30%	50%	282,302	423,452	705,754	1,411,508
1755	568	457,496	20%	30%	50%	91,499	137,249	228,748	457,496
1756	568	931,267	33%	33%	34%	308,180	308,180	314,907	931,267
1757	568	353,581	20%	30%	50%	70,716	106,074	176,790	353,581
1811	920	408,329	58%	11%	31%	237,019	44,871	126,438	408,329
1821	920	450,110	58%	11%	31%	259,843	49,415	140,853	450,110
1831	920	95,708	62%	11%	27%	59,317	10,643	25,748	95,708
1841	920	1,044,001	61%	11%	28%	637,432	114,537	292,032	1,044,001
1851	920	343,165	58%	11%	31%	198,105	37,674	107,386	343,165
1861	920	405,154	58%	11%	31%	233,890	44,479	126,785	405,154
1513	560	1,498	70%	11%	19%	1,049	165	285	1,498
1751	560	4,992	20%	30%	50%	998	1,498	2,496	4,992
1756	561	10,773	33%	33%	34%	3,565	3,565	3,643	10,773
1752	561	651	20%	30%	50%	130	195	325	651
1751	561	628	20%	30%	50%	126	188	314	628
1754	568	100,971	20%	30%	50%	20,194	30,291	50,486	100,971
1558	568	631,701	94%	0%	6%	593,799	-	37,902	631,701
1542	568	3,354	88%	12%	0%	2,951	402	-	3,354
1541	901	0	70%	11%	19%	0	0	0	0
1461	902	18,431	97%	2%	1%	17,878	369	184	18,431
1555	903	346	80%	10%	10%	277	35	35	346
1756	908	15,149	33%	33%	34%	5,013	5,013	5,123	15,149
1751	908	696	20%	30%	50%	139	209	348	696
1662	920	375,484	35%	10%	55%	131,419	37,548	206,516	375,484
1465	920	90,738	34%	0%	66%	30,851	-	59,887	90,738
1463	920	220,421	48%	6%	46%	105,802	13,225	101,394	220,421
		61,563,837				34,274,928	5,229,128	22,059,781	61,563,837

Note:

Derivation of the allocation factors for the ISO's costs are documented on the ISO's Cost Allocation Matrix.
This worksheet documents the mapping, or translation of the cost percentages to the FERC accounts used in this Section 35.13 filing.
This is an extract of labor/salary related costs only.

California Independent System Operator
Calculation of Operating & Capital Reserve Account Balance as of 12/2001

		Per 11/22/2001 Filing				Per 1/2/2001 Filing				Per 2001 Section 35 Filing							
		CAS	CONG	Market	Total	CAS	CONG	Actual Opz/ ASREO	Total	Difference	General Notes	Allocation Notes	CAS	CONG	Market Opz/ ASREO	Total	
1	Beginning Reserve Balance, 1/1/2001	9,806	1,839	8,784	20,429	9,806	1,839	8,784	20,429				48.0%	9.0%	43.0%	100.0%	
2	Calculation of Contribution to Reserve from Operations																
3	Revenue:																
4	GMC Rates: 2001 Revenue	100,095	16,771	101,226	218,091	100,314	16,936	101,038	218,288		197 2001 Collections, updated from 11/22/2001 filing.		46.0%	7.8%	46.3%	100.0%	
5	Other (Interest Income, WSCC reimbursement)	2,240	199	1,201	3,640	2,847	365	1,745	4,957	1,317	Updated from 11/22/2001 filing.	Security coordinator fees assigned to CAS, remainder (mainly interest) spread proportionately.	57.4%	7.4%	35.2%	100.0%	
5a	Other (non cash items)					(119)	(22)	(106)	(247)		(247) Non cash items (arbitrage rebate liability)	Spread proportionately.	48.0%	9.0%	43.0%	100.0%	
6	Expenses:																
7	O&M	(83,956)	(12,109)	(67,736)	(163,800)	(81,901)	(12,618)	(62,226)	(156,745)	7,055	Updated based on actual 2001 results. Excludes internally capitalized labor cost.	Per Section 35.13 filing Period 1 data for 2001.	52.3%	8.1%	39.7%	100.0%	
7a	O&M: Internally Capitalized Labor Costs	(18,619)	(5,509)	(21,783)	(45,911)	(19,025)	(5,630)	(22,258)	(46,913)	(1,002)	No 2001 bonds were issued. Budgeted Debt service was \$50,513 (\$32,233 principal plus \$11,785 interest) less \$8,494 on filed 2001 debt service 2001 bonds, plus variance of interest expense of \$2,895. Non-cash interest expense item for \$3,052 excluded from calculation (FAS 133 mark to market).	Variance spread proportionately. Allocation based on filed 2001 debt service allocation factors.	40.6%	12.0%	47.4%	100.0%	
9	Contribution to Operating Reserve	(240)	(648)	12,908	12,020	2,117	(969)	18,192	19,339								
10	Other Reserve Uses																
11	Use of Reserve for CapEx	(7,248)	(513)	(5,068)	(12,829)	(10,994)	(779)	(7,686)	(19,459)	(6,630)	Total 2001 spending of \$25,800 plus \$1617 internally capitalized labor cost. Of this amount, \$7,958 is funded from 2000 bond proceeds, balance from 2001 collections.	Allocation per 11/22/2001 filing. Exh. 9, page 8 of 10	56.5%	4.0%	39.5%	100.0%	
12	Amendment 33 Fines (per original filing)	2,400	450	2,150	5,000	2,400	450	2,150	5,000	-	Actual fines provided toward 2002 rates per 11/22/2001 filing.	Allocated based on proportion of forecasted GMC collections in 2001. Same as above.	48.0%	9.0%	43.0%	100.0%	
13	Amendment 33 Fines (additional collections)					17,976	3,371	16,104	37,450	37,450	Additional fines recognized in Operating Reserve post-11/22/2001 filing (based on assessment as of April 2002.)		48.0%	9.0%	43.0%	100.0%	
14	Net Increase in Operating Reserve (Sum Lines 9-13)	(5,088)	(712)	9,991	4,191	11,499	2,073	28,759	42,330	38,139							
15	Ending Reserve Balance (Line 1 plus Line 14)	4,718	1,127	18,775	24,620	21,305	3,912	37,543	62,759	38,139							
16	Less: Reserve Requirement (15% of 2002 Budget: 1)	14,962	2,848	8,418	26,228												
17	FY2002 Operating Budget	99,747	18,983	56,123	174,853												
18	Equals: Revenue Credit Available (Line 19 less Line 16)	(10,244)	(1,720)	10,356	(1,608)												

California Independent System Operator
Statement BL
Rate Design Information
December 31, 2001

Rate Design Information was provided in the 2001 GMC filing.

California Independent System Operator
Statement BM
Construction Program Statement
December 31, 2001

Not applicable to the California ISO, which has no such construction program.

California Independent System Operator
Index of Statements
Period II Data

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Statement AC:	Retained Earnings
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Statement AE:	Accumulated Depreciation and Amortization
Statement AF:	Specified Deferred Credits
Statement AG:	Specified Plant Accounts
Statement AH:	Operation and Maintenance Expenses
Statement AH: Support	Operation and Maintenance Expenses: Detail
Statement AI:	Wages and Salaries
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Statement AJ:	Depreciation and Amortization Expenses
Statement AK:	Taxes Other than Income Taxes
Statement AL:	Working Capital
Statement AM:	Construction Work in Progress
Statement AN:	Notes Payable
Statement AO:	Rate for Allowance for Funds Used During Construction
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Statement AX:	Other Recent and Pending Rate Changes
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Statement BK:	Electric Cost of Service, Total and Allocated
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Statement BK: Support	ISO Departmental Allocation Factors
Statement BL:	Rate Design Information
Statement BM:	Construction Program Statement

California Independent System Operator
Statement AA
Balance Sheet
December 31, 2003
Unaudited
In Thousands

Line No.	Account Description	Balance at Beginning of Year	Balance at End of Year	Line No.
Utility Plant				
1	Utility Plant	\$252,508	\$274,508	1
2	Less: Accumulated Depreciation and Amortization	180,709	219,635	2
3	Net Utility Plant	71,799	54,873	3
Other Property and Investments				
4	Special Funds	0	0	4
5	Total Other Property and Investments	0	0	5
Current and Accrued Assets				
6	Cash - Unrestricted	105,825	55,725	6
7	- Restricted for payment of debt service	22,533	23,533	7
8	Customer Accounts Receivable	0	0	8
9	Prepayments	2,242	1,412	9
10	Accrued Utility Revenues	54,800	56,637	10
11	Total Current and Accrued Assets	185,400	137,307	11
Deferred Debits				
12	Unamortized Debt Expense	495	425	12
13	Other	0	0	13
14	Total Deferred Debits	495	425	14
14	Total Assets and Other Debits	\$257,695	\$192,604	14

Note:
Line 4
Comprised of funds limited to use for capital expenditures.

California Independent System Operator
Statement AA
Balance Sheet
December 31, 2003
Unaudited
In Thousands

Line No.	Account Description	Balance at Beginning of Year	Balance at End of Year	Line No.
Proprietary Capital				
15	Unappropriated Retained Earnings	(\$34,860)	(\$23,808)	15
16	Total Proprietary Capital	(34,860)	(23,808)	16
Long-Term Debt				
17	Bonds	228,800	195,000	17
18	Other Long Term Debt (Market Value of Interest Rate Swap)	(6,994)	0	18
19	Notes Payable	0	0	19
20	Net Long-Term Debt	221,806	195,000	20
Current and Accrued Liabilities				
21	Accounts Payable	20,000	20,000	21
22	Taxes Accrued	0	0	22
23	Customer Deposits	0	0	23
24	Interest Accrued	0	0	24
25	Customer Accounts Payable: 2002 GMC Settlement	10,250	0	25
27	Amendment 33 Fines Subject to Refund	39,899	0	27
27	Total Current and Accrued Liabilities	70,149	20,000	27
Deferred Credits				
28	Other	600	1,412	28
	Total Deferred Credits	600	1,412	
29	Total Liabilities and Other Credits	\$257,695	\$192,604	29
	Difference	0	(0)	

California Independent System Operator
Statement AB
Income Statement
For the Period Ending December 31, 2003
Unaudited
In Thousands

Line No.	Account Description	Balance at End of Year	Control Area Operations	Congestion Management	Ancillary Services Real Time Energy Operations	Line No.
	<u>Utility Operating Income</u>					
1	Operating Revenues	\$238,976	\$139,188	\$27,413	\$72,376	1
2	Operating Expenses:					2
3	Operating Expenses	145,315	92,145	14,167	39,002	3
4	Maintenance Expenses	26,009	14,637	3,789	7,582	4
5	Depreciation Expenses	48,575	22,830	4,857	20,888	5
6	Taxes Other Than Income Taxes	416	265	45	106	6
7	Total Utility Operating Expenses	<u>220,314</u>	<u>129,877</u>	<u>22,858</u>	<u>67,579</u>	7
8	Net Utility Operating Income	<u>18,662</u>	<u>9,310</u>	<u>4,555</u>	<u>4,797</u>	8
	<u>Other Income and Deductions</u>					
9	Interest Income	1,252	780	131	341	9
10	Miscellaneous Non-operating Income	0	0	0	0	10
11	Miscellaneous Income Deductions	0	0	0	0	
12	Total Other income and Deductions	<u>1,252</u>	<u>780</u>	<u>131</u>	<u>341</u>	
	<u>Interest Charges</u>					
13	Interest on Long-term Debt	8,497	4,344	983	3,170	13
14	Amortization of Debt Discount and Expense	366	146	37	183	14
15	Other Interest Expense	0	0	0	0	15
16	Total Interest Charges	<u>8,863</u>	<u>4,490</u>	<u>1,020</u>	<u>3,353</u>	16
17	Net Income	<u>\$11,052</u>	<u>\$5,600</u>	<u>\$3,666</u>	<u>\$1,785</u>	17

Note:

California ISO calculates its rates using the debt service coverage principle. Depreciation is not used in the calculation. Instead, actual debt service principal and interest costs are recovered through the rate. "Net income" is prior to cash funded capital expenditures, and the difference between debt service and depreciation expense.

Accordingly, this statement is not the basis upon which the GMC rates are calculated.

California Independent System Operator
Statement AC
Retained Earnings
December 31, 2003
Unaudited
In Thousands

Line No.	Account Description	Amount	Line No.
<u>Unappropriated Retained Earnings</u>			
1	Unappropriated Retained Earnings - Beginning of Year	(\$34,860)	1
2	Balance Transferred from Income (Account 433)	11,052	2
3	Appropriations of Retained Earnings (Account 436)	<u>0</u>	3
4	Unappropriated Retained Earnings - End of Year	<u>(\$23,808)</u>	4
<u>Appropriated Retained Earnings</u>			
5	Appropriated Retained Earnings - Beginning of Year	\$0	5
6	Increase in Appropriations of Retained Earnings	0	6
7	Decrease in Appropriations of Retained Earnings	<u>0</u>	7
8	Appropriated Retained Earnings - End of Year	<u>\$0</u>	8

Note:

As a not-for-profit, public benefit corporation, the California ISO does not have "retained earnings" in the sense that this term is typically used.

California Independent System Operator
Statement AD
Cost of Plant
December 31, 2003
In Thousands

Line No.	Functional Classification	Average Balance	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$0	\$0	\$0	\$0	1
2	Intangible	211,327	107,777	25,359	78,191	2
3	General	53,798	27,437	6,456	19,905	3
4	Total Plant	<u>\$265,125</u>	<u>\$135,214</u>	<u>\$31,815</u>	<u>\$98,096</u>	4

		Balance		Simple	
		12/31/02	12/31/03	Average 1/	
5	Transmission	\$0	\$0	\$0	5
6	Intangible	200,840	221,815	211,327	6
7	General	53,285	54,310	53,798	7
	Total	254,125	276,125		

1/ Averages for Transmission, Intangibles and General are based on a beginning-of-period, and end-of-period simple average.

Line 2 Includes internally-developed software and off-the-shelf software.

Line 6, 7 Includes CWIP allocated 80% and 20% respectively.

California Independent System Operator
Statement AE
Accumulated Depreciation and Amortization
December 31, 2003
In Thousands

Line No.	Functional Classification	Average Balance	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$0	\$0	\$0	\$0	1
2	Intangible	162,502	82,876	19,500	60,126	2
3	General	37,670	4,520	4,520	28,630	3
Total Accumulated Depreciation and Amortization		<u>\$200,172</u>	<u>\$87,396</u>	<u>\$24,020</u>	<u>\$88,756</u>	

		Balance		Simple Average 1/	
		12/31/02	12/31/03		
4	Transmission	\$0	\$0	\$0	4
5	Intangible	145,659	179,345	162,502	5
6	General	35,050	40,290	37,670	6

1/ Averages for Accumulated Depreciation and Amortization are based on a beginning-of-period, and end-of-period simple average.

California Independent System Operator
Statement AF
Deferred Credits
December 31, 2003
Unaudited
In Thousands

Line No.	Description	Amount	Line No.
1	Post-retirement Liability	\$ 1,300	1
2	Supplemental Executive Retirement Plan Liability	<u>112</u>	2
3	Total Deferred Credits	<u><u>1,412</u></u>	3

California Independent System Operator
Statement AG
Specified Plant Accounts and Deferred Debits
December 31, 2003
In Thousands

Line No.	Functional Classification	Balance		Average 1/ Balance	Line No.
		12/31/02	12/31/03		
	<u>Account 181 - Unamortized Debt Expense</u>				
1	General	\$495	\$425	\$460	1
2	Total - Specified Plant Accounts and Deferred Debits	\$495	\$425	\$460	2

1/ Averages for Deferred Debits are based on a beginning-of-period, and end-of-period simple average.

California Independent System Operator
Statement AH
Operation and Maintenance Expenses
December 31, 2003
In Thousands

Line No.	Description	Amount	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$71,425	\$48,311	\$8,560	\$14,554	1
2	Customer Accounts	9,137	3,797	628	4,713	2
3	Customer Service and Informational	2,392	967	222	1,203	3
4	Administrative and General	88,368	53,708	8,545	26,115	4
5	Total	<u>\$171,323</u>	<u>\$106,783</u>	<u>\$17,955</u>	<u>\$46,585</u>	5

California Independent System Operator
Statement AH
Operation and Maintenance Expenses
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Congestion Management	Ancillary Services Real Time Energy Operations	Line No.
<u>Transmission Expenses - Operation</u>							
1	560	Operation Supervision and Engineering	\$3,546	\$3,200	\$188	\$157	1
2	561	Load Dispatching	\$55,185	\$39,326	\$5,613	\$10,246	2
3	566	Miscellaneous Transmission Expenses	\$0	\$0	\$0	\$0	3
4		Total Operation	\$58,731	\$42,526	\$5,801	\$10,403	4
<u>Transmission Expenses - Maintenance</u>							
5	568	Maintenance Supervision and Engineering	\$12,694	\$5,785	\$2,759	\$4,151	5
6		Total Maintenance	\$12,694	\$5,785	\$2,759	\$4,151	6
7		Total Transmission Expenses	\$71,425	\$48,311	\$8,560	\$14,554	7

California Independent System Operator
Statement AH
Electric Operating and Maintenance Expenses
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Congestion Management	Ancillary Services Real Time Energy Operations	Line No.
<u>Customer Accounts Expenses - Operation</u>							
8	901	Supervision	\$189	\$70	\$34	\$85	8
9	902	Meter Reading Expenses	\$3,036	\$1,118	\$296	\$1,622	9
10	903	Customer Record and Collection Expenses	\$5,473	\$2,526	\$267	\$2,680	10
11	905	Miscellaneous Customer Accounts Expenses	\$440	\$84	\$31	\$325	11
12		Total Customer Accounts Expenses	<u>\$9,137</u>	<u>\$3,797</u>	<u>\$628</u>	<u>\$4,713</u>	12
<u>Customer Service and Informational Expenses - Operation</u>							
13	907	Supervision	\$0	\$0	\$0	\$0	13
14	908	Customer Assistance Expenses	\$2,392	\$967	\$222	\$1,203	14
15	909	Informational and Instructional Advertising Expenses	\$0	\$0	\$0	\$0	15
16		Total Customer Service - Informational Expenses	<u>\$2,392</u>	<u>\$967</u>	<u>\$222</u>	<u>\$1,203</u>	16

California Independent System Operator
Statement AH
Electric Operating and Maintenance Expenses
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Congestion Management	Ancillary Services Real Time Energy Operations	Line No.
<u>Administrative and General Expenses - Operation</u>							
17	920	Administrative and General Salaries	\$30,001	\$17,320	\$3,052	\$9,629	17
18	921	Office Supplies and Expenses	\$5,611	\$3,376	\$586	\$1,649	18
19	923	Outside Services Employed	\$16,792	\$9,584	\$1,846	\$5,362	19
20	924	Property Insurance	\$1,445	\$863	\$149	\$433	20
21	925	Injuries and Damage	\$0	\$0	\$0	\$0	21
22	928	Regulatory Commission Expenses	\$0	\$0	\$0	\$0	22
23	930	Miscellaneous General Expenses	\$392	\$242	\$42	\$107	23
24	931	Rents	\$20,813	\$13,471	\$1,840	\$5,503	24
25		Total Operation	\$75,054	\$44,856	\$7,515	\$22,683	25
<u>Administrative and General Expenses - Maintenance</u>							
26	935	Maintenance of General Plant	\$13,314	\$8,852	\$1,030	\$3,432	26
27		Total Maintenance	\$13,314	\$8,852	\$1,030	\$3,432	27
28		Total Administrative and General Expenses	\$88,368	\$53,708	\$8,545	\$26,115	28
29		Total Operating and Maintenance Expenses	\$171,323	\$106,783	\$17,955	\$46,585	29

California Independent System Operator
Statement AH
Operation and Maintenance Expenses
Itemization of General Advertising Expenses - Account 930.1
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Total	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	930	Recruiting/ Advertising	\$100	\$63	\$11	\$26	1
2		Total	\$100	\$63	\$11	\$26	2

California Independent System Operator
Statement AH
Operation and Maintenance Expenses
Itemization of Miscellaneous General Expenses - Account 930.2
December 31, 2003
In Thousands

<u>Line No.</u>		<u>Description</u>	<u>Total</u>	<u>Control Area Operations</u>	<u>Congestion Management</u>	<u>Ancillary Services & Real Time Energy Operations</u>	<u>Line No.</u>
1	930	Board Compensation and Expenses	\$160	\$100	\$18	\$42	1
2		Total	\$160	\$100	\$18	\$42	2

California Independent System Operator
Statement A1
Wages and Salaries
December 31, 2003
In Thousands

Line No.	Description	Amount	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$36,098	\$27,155	\$4,001	\$4,941	1
2	Customer Accounts	7,441	3,064	545	3,833	2
3	Customer Service and Informational	2,147	874	199	1,074	3
4	Administrative and General	25,408	14,323	2,589	8,496	4
5	Total	<u>\$71,094</u>	<u>\$45,417</u>	<u>\$7,333</u>	<u>\$18,344</u>	5

California Independent System Operator
Statement AI
Wages and Salaries
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Ancillary Services		Line No.
					Congestion Management	Real Time Energy Operations	
<u>Transmission Expenses - Operation</u>							
1	560	Operation Supervision and Engineering	\$2,515	\$2,387	\$70	\$58	1
2	561	Load Dispatching	\$25,518	\$20,500	\$2,539	\$2,480	2
3	566	Miscellaneous Transmission Expenses	\$0	\$0	\$0	\$0	3
4		Total Operation	\$28,033	\$22,886	\$2,609	\$2,538	4
<u>Transmission Expenses - Maintenance</u>							
5	568	Maintenance Supervision and Engineering	\$8,064	\$4,269	\$1,393	\$2,403	5
6		Total Maintenance	\$8,064	\$4,269	\$1,393	\$2,403	6
7		Total Transmission Salary Expenses	\$36,098	\$27,155	\$4,001	\$4,941	7

California Independent System Operator
Statement AI
Electric Wages and Salaries
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Ancillary Services		Line No.
					Congestion Management	Real Time Energy Operations	
<u>Customer Accounts Expenses - Operation</u>							
8	901	Supervision	\$335	\$124	\$60	\$152	8
9	902	Meter Reading Expenses	\$2,260	\$850	\$235	\$1,176	9
10	903	Customer Record and Collection Expenses	\$4,413	\$2,008	\$220	\$2,185	10
11	905	Miscellaneous Customer Accounts Expenses	\$433	\$82	\$30	\$320	11
12		Total Customer Accounts Expenses	<u>\$7,441</u>	<u>\$3,064</u>	<u>\$545</u>	<u>\$3,833</u>	12
<u>Customer Service and Informational Expenses - Operation</u>							
13	907	Supervision	\$0	\$0	\$0	\$0	13
14	908	Customer Assistance Expenses	\$2,147	\$874	\$199	\$1,074	14
15		Total Customer Service - Informational Expenses	<u>\$2,147</u>	<u>\$874</u>	<u>\$199</u>	<u>\$1,074</u>	15

California Independent System Operator
Statement AI
Wages and Salaries
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Ancillary Services		Line No.
					Congestion Management	Real Time Energy Operations	
<u>Administrative and General Expenses - Operation</u>							
16	920	Administrative and General Salaries	\$25,408	\$14,323	\$2,589	\$8,496	16
17	921	Office Supplies and Expenses	\$0	\$0	\$0	\$0	17
18		Total Operation	\$25,408	\$14,323	\$2,589	\$8,496	18
<u>Administrative and General Expenses - Maintenance</u>							
19	935	Maintenance of General Plant	\$0	\$0	\$0	\$0	19
20		Total Maintenance	\$0	\$0	\$0	\$0	20
21		Total Administrative and General Salary Expenses	\$25,408	\$14,323	\$2,589	\$8,496	21
22		Total Operating and Maintenance Salary Expenses	\$71,094	\$45,417	\$7,333	\$18,344	22

California Independent System Operator
Statement AJ
Depreciation and Amortization Expenses
December 31, 2003
In Thousands

Line No.	Functional Classification	2003 Average Depreciable Cost of Plant	Annual Depreciation Rate	Amount of Expense	Control Area Operations	Congestion Management	Ancillary Services Real Time Energy Operations	Line No.
1	Transmission	\$0	0.00%	\$0	\$0	\$0	\$0	1
2	General	53,798	11.17%	6,011	2,825	601	2,585	2
3	Intangibles	211,327	20.14%	42,564	20,005	4,256	18,303	3
4	Total	<u>\$265,125</u>		<u>\$48,575</u>	<u>\$22,830</u>	<u>\$4,857</u>	<u>\$20,888</u>	4

Note:

Allocated using 2003 debt service allocation factors.

California Independent System Operator
Statement AK
Taxes Other Than Income Taxes
December 31, 2003
In Thousands

Line No.	Account Description	Total	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	Property Taxes	525	265	45	106	1
2	Total Taxes Other Than Income Taxes	<u>\$525</u>	<u>\$265</u>	<u>\$45</u>	<u>\$106</u>	2
 <u>Employer Payroll Taxes</u>						
3	FICA	\$2,439				3
4	Medicare	960				4
5	California State Tax	<u>95</u>				5
6	Total Taxes	<u>\$3,494</u>				6

California Independent System Operator
Statement AL
Working Capital
December 31, 2003
In Thousands

Line No.	Month/Year	Average Working Cash	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	December-02	\$34,018	\$ 18,127	\$ 5,192	10,698	1
2	January-03	28,540	\$14,556	\$4,281	\$8,562	2
3	February-03	18,900	\$9,639	\$2,835	\$5,670	3
4	March-03	10,728	\$5,471	\$1,609	\$3,218	4
5	April-03	11,824	\$6,030	\$1,774	\$3,547	5
6	May-03	12,949	\$6,604	\$1,942	\$3,885	6
7	June-03	17,388	\$8,868	\$2,608	\$5,217	7
8	July-03	13,520	\$6,895	\$2,028	\$4,056	8
9	August-03	16,144	\$8,234	\$2,422	\$4,843	9
10	September-03	21,606	\$11,019	\$3,241	\$6,482	10
11	October-03	28,593	\$14,582	\$4,289	\$8,578	11
12	November-03	35,707	\$18,211	\$5,356	\$10,712	12
13	December-03	<u>36,746</u>	<u>\$22,047</u>	<u>\$3,675</u>	<u>\$11,024</u>	13
14	13-Month Total	<u>\$286,664</u>	<u>\$150,284</u>	<u>\$41,251</u>	<u>\$86,492</u>	14
15	13-Month Average	<u>\$22,051</u>	<u>\$11,560</u>	<u>\$3,173</u>	<u>\$6,653</u>	15

Note:
Average working cash approximates ISO Operating & Capital Reserve balance.

California Independent System Operator
Statement AM
Construction Work in Process
December 31, 2003
In Thousands

Line No.	Functional Classification	Average Balance	Control Area Operations	Congestion Management	Ancillary Services & Real Time Energy Operations	Line No.
1	Transmission	\$0	\$0	\$0	\$0	1
2	Intangible	9,481	4,835	1,138	3,508	2
3	General	<u>2,370</u>	<u>1,209</u>	<u>284</u>	<u>877</u>	3
4	Total Plant	<u>11,851</u>	<u>\$6,044</u>	<u>\$1,422</u>	<u>\$4,385</u>	4

		Balance		Simple	
		12/31/02	12/31/03	Average 1/	
5	Intangible	12,681	6,281	9,481	5
6	General	<u>3,170</u>	<u>1,570</u>	2,370	6
	Total	15,851	7,851		

1/ Averages for Construction Work in Process are based on a beginning-of-period, and end-of-period simple average.

California Independent System Operator
Statement AN
Notes Payable
December 31, 2003
In Thousands

Line No.	Date	Amount	Line No.
1	01/01/03	\$0	1
2	01/31/03	0	2
3	02/28/03	0	3
4	03/31/03	0	4
5	04/30/03	0	5
6	05/31/03	0	6
7	06/30/03	0	7
8	07/31/03	0	8
9	08/31/03	0	9
10	09/30/03	0	10
11	10/31/03	0	11
12	11/30/03	0	12
13	12/31/03	0	13
14	Total	<u>\$0</u>	14
15	Average Balance	<u>\$0</u>	15

California Independent System Operator
Statement AO
Rate for Allowance for Funds Used During Construction

This Statement was not prepared because the ISO does not intend to request a return on funds used during construction.

California Independent System Operator
Statement AP
Federal Income Tax Deductions - Interest

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AQ
Federal Income Tax Deductions - Other than Interest

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AR
Federal Tax Adjustments

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AS
Additional State Income Tax Deduction

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AT
State Tax Adjustments

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement AU
Revenue Credits
December 31, 2003
In Thousands

Line No.	FERC Account	Description	Amount	Control Area Operations	Ancillary Services		Line No.
					Congestion Management	Real Time Energy Operations	
1	456	Other Operating Revenue					1
2		Grid Management Charge	237,600	137,857	27,401	72,343	2
3		MCI Subscriber Charges	0	0	0	0	3
4		WSCC Security Coordinator Fees	1,256	1,256	0	0	4
5		SC Application Fees & Training Fees	120	75	13	33	5
6		Fines and Penalties	0	0	0	0	6
7		Total Operating Revenue (Account 456)	<u>\$238,976</u>	<u>\$139,188</u>	<u>\$27,413</u>	<u>\$72,376</u>	7
8		Total Revenue Credits	<u>\$238,976</u>	<u>\$139,188</u>	<u>\$27,413</u>	<u>\$72,376</u>	8

Note:

Not shown explicitly above is a credit or unrecovered balance applied to the 2003 revenue requirement resulting from the operating reserve position of each service as of 12/31/2002.
The ISO's GMC contains a provision for the collection of funds for an operating reserve, which is funded from ongoing collections equal to 25% of debt service payments. The operating reserve is considered fully funded when it reaches a level of 15% of the following year's operating & maintenance budget. At year end, any operating reserve balance in excess of this 15% requirement may be applied as a credit toward the following year's revenue requirement, and any deficiency recovered. For 12/31/2001, the operating reserve credit or deficiency was calculated as follows:

9	Total FY2003 Operating & Maintenance Budget:	\$ 171,739	\$ 107,047	\$ 18,001	\$ 46,691	Statement 2003 GMC Summary
10	Equals: Net Operating Budget	\$ 171,739	\$ 107,047	\$ 18,001	\$ 46,691	Calculation
11	Target Operating Reserve Requirement, 15% of Above	\$ 25,761	\$ 16,057	\$ 2,700	\$ 7,004	15% of above
12	Projected Operating Reserve Balance, 12/31/2002:	\$ 34,018	20,208	5,108	8,702	Separate Analysis
13	Difference: Available for Revenue Credit or (shortfall)	<u>\$ 8,257</u>	<u>\$ 4,151</u>	<u>\$ 2,407</u>	<u>\$ 1,698</u>	
14	This revenue credit is applied as a credit toward 2003 costs as follows:					
15	Total FY2003 Operating & Maintenance Budget:	\$ 171,739	\$ 107,047	\$ 18,001	\$ 46,691	Statement BK
16	Required Debt Service Collections	\$ 43,797	\$ 22,392	\$ 5,067	\$ 16,338	Statement BK
17	Required Operating Reserve Collection, 2001 (25% of Debt Ser	\$ 10,949	\$ 5,598	\$ 1,267	\$ 4,084	
18	Cash Funded Capital Expenditures	\$ 22,000	\$ 9,081	\$ 5,617	\$ 7,302	
19	Less: WSCC Security Coordinator Fees	\$ (1,256)	\$ (1,256)			AU, Line 4 above
20	Less: SC App. Fees	\$ (120)	\$ (75)	\$ (13)	\$ (33)	AU, Line 4 above
21	Less: Interest Income	\$ (1,252)	(\$780)	(\$131)	(\$341)	Statement BK
22	Subtotal: Required Collections before revenue credit/debit	<u>\$ 245,857</u>	<u>\$ 142,008</u>	<u>\$ 29,808</u>	<u>\$ 74,041</u>	
23	Plus: Available Revenue Credit/Debit	<u>(8,257)</u>	<u>(4,151)</u>	<u>(2,407)</u>	<u>(1,698)</u>	Above
24	Equals: Total Revenue Requirement	<u>237,600</u>	<u>137,857</u>	<u>27,401</u>	<u>72,343</u>	
25	Reconciliation:					
26	O&M Budget per Cost Allocation Matrix	\$171,739	\$107,047	18,001	46,691	
27	Difference		(\$0)	(\$0)	\$0	
28	Total Revenue Requirement per Cost Allocation Matrix	\$237,600	137,857	27,401	72,343	
29	Difference		(0)	(0)	0	

California Independent System Operator
Statement AV
Cost of Capital
December 31, 2003
In Thousands

Line No.	Component	Average Capitalization Amount	Capitalization Ratio	Component Cost	Weighted Component Cost	Line No.
1	Long-Term Debt	\$195,000	100%	4.18%	4.18%	1

Long Term Debt Reconciliation:

Debt Outstanding at 1/1/2003:	228,800
Debt Retired During 2003:	(33,800)
Debt Issuance Planned During 2003:	
Total Debt Outstanding 12/31/2003:	<u>195,000</u>

Average capital cost noted above is calculated by dividing interest expense by average outstanding debt. Budgeted interest expense costs for 2003 consist of the following:

Status:	<u>Series 2000A&B</u>	<u>Series 2000C</u>	
	Hedged	Unhedged	
Interest Rate:	4.38%	3.2%	Unswapped rate-- average from 4/2000 to July 2002, is 3.2%.
Negative Carry with new swap:	0.02%		
Insurance Premium	0.05%	0.05%	
Remarketing Fee	0.08%	0.08%	
Liquidity Facility Commitment Fee	0.50%	0.50%	
California Trading Value	-0.36%		Unswapped basis differential from 4/2000 to July 2002, is - .36%
Effective Interest Rate	<u>4.67%</u>	<u>3.83%</u>	

California Independent System Operator
Statement AW
Cost of Short-Term Debt
December 31, 2003
In Thousands

Line No.	Type of Short-term Financing	Balance End of Year 12/31/03	Interest Rate	Interest Charges on an Annual Basis	Line No.
1	Line of Credit	\$0	n/a	0	1
2	Total, All Short-Term Debt	\$0	n/a	0	2

Note:

The ISO does anticipate incurring short-term debt costs in 2003.

California Independent System Operator
Statement AX
Other Recent and Pending Rate Changes

The California ISO implemented an unbundled GMC, effective 1/1/2001.

A GMC Settlement Agreement filed in October 2002 relates to 2002 GMC rates. The Settlement Agreement is pending approval by the Commission.

See Statement BG, BH

California Independent System Operator
Statement AY
Income and Revenue Tax Rate Data

This Statement was not prepared because the ISO is tax-exempt under section 501(c)(3) of the Internal Revenue Code.

California Independent System Operator
Statement BA
Wholesale Customer Rate Groups

Control Area Services

This category is responsible for managing the Control Area and the ISO Controlled Grid to "keep the lights on," i.e., ensure safe, reliable operation of the transmission grid and dispatch of bulk power supplies in accordance with regional and national reliability standards, including, but not limited to:

- performing operation studies;
- system security analyses;
- transmission maintenance standards;
- system planning to ensure overall reliability;
- integration with other Control Areas;
- emergency management;
- outage coordination;
- transmission planning; and
- scheduling generation, imports, exports, and wheeling in the Day-Ahead and Hour-Ahead of actual operations.

Congestion Management

Provides for the administration of Congestion management. Congestion exists when power flowing on a transmission path exceeds the transmission path capacity. Congestion management is conducted by the ISO during the scheduling process and results in the economic rationing of transmission service in order to prevent congestion. Currently provides for only interzonal congestion.

**Ancillary Services and Real Time
Energy Operations / Market
Operations**

Provides for ancillary service and real-time energy related services, including, but not limited to: providing open and non-discriminatory access for market making activities for participants through Ancillary Services auctions and Energy balancing services, Posting of market information; Market surveillance and analysis; Settlement, billing, and metering related to the above;

The above are not wholesale customer rate groups per se, but are the categories of service provided by the California ISO.

Wholesale customers include: generators, municipal utilities, investor owned utilities, power marketers, others.

The rate design is not based on customer classes.

California Independent System Operator
Statement BB
Allocation of Demand and Capability Data

The California ISO does not allocate costs to wholesale services based on allocation demand and capability data. Services are allocated based on energy data which is provided in Statement BD.

California Independent System Operator
Statement BC
Reliability Data

The California ISO does not maintain data for generating capacity reserves.

California Independent System Operator
Statement BD
Allocation of Energy and Supporting Data

		Period II Billable Quantities (MWh)			
Line No.		Control Area Services	Congestion Management	Ancillary Services and Real Time Energy Operations	Total AS&RT in MWh
1	Jan	19,450,369	6,865,980	5,118,385	5,118,385
2	Feb	17,348,907	6,124,164	4,565,863	4,565,863
3	Mar	19,096,066	6,740,911	4,280,679	4,280,679
4	Apr	18,614,118	6,570,784	4,171,458	4,171,458
5	May	19,812,053	6,993,655	4,440,951	4,440,951
6	Jun	21,509,783	7,592,953	4,826,756	4,826,756
7	Jul	23,999,124	8,471,691	5,388,861	5,388,861
8	Aug	23,000,644	8,119,227	5,162,256	5,162,256
9	Sep	21,334,626	7,531,123	4,788,164	4,788,164
10	Oct	19,514,280	6,888,541	4,379,419	4,379,419
11	Nov	19,678,470	6,946,500	4,416,286	4,416,286
12	Dec	19,027,790	6,716,810	4,270,181	4,270,181
13	Total	242,386,230	85,562,339	55,809,257	55,809,257
14	Average	20,198,852	7,130,195	4,650,771	4,650,771

Notes:

- / Control Area Services forecast assumes 2% load growth from 2002 forecast/actual level. 2002 figures (used to develop the 2003 forecast shown above) are actual through September, and forecasted for October - December.
- / Congestion Management billing determinant volumes are calculated as 35.3% of Gross Control Load and Exports.
- / Purchases and Sales of Ancillary Services and Real Time Energy are forecast at approximately 23% of Gross Control Area Load and Exports.

California Independent System Operator
Statement BE
Specific Assignment Data

Allocation of costs to the GMC service categories is performed in the Cost Allocation Matrix. Documentation of the methodology of that process is included in that document.

Results of the allocation process are also shown in Statement BK.

California Independent System Operator
Statement BF
Exclusive Use Commitments of Major Power Supply Facilities

This statement is not applicable to the California ISO. It owns no generation and has no exclusive use commitments.

California Independent System Operator
Statement BG
Revenue Data to Reflect Changed Rates

Line No.		Period II Billable Quantities (MWh)			Period II Revenues \$			Total
		Control Area Services	Congestion Management	Ancillary Services and Real Time Energy Operations	Control Area Services	Congestion Management	Ancillary Services and Real Time Energy Operations	
	Rate \$/MWh				\$ 0.569	\$ 0.320	\$ 1.296	
1	Jan	19,450,369	6,865,980	5,118,385	11,067,260	2,197,114	6,633,427	
2	Feb	17,348,907	6,124,164	4,565,863	9,871,528	1,959,733	5,917,358	
3	Mar	19,096,066	6,740,911	4,280,679	10,865,662	2,157,092	5,547,760	
4	Apr	18,614,118	6,570,784	4,171,458	10,591,433	2,102,651	5,406,209	
5	May	19,812,053	6,993,655	4,440,951	11,273,058	2,237,969	5,755,472	
6	Jun	21,509,783	7,592,953	4,826,756	12,239,066	2,429,745	6,255,476	
7	Jul	23,999,124	8,471,691	5,388,861	13,655,502	2,710,941	6,983,963	
8	Aug	23,000,644	8,119,227	5,162,256	13,087,366	2,598,153	6,690,284	
9	Sep	21,334,626	7,531,123	4,788,164	12,139,402	2,409,959	6,205,460	
10	Oct	19,514,280	6,888,541	4,379,419	11,103,626	2,204,333	5,675,726	
11	Nov	19,678,470	6,946,500	4,416,286	11,197,049	2,222,880	5,723,507	
12	Dec	<u>19,027,790</u>	<u>6,716,810</u>	<u>4,270,181</u>	<u>10,826,812</u>	<u>2,149,379</u>	<u>5,534,154</u>	
13	Total	242,386,230	85,562,339	55,809,257	\$ 137,917,765	\$ 27,379,949	\$ 72,328,797	\$ 237,626,510
14			2003 Revenue Requirement		<u>137,856,869</u>	<u>27,400,520</u>	<u>72,342,982</u>	<u>237,600,371</u>
15			Difference		60,896	(20,572)	(14,185)	26,139

Notes:

Line 15

Minor difference between collected revenues and revenue requirement per remainder of filing is due to rounding of rates to 3 digits.

Statement demonstrates that under the proposed new rates, the California ISO anticipates that it will collect sufficient revenues from each GMC service category to meet the revenue requirement.

California Independent System Operator
Statement BH
Revenue Data to Reflect Present Rates

Line No.		Period II Billable Quantities (MWh)			Control Area Services	Period II Revenues \$		Total
		Control Area Services	Congestion Management (Previously "Interzonal Congestion Scheduling")	Ancillary Services and Real Time Energy Operations		Congestion Management (Previously "Interzonal Congestion Scheduling")	Ancillary Services and Real Time Energy Operations (Third category was previously "Market Operations")	
	Rate \$/MWh				See Note	\$ 0.553	\$ 0.312	\$ 1.158
1	Jan	19,450,369	6,865,980	5,118,385		10,756,054	2,142,186	5,927,090
2	Feb	17,348,907	6,124,164	4,565,863		9,593,946	1,910,739	5,287,269
3	Mar	19,096,066	6,740,911	4,280,679		10,560,125	2,103,164	4,957,027
4	Apr	18,614,118	6,570,784	4,171,458		10,293,607	2,050,085	4,830,548
5	May	19,812,053	6,993,655	4,440,951		10,956,065	2,182,020	5,142,621
6	Jun	21,509,783	7,592,953	4,826,756		11,894,910	2,369,001	5,589,383
7	Jul	23,999,124	8,471,691	5,388,861		13,271,516	2,643,168	6,240,301
8	Aug	23,000,644	8,119,227	5,162,256		12,719,356	2,533,199	5,977,893
9	Sep	21,334,626	7,531,123	4,788,164		11,798,048	2,349,710	5,544,694
10	Oct	19,514,280	6,888,541	4,379,419		10,791,397	2,149,225	5,071,367
11	Nov	19,678,470	6,946,500	4,416,286		10,882,194	2,167,308	5,114,059
12	Dec	<u>19,027,790</u>	<u>6,716,810</u>	<u>4,270,181</u>		<u>10,522,368</u>	<u>2,095,645</u>	<u>4,944,869</u>
13	Total	242,386,230	85,562,339	55,809,257		\$ 134,039,585	\$ 26,695,450	\$ 64,627,119
						\$ 225,362,154		
14		2003 Revenue Requirement				<u>\$137,856,869</u>	<u>\$27,400,520</u>	<u>\$72,342,982</u>
								<u>\$237,600,371</u>
15		Difference				\$ (3,817,284)	\$ (705,070)	\$ (7,715,863)
								(\$12,238,217)

Notes:

Statement demonstrates that if the rates are not changed, the collections for each GMC service category will fall short of the the revenue requirement. (Line 15).

Multiple rates have been in effect for GMC service categories during 2002, as noted below:

	Control Area Services	Congestion Management (Previously "Interzonal Congestion Scheduling")	Ancillary Services and Real Time Energy Operations (also known as "Market Operations")
Originally filed rate	0.575	0.368	0.957
Settlement rates Jan-Aug 2002	0.553	0.312	0.957
Settlement rates Sept - Oct 2002	0.553	0.312	1.048
Settlement rates Oct - Nov 2002	0.553	0.312	1.158

California Independent System Operator
Statement BJ
Summary Data Tables
December 31, 2003
In Thousands

Line No.	Item	Total	Table	Data Source	Line No.
1	Total Plant in Service				1
2	Intangible Plant in Service	\$211,327		AD	2
3	General Plant in Service	\$53,798		AD	3
4	Accumulated Depreciation and Amortization				4
5	Intangible Depreciation and Amortization	\$162,502		AE	5
6	General Depreciation and Amortization	\$37,670		AE	6
7	Total Deferred Credits	\$1,412		AF	7
8	Unamortized Debt Expense	\$460		AG	8
9	Transmission Expense- O&M	\$71,425		AH	9
10	Customer Accounts Expense	\$9,137		AH	10
11	Customer Service & Information Expense	\$2,392		AH	11
12	Administration & General Expense	\$88,368		AH	12
13	Transmission Expense- Labor	\$36,098		AI	13
14	Customer Accounts Expense - Labor	7,441		AI	14
15	Customer Service & Information Expense - Labor	2,147		AI	15
16	Administration & General Expense - Labor	25,408		AI	16
17	Transmission - Depreciation Expense	0		AJ	17
18	General - Depreciation Expense	\$6,011		AJ	18
19	Intangibles - Depreciation Expense	\$42,564		AJ	19
20	Taxes Other Than Income Taxes	525		AK	20
21	Employer Payroll Tax	3,494		AK	21
22	Working Capital: Average	\$22,198		AL	22
23	Construction Work In Progress- Average- Total	11,851		AM	23
24	Notes Payable - Average	\$0		AN	24
25	Fed Income Tax Deductions - Interest	N/A		AP	25
26	Fed Income Tax Deductions - Other than Interest	N/A		AQ	26
27	Fed Income Tax Adjustments	N/A		AR	27
28	Additional State Income Tax Deduction	N/A		AS	28
29	State Tax Adjustments	N/A		AT	29
30	Other Operating Revenues	\$238,976		AU	30
31	Cost of Capital	4.18%		AV	31
32	Cost of Short Term Debt	\$0		AW	32
33	Allocation of Demand and Capability Data	N/A		BB	33
34	Allocation of Energy and Supporting Data: Billing Determinant in MWh				34
35	Control Area Services	242,386		BD	35
36	Congestion Management	85,562		BD	36
37	Ancillary Services and Real Time Energy Operations	55,809		BD	37
38	Specific Assignment Data	N/A		BE	38
39	Revenue Data to Reflect Changed Rates				39
40	Control Area Services	\$ 137,918		BG	40
41	Congestion Management	\$ 27,380		BG	41
42	Ancillary Services and Real Time Energy Operations	\$ 72,329		BG	42
43	Revenue Data to Reflect Existing Rates				43
44	Control Area Services	\$ 134,040		BH	44
45	Congestion Management	\$ 26,695		BH	45
46	Ancillary Services and Real Time Energy Operations	\$ 64,627		BH	46

California Independent System Operator
Statement BK
Electric Utility Department Cost of Service, Total and as Allocated
For the Year Ending December 31, 2003
In Thousands

Line No.	Description	Amount	Control Area Operations	Congestion & Management	Ancillary Services Real Time Energy Operations	Line No.
1	Grid Management Charge Revenue Collected (Statement AU)	\$237,600	\$137,857	\$27,401	\$72,343	1
2	Operating Expenses					2
3	Transmission (Statement AH)	\$71,425	\$48,311	\$8,560	\$14,554	3
4	Customer Accounts (Statement AH)	9,137	3,797	628	4,713	4
5	Customer Service and Informational Expenses (Statement AH)	2,392	967	222	1,203	5
6	Administrative and General (Statement AH)	88,368	53,708	8,545	26,115	6
7	Taxes Other Than Income Taxes (Statement AK)	416	265	45	106	7
8	Total Operating Expenses	\$171,739	\$107,047	\$18,001	\$46,691	8
9	Less: Other Revenues					9
10	Interest Earnings	\$1,252	\$780	\$131	\$341	10
11	Other Earnings (Statement AU)	1,376	1,331	13	33	11
12		\$2,628	\$2,111	\$143	\$374	12
13	Net Operating Expenses	\$169,111	\$104,936	\$17,857	\$46,317	13
14	Net Revenues	\$68,490	\$32,921	\$9,543	\$26,026	14
15	Less: Debt Service and Cash Funded CapEx (Statement BK)					15
16	Principal Reserve Funding	\$35,300	\$18,048	\$4,084	\$13,168	16
17	Interest Reserve Funding	8,497	\$4,344	\$983	\$3,170	17
18	Cash Funded CapEx	\$22,000	\$9,081	\$5,617	\$7,302	18
19	Total Debt Service and Cash Funded CapEx	\$65,797	\$31,474	\$10,684	\$23,640	19
20	Operating Reserve Contribution	\$2,693	\$1,447	(\$1,141)	\$2,386	20
21	<u>GMC Revenue Collected</u>	<u>\$237,600</u>	<u>\$137,857</u>	<u>\$27,401</u>	<u>\$72,343</u>	21
22	<u>2003 Annual Volume (000 MWh) - By Service</u>		<u>242,386</u>	<u>85,562</u>	<u>55,809</u>	22
23	<u>Grid Management Charge - By Service</u>		<u>\$0.569</u>	<u>\$0.320</u>	<u>\$1.296</u>	23

Note:

The factors used to allocate total ISO costs to the categories of service are documented in the ISO's Cost Allocation Matrix

Line 16,17

Debt service is allocated to ISO service categories based on an analysis of how borrowed funds were (or are anticipated to be) spent.

Line 18

Cash funded capital expenditures of \$22,000, as the ISO does not anticipate an ability to issue bonds in 2003.

Line 20

The ISO collects 25% of debt service as an annual contribution to the operating reserve. As noted elsewhere, excess revenue collected for the operating reserve may be used as a revenue credit in subsequent years. For 2003, a deficiency of \$5,189 from 2001 is recovered. See statement AU.

The Operating Reserve Contribution for 2003 is reconciled as follows:

Total 2002 Debt Service (Line 16&17)	\$43,797
Times: 25% Operating Reserve Collection	0.25
Equals: Operating Reserve Collection	\$ 10,949
Less: Operating Reserve Credit from 2002	\$ 8,257
Equals: Net Operating Reserve Collection, 2003	\$ 2,692

California Independent System Operator
Statement BK1: Support for Cost Allocations by ISO Cost Center: Total Costs
For Year Ended December 31, 2003

Center	FERC Code	FERC Short	Annual Budget	Control Area Services	Congestion Management	Market Ops/ASREO	Control Area Services	Congestion Management	Market Ops/ASREO	Total
1111	9200010	920	525,416	79%	4%	17%	437,850	19,834	94,733	552,417
1111	9210010	921	89,025	63%	11%	26%	55,910	9,877	23,238	89,025
1111	9230010	923	150,000	63%	11%	26%	94,203	16,643	39,154	150,000
1241	5610010	561	949,353	32%	33%	35%	295,153	304,376	322,824	922,353
1311	9200010	920	363,261	58%	10%	31%	211,983	36,974	114,304	363,261
1311	9210010	921	14,860	61%	11%	28%	9,049	1,586	4,225	14,860
1311	9230010	923	65,000	61%	11%	28%	39,583	6,937	18,481	65,000
1321	9200010	920	874,513	47%	8%	45%	414,274	68,128	392,110	874,513
1321	9210010	921	62,900	47%	8%	45%	29,784	4,904	28,212	62,900
1321	9230010	923	1,268,800	47%	8%	45%	600,795	98,920	569,085	1,268,800
1331	9200010	920	746,969	60%	10%	30%	446,578	76,988	223,403	746,969
1331	9210010	921	34,100	60%	10%	30%	20,372	3,519	10,209	34,100
1331	9230010	923	185,000	60%	10%	30%	110,524	19,090	55,386	185,000
1331	9240010	924	1,445,127	60%	10%	30%	863,356	149,124	432,648	1,445,127
1331	9300210	930	132,000	60%	10%	30%	78,860	13,621	39,519	132,000
1351	4081010	408	416,000	64%	11%	25%	264,561	45,413	106,025	416,000
1351	9200010	920	670,231	64%	11%	25%	426,443	73,100	170,687	670,231
1351	9210010	921	78,385	64%	11%	25%	49,850	8,557	19,978	78,385
1351	9230010	923	123,150	64%	11%	25%	78,319	13,444	31,387	123,150
1351	9310010	931	2,508,000	64%	11%	25%	1,595,000	273,790	639,210	2,508,000
1351	9350010	935	2,046,076	64%	11%	25%	1,301,233	223,363	521,480	2,046,076
1361	9200010	920	672,582	64%	11%	25%	427,940	73,357	171,286	672,582
1361	9210010	921	622,260	64%	11%	25%	395,736	67,930	158,594	622,260
1361	9230010	923	10,000	64%	11%	25%	6,360	1,092	2,549	10,000
1361	9310010	931	150,000	64%	11%	25%	95,395	16,375	38,230	150,000
1361	9350010	935	801,310	64%	11%	25%	509,605	87,476	204,229	801,310
1411	9200010	920	96,491	62%	9%	29%	60,078	8,330	28,082	96,491
1411	9210010	921	50,818	62%	9%	29%	31,641	4,387	14,790	50,818
1411	9230010	923	82,550	62%	9%	29%	51,398	7,127	24,025	82,550
1422	9200010	920	243,826	62%	10%	28%	150,508	24,293	69,025	243,826
1422	9210010	921	15,000	62%	10%	28%	9,249	1,496	4,254	15,000
1422	9230010	923	-	0%	0%	0%	-	-	-	-
1422	9350010	935	-	0%	0%	0%	-	-	-	-
1424	9200010	920	883,384	56%	5%	39%	494,695	44,169	344,520	883,384
1424	9210010	921	495,050	67%	7%	26%	333,044	34,016	127,990	495,050
1424	9230010	923	97,000	67%	7%	26%	65,257	6,665	25,078	97,000
1424	9310010	931	9,837,992	67%	7%	26%	6,618,497	675,982	2,543,514	9,837,992
1424	9350010	935	10,466,827	67%	7%	26%	7,041,545	719,190	2,706,093	10,466,827
1431	9200010	920	513,325	63%	10%	27%	323,738	53,378	136,210	513,325
1431	9210010	921	292,195	63%	10%	27%	184,143	30,420	77,632	292,195
1431	9230010	923	164,290	63%	10%	27%	103,537	17,104	43,649	164,290
1431	9310010	931	5,617,310	63%	10%	27%	3,540,070	584,811	1,492,429	5,617,310
1431	9350010	935	-	0%	0%	0%	-	-	-	-
1432	9200010	920	421,218	58%	10%	32%	245,113	40,414	135,691	421,218
1432	9210010	921	27,907	61%	10%	29%	16,940	2,798	8,168	27,907
1433	9200010	920	1,619,376	63%	10%	27%	1,021,288	168,390	429,697	1,619,376
1433	9210010	921	80,308	63%	10%	27%	50,611	8,361	21,337	80,308
1441	5610010	561	25,284,894	60%	11%	29%	15,189,495	2,704,343	7,391,057	25,284,894
1441	9200010	920	166,647	60%	11%	29%	100,110	17,824	48,713	166,647
1441	9210010	921	1,539,118	60%	11%	29%	924,600	164,616	449,901	1,539,118
1441	9230010	923	-	0%	0%	0%	-	-	-	-
1441	9310010	931	2,700,000	60%	11%	29%	1,621,982	288,778	789,240	2,700,000
1441	9350010	935	-	0%	0%	0%	-	-	-	-
1442	9200010	920	2,550,464	56%	9%	35%	1,433,101	236,290	881,073	2,550,464
1442	9210010	921	140,600	56%	9%	35%	78,945	13,042	48,613	140,600
1442	9230010	923	-	0%	0%	0%	-	-	-	-
1451	9200010	920	1,085,035	63%	10%	27%	684,296	112,827	287,911	1,085,035
1451	9210010	921	176,219	63%	10%	27%	111,054	18,346	46,819	176,219
1451	9230010	923	295,000	63%	10%	27%	185,911	30,712	78,377	295,000
1461	5680010	568	2,420,134	100%	0%	0%	2,420,134	-	-	2,420,134
1462	9020010	902	2,589,871	29%	10%	61%	748,656	271,423	1,569,792	2,589,871
1463	5680010	568	336,698	74%	2%	24%	248,723	6,214	81,762	336,698
1466	9020010	902	13,853	62%	9%	29%	8,550	1,298	4,005	13,853
1466	9200010	920	798,532	62%	9%	29%	493,174	74,732	230,626	798,532
1466	9210010	921	38,523	62%	9%	29%	23,776	3,610	11,138	38,523
1467	9200010	920	1,024,772	15%	7%	78%	153,716	71,734	799,322	1,024,772
1467	9210010	921	83,735	15%	7%	78%	12,560	5,861	65,313	83,735
1468	9200010	920	1,242,229	61%	10%	29%	752,770	124,117	365,342	1,242,229
1468	9210010	921	63,900	61%	10%	29%	38,694	6,392	18,814	63,900
1468	9230010	923	80,685	61%	10%	29%	48,858	8,071	23,756	80,685
1469	9200010	920	1,028,420	63%	10%	27%	648,591	106,940	272,889	1,028,420
1469	9210010	921	71,000	63%	10%	27%	44,745	7,392	18,864	71,000
1471	9200010	920	656,644	63%	10%	27%	414,124	68,281	174,239	656,644

California Independent System Operator
Statement BK1: Support for Cost Allocations by ISO Cost Center: Total Costs
For Year Ended December 31, 2003

Center	FERC Code	FERC Short	Annual Budget	Control Area Services	Congestion Management	Market Ops/ASREO	Control Area Services	Congestion Management	Market Ops/ASREO	Total
1471	9210010	921	62,827	63%	10%	27%	39,594	6,541	16,692	62,827
1471	9230010	923	78,940	63%	10%	27%	49,749	8,218	20,973	78,940
1481	9200010	920	1,324,848	56%	9%	35%	744,078	122,684	458,087	1,324,848
1481	9210010	921	56,739	56%	9%	35%	31,843	5,260	19,635	56,739
1481	9230010	923	196,128	56%	9%	35%	110,071	18,184	67,873	196,128
1511	5600010	560	1,028,402	66%	18%	15%	682,860	188,068	157,474	1,028,402
1521	5600010	560	2,517,260	100%	0%	0%	2,517,260	-	-	2,517,260
1542	5610010	561	1,852,094	100%	0%	0%	1,852,094	-	-	1,852,094
1543	5610010	561	1,048,942	100%	0%	0%	1,048,942	-	-	1,048,942
1544	5610010	561	2,632,304	75%	15%	10%	1,974,228	394,846	263,230	2,632,304
1544	5680010	568	164,787	75%	15%	10%	123,590	24,718	16,479	164,787
1545	5610010	561	7,475,549	79%	10%	10%	5,936,666	769,497	769,386	7,475,549
1546	5610010	561	1,310,282	100%	0%	0%	1,310,282	-	-	1,310,282
1547	5610010	561	1,167,246	96%	1%	3%	1,121,155	9,846	36,245	1,167,246
1548	5610010	561	276,147	74%	8%	18%	204,028	22,957	49,161	276,147
1549	5610010	561	3,150,678	62%	24%	14%	1,951,958	769,916	428,804	3,150,678
1554	5610010	561	888,086	82%	0%	18%	729,887	(336)	158,535	888,086
1555	5610010	561	1,069,053	60%	22%	18%	645,155	234,507	189,391	1,069,053
1558	5610010	561	1,856,337	98%	0%	2%	1,813,266	-	43,071	1,856,337
1559	5610010	561	478,644	79%	11%	11%	375,967	51,331	51,345	478,644
1561	5610010	561	1,286,779	100%	0%	0%	1,286,779	-	-	1,286,779
1562	5610010	561	1,279,337	100%	0%	0%	1,279,337	-	-	1,279,337
1563	5610010	561	704,273	60%	10%	30%	422,564	70,427	211,282	704,273
1564	5610010	561	310,053	81%	11%	8%	252,350	33,691	24,013	310,053
1564	5680010	568	25,479	81%	11%	8%	20,716	2,781	1,982	25,479
1565	5610010	561	1,659,550	73%	15%	12%	1,216,873	248,017	194,660	1,659,550
1565	5680010	568	112,600	73%	15%	12%	82,550	16,836	13,214	112,600
1566	5610010	561	532,479	79%	0%	21%	419,554	-	112,925	532,479
1566	5680010	568	41,481	77%	0%	23%	32,085	-	9,396	41,481
1611	9200010	920	344,385	55%	12%	33%	190,022	40,606	113,757	344,385
1611	9210010	921	37,700	57%	11%	32%	21,581	4,201	11,918	37,700
1611	9230010	923	25,000	57%	11%	32%	14,311	2,786	7,903	25,000
1631	9200010	920	3,480,025	62%	10%	28%	2,148,047	350,155	981,822	3,480,025
1631	9210010	921	203,439	62%	10%	28%	125,483	20,496	57,461	203,439
1631	9230010	923	9,584,500	62%	10%	28%	5,911,797	965,599	2,707,104	9,584,500
1641	9200010	920	2,087,287	25%	19%	56%	524,121	390,792	1,172,375	2,087,287
1641	9210010	921	183,478	23%	19%	58%	41,385	35,416	106,677	183,478
1641	9230010	923	873,056	23%	19%	58%	196,924	168,522	507,610	873,056
1642	9210010	921	2,000	9%	25%	66%	184	500	1,316	2,000
1642	9230010	923	638,750	9%	25%	66%	58,891	159,688	420,172	638,750
1651	9210010	921	3,500	63%	11%	26%	2,198	388	914	3,500
1651	9300251	930	44,600	63%	11%	26%	28,010	4,948	11,642	44,600
1651	9300252	930	115,000	63%	11%	26%	72,223	12,759	30,018	115,000
1661	9200010	920	1,201,884	83%	6%	11%	1,001,570	66,771	133,543	1,201,884
1661	9210010	921	52,000	82%	5%	13%	42,544	2,860	6,596	52,000
1661	9230010	923	254,800	82%	5%	13%	208,465	14,012	32,322	254,800
1662	9020010	902	432,275	83%	5%	11%	360,447	23,561	48,268	432,275
1711	9010010	901	188,967	37%	18%	45%	69,652	33,880	85,436	188,967
1711	9030010	903	76,905	37%	18%	45%	28,346	13,788	34,770	76,905
1721	9030010	903	369,577	33%	6%	61%	120,872	21,496	227,210	369,577
1722	9030010	903	89,360	19%	7%	74%	16,945	6,252	66,164	89,360
1722	9050010	905	439,760	19%	7%	74%	83,552	30,783	325,425	439,760
1723	9030010	903	926,927	90%	0%	10%	834,235	-	92,693	926,927
1724	9030010	903	1,190,794	17%	8%	75%	201,745	93,038	896,011	1,190,794
1725	9030010	903	1,327,052	16%	7%	77%	206,887	96,618	1,023,547	1,327,052
1731	9030010	903	1,491,926	75%	2%	23%	1,116,734	35,840	339,352	1,491,926
1741	9080010	908	2,392,472	40%	9%	50%	967,171	222,126	1,203,175	2,392,472
1751	5680010	568	974,907	20%	30%	50%	194,981	292,472	487,453	974,907
1752	5680010	568	2,452,454	29%	30%	41%	710,758	735,736	1,005,960	2,452,454
1753	5680010	568	2,137,489	33%	28%	40%	696,378	592,238	848,874	2,137,489
1755	5680010	568	976,030	26%	10%	64%	252,145	98,553	625,332	976,030
1756	5680010	568	2,189,942	37%	33%	30%	810,447	722,838	656,656	2,189,942
1757	5680010	568	862,344	22%	31%	47%	192,356	266,428	403,559	862,344
1811	9200010	920	378,296	63%	11%	26%	239,044	40,035	99,217	378,296
1811	9210010	921	31,800	63%	11%	26%	20,077	3,366	8,357	31,800
1811	9230010	923	105,000	63%	11%	26%	66,291	11,115	27,594	105,000
1821	9200010	920	473,097	64%	11%	25%	301,014	51,599	120,483	473,097
1821	9210010	921	205,600	64%	11%	25%	130,754	22,445	52,401	205,600
1821	9230010	923	207,500	64%	11%	25%	131,963	22,652	52,885	207,500
1831	9200010	920	499,258	64%	11%	25%	317,660	54,453	127,146	499,258
1831	9210010	921	5,000	64%	11%	25%	3,180	546	1,274	5,000
1831	9230010	923	211,000	64%	11%	25%	134,189	23,034	53,777	211,000
1841	9200010	920	2,780,150	63%	11%	26%	1,746,365	308,338	725,447	2,780,150

California Independent System Operator
Statement BK1: Support for Cost Allocations by ISO Cost Center: Total Costs
For Year Ended December 31, 2003

Center	FERC Code	FERC Short	Annual Budget	Control Area Services	Congestion Management	Market Ops/ ASREO	Control Area Services	Congestion Management	Market Ops/ ASREO	Total
1841	9210010	921	676,225	63%	11%	26%	424,684	75,028	176,513	676,225
1841	9230010	923	1,291,000	63%	11%	26%	810,776	143,237	336,987	1,291,000
1841	9300110	930	100,000	63%	11%	26%	62,802	11,095	26,103	100,000
1851	9200010	920	609,522	63%	10%	27%	382,988	62,937	163,597	609,522
1851	9210010	921	14,500	63%	10%	27%	9,104	1,499	3,897	14,500
1851	9230010	923	60,000	63%	10%	27%	37,673	6,203	16,124	60,000
1861	9200010	920	611,491	63%	10%	27%	384,225	63,140	164,126	611,491
1861	9210010	921	100,625	63%	10%	27%	63,181	10,403	27,041	100,625
1861	9230010	923	745,000	63%	10%	27%	467,776	77,023	200,201	745,000
			171,739,129	62.3%	10.5%	27.2%	107,047,267	18,000,872	46,690,990	171,739,129

Note:

Derivation of the allocation factors for the ISO's costs are documented on the ISO's Cost Allocation Matrix.
This worksheet documents the mapping, or translation of the cost percentages to the FERC accounts used in this Section 35.13 filing.

California Independent System Operator
Statement BK2: Support for Cost Allocations by ISO Cost Center: Salary Costs
For Year Ended December 31, 2003

Center	FERC Code	FERC Short	Salaries	Control Area Services	Interzonal Congestion Scheduling	Ancillary Services and Real Time Energy Operations	Control Area Services	Interzonal Congestion Scheduling	Ancillary Services and Real Time Energy Operations	Total
1111	9200010	920	778,416	63%	11%	26%	489,099	86,288	203,029	778,416
1241	5610010	561	922,353	32%	33%	35%	295,153	304,376	322,824	922,353
1311	9200010	920	439,007	59%	10%	31%	258,109	45,058	135,840	439,007
1321	9200010	920	874,513	47%	8%	45%	414,274	68,128	392,110	874,513
1331	9200010	920	746,969	60%	10%	30%	446,578	76,988	223,403	746,969
1351	9200010	920	670,231	64%	11%	25%	426,443	73,100	170,687	670,231
1361	9200010	920	672,582	64%	11%	25%	427,940	73,357	171,286	672,582
1411	9200010	920	408,756	62%	9%	29%	254,504	35,289	118,963	408,756
1422	9200010	920	243,826	62%	10%	28%	150,508	24,293	69,025	243,826
1424	9200010	920	883,384	56%	5%	39%	494,695	44,169	344,520	883,384
1431	9200010	920	513,325	63%	10%	27%	323,738	53,378	136,210	513,325
1432	9200010	920	421,218	58%	10%	32%	245,113	40,414	135,691	421,218
1433	9200010	920	1,619,376	63%	10%	27%	1,021,288	168,390	429,697	1,619,376
1441	9200010	920	166,647	60%	11%	29%	100,110	17,824	48,713	166,647
1442	9200010	920	2,550,464	56%	9%	35%	1,433,101	236,290	881,073	2,550,464
1451	9200010	920	1,085,035	63%	10%	27%	684,296	112,827	287,911	1,085,035
1461	5680010	568	2,285,457	100%	0%	0%	2,285,457	-	-	2,285,457
1462	9020010	902	1,887,098	29%	11%	60%	538,782	213,874	1,134,442	1,887,098
1463	5680010	568	305,396	74%	2%	24%	225,427	5,626	74,343	305,396
1466	9200010	920	798,532	62%	9%	29%	493,174	74,732	230,626	798,532
1467	9200010	920	1,024,772	15%	7%	78%	153,716	71,734	799,322	1,024,772
1468	9200010	920	1,242,229	61%	10%	29%	752,770	124,117	365,342	1,242,229
1469	9200010	920	1,028,420	63%	10%	27%	648,591	106,940	272,889	1,028,420
1471	9200010	920	656,644	63%	10%	27%	414,124	68,281	174,239	656,644
1481	9200010	920	1,324,848	56%	9%	35%	744,078	122,684	458,087	1,324,848
1511	5600010	560	381,647	66%	18%	15%	253,414	69,793	58,440	381,647
1521	5600010	560	2,133,260	100%	0%	0%	2,133,260	-	-	2,133,260
1542	5610010	561	1,651,520	100%	0%	0%	1,651,520	-	-	1,651,520
1543	5610010	561	986,442	100%	0%	0%	986,442	-	-	986,442
1544	5610010	561	2,530,104	75%	15%	10%	1,897,578	379,516	253,010	2,530,104
1544	5680010	568	164,787	75%	15%	10%	123,590	24,718	16,479	164,787
1545	5610010	561	7,153,049	79%	10%	10%	5,680,097	736,476	736,476	7,153,049
1546	5610010	561	1,262,282	100%	0%	0%	1,262,282	-	-	1,262,282
1547	5610010	561	302,246	99%	0%	1%	300,124	-	2,121	302,246
1548	5610010	561	190,647	73%	9%	18%	138,532	17,181	34,934	190,647
1549	5610010	561	2,005,693	62%	25%	13%	1,245,570	494,212	265,911	2,005,693
1554	5610010	561	629,036	81%	0%	19%	511,704	-	117,332	629,036
1555	5610010	561	1,018,573	60%	22%	18%	614,582	223,670	180,321	1,018,573
1558	5610010	561	1,192,487	97%	0%	3%	1,161,034	-	31,453	1,192,487
1559	5610010	561	468,130	79%	11%	11%	367,674	50,228	50,228	468,130
1561	5610010	561	1,081,273	100%	0%	0%	1,081,273	-	-	1,081,273
1562	5610010	561	1,221,497	100%	0%	0%	1,221,497	-	-	1,221,497
1563	5610010	561	610,873	60%	10%	30%	366,524	61,087	183,262	610,873
1564	5610010	561	268,553	81%	11%	8%	218,353	29,307	20,893	268,553
1564	5680010	568	25,479	81%	11%	8%	20,716	2,781	1,982	25,479
1565	5610010	561	1,622,950	73%	15%	12%	1,189,833	242,660	190,457	1,622,950
1565	5680010	568	112,600	73%	15%	12%	82,550	16,836	13,214	112,600
1566	5610010	561	400,579	77%	0%	23%	309,841	-	90,737	400,579
1566	5680010	568	41,481	77%	0%	23%	32,085	-	9,396	41,481
1611	9200010	920	489,683	56%	12%	33%	273,195	56,798	159,689	489,683
1631	9200010	920	3,480,025	62%	10%	28%	2,148,047	350,155	981,822	3,480,025
1641	9200010	920	2,087,287	25%	19%	56%	524,121	390,792	1,172,375	2,087,287
1661	9200010	920	1,201,884	83%	6%	11%	1,001,570	66,771	133,543	1,201,884
1662	9020010	902	373,275	83%	6%	11%	311,063	20,738	41,475	373,275
1711	9010010	901	335,137	37%	18%	45%	123,528	60,086	151,522	335,137
1711	9030010	903	76,905	37%	18%	45%	28,346	13,788	34,770	76,905
1721	9030010	903	363,577	33%	6%	61%	118,843	21,153	223,582	363,577
1722	9050010	905	432,910	19%	7%	74%	82,253	30,304	320,353	432,910
1723	9030010	903	697,249	90%	0%	10%	627,524	-	69,725	697,249
1724	9030010	903	984,766	17%	8%	75%	167,078	77,158	740,530	984,766
1725	9030010	903	1,084,508	16%	7%	77%	168,944	78,684	836,880	1,084,508
1731	9030010	903	1,205,918	74%	2%	23%	897,732	28,901	279,285	1,205,918
1741	9080010	908	2,147,056	41%	9%	50%	874,387	198,855	1,073,814	2,147,056
1751	5680010	568	346,686	20%	30%	50%	69,337	104,006	173,343	346,686

California Independent System Operator
Statement BK2: Support for Cost Allocations by ISO Cost Center: Salary Costs
For Year Ended December 31, 2003

Center	FERC Code	FERC Short	Salaries	Control Area Services	Interzonal Congestion Scheduling	Ancillary Services and Real Time Energy Operations	Control Area Services	Interzonal Congestion Scheduling	Ancillary Services and Real Time Energy Operations	Total
1752	5680010	568	2,253,454	29%	30%	41%	653,502	676,036	923,916	2,253,454
1753	5680010	568	1,756,573	33%	28%	40%	575,615	485,325	695,633	1,756,573
1755	5680010	568	772,451	26%	10%	64%	200,837	77,245	494,368	772,451
1756	5680010	568	2,027,785	37%	33%	30%	750,280	669,169	608,335	2,027,785
1757	5680010	568	613,810	21%	31%	48%	129,885	191,868	292,055	613,809
1811	9200010	920	409,888	63%	11%	26%	258,989	43,379	107,520	409,888
1821	9200010	920	473,097	64%	11%	25%	301,014	51,599	120,483	473,097
1831	9200010	920	499,258	64%	11%	25%	317,660	54,453	127,146	499,258
1841	9200010	920	1,219,150	63%	11%	26%	766,023	135,144	317,983	1,219,150
1851	9200010	920	609,522	63%	10%	27%	382,988	62,937	163,597	609,522
1861	9200010	920	611,491	63%	10%	27%	384,225	63,140	164,126	611,491
			77,558,029	62.8%	11.1%	26.1%	48,708,133	8,605,107	20,244,789	77,558,028

Note:

Derivation of the allocation factors for the ISO's costs are documented on the ISO's Cost Allocation Matrix.
This worksheet documents the mapping, or translation of the cost percentages to the FERC accounts used in this Section 35.13 filing.
This is an extract of labor/salary related costs only.

1756 Allocated differently to balance to overall CAM.

California Independent System Operator
Statement BK3 - Support for Cost Allocations by ISO Cost Center
For Year Ended December 31, 2003
Overall Departmental Costs

Cost Center	Cost Center Name	Control Area Services	Congestion Management	ASRE/OMO	Total	Control Area Services	Congestion Management	ASRE/OMO
1111	CEO - General	76.8%	6.1%	20.6%	\$ 764,441	\$ 587,963	\$ 46,354	\$ 157,125
1241	MD02	31.1%	32.1%	34.0%	949,353	295,153	304,376	322,824
1311	CFO - General	58.8%	10.3%	30.9%	443,121	280,815	45,497	137,009
1321	Accounting	47.4%	7.8%	44.8%	2,206,213	1,044,854	171,952	989,407
1331	Financial Planning and Treasury	59.8%	10.3%	29.9%	2,543,196	1,519,890	262,342	761,164
1351	Facilities	63.6%	10.9%	25.5%	5,841,842	3,715,408	637,667	1,488,767
1361	Office Administration	63.6%	10.9%	25.5%	2,256,152	1,435,035	246,230	574,888
1411	Chief Information Officer- General	62.3%	8.6%	29.1%	229,859	143,118	19,845	66,897
1422	Corporate & Enterprise Applications - General	61.7%	10.0%	28.3%	258,626	159,758	25,789	73,779
1424	Asset Management	86.8%	6.8%	26.4%	21,780,253	14,553,037	1,480,021	5,747,195
1431	End User Support	63.0%	10.4%	26.6%	6,587,120	4,151,487	685,714	1,749,919
1432	Computer Operations - General	58.3%	9.6%	32.0%	449,125	262,053	43,213	143,859
1433	Network Operations	63.1%	10.4%	26.5%	1,899,584	1,071,898	176,751	451,034
1441	Outsourced Contracts	60.1%	10.7%	29.2%	29,690,659	17,836,187	3,175,561	8,678,911
1442	Production Support	56.2%	9.3%	34.5%	2,691,064	1,512,046	249,332	929,686
1451	Information Security	63.1%	10.4%	26.5%	1,556,254	981,262	161,885	413,107
1461	Control Systems	100.0%	0.0%	0.0%	2,420,134	2,420,134	-	-
1462	Field Data Acquisition System (FDAS)	28.9%	10.5%	60.6%	2,589,871	748,656	271,423	1,569,792
1463	Operations Applications - General	73.9%	1.8%	24.3%	336,698	248,723	8,214	81,762
1466	Enterprise Applications	81.8%	9.4%	28.9%	850,908	525,500	79,639	245,769
1467	Settlement Systems Services	15.0%	7.0%	78.0%	1,108,507	166,276	77,596	864,636
1468	Corporate Application Support	60.6%	10.0%	29.4%	1,386,814	840,323	138,581	407,911
1469	Analytical and Reporting	63.1%	10.4%	26.5%	1,099,420	693,336	114,332	291,752
1471	IT Planning	63.1%	10.4%	26.5%	798,411	503,466	83,040	211,904
1481	Markets and Scheduling	56.2%	9.3%	34.6%	1,577,715	885,992	146,128	545,595
1511	VP Grid Operations - General	66.4%	18.3%	15.3%	1,028,402	682,860	188,068	157,474
1521	Grid Planning	100.0%	0.0%	0.0%	2,517,260	2,517,260	-	-
1542	Outage Coordination	100.0%	0.0%	0.0%	1,852,094	1,852,094	-	-
1543	Loads and Resources	100.0%	0.0%	0.0%	1,048,942	1,048,942	-	-
1544	Real-Time Scheduling	75.0%	15.0%	10.0%	2,797,090	2,097,818	419,564	279,709
1545	Grid Operations - General	79.4%	10.3%	10.3%	7,475,549	5,936,666	769,497	769,386
1546	Security Coordination	100.0%	0.0%	0.0%	1,310,282	1,310,282	-	-
1547	Engineering and Maintenance - General	96.1%	0.6%	3.1%	1,167,246	1,121,155	9,846	36,245
1548	OSAT Group - General	73.9%	8.3%	17.8%	276,147	204,028	22,957	49,161
1549	Operations Training	62.0%	24.4%	13.6%	3,150,678	1,951,958	769,916	428,804
1554	Special Projects Engineering	82.2%	0.0%	17.9%	888,086	729,887	(336)	158,535
1555	Operations Support Group	60.3%	21.9%	17.7%	1,069,053	645,155	234,507	189,391
1558	Transmission Maintenance	97.7%	0.0%	2.3%	1,856,337	1,813,266	51,331	43,071
1559	Operations Application Support	78.5%	10.7%	10.7%	478,844	375,967	-	-
1561	Operations Engineering South	100.0%	0.0%	0.0%	1,286,779	1,286,779	-	-
1562	Operations Engineering North	100.0%	0.0%	0.0%	1,279,337	1,279,337	-	-
1563	Coordinated Operations	60.0%	10.0%	30.0%	704,273	422,564	70,427	211,282
1564	Operations Scheduling - General	81.4%	10.9%	7.7%	335,532	273,066	36,471	25,995
1565	Pre-Scheduling and Support	73.3%	14.9%	11.7%	1,772,149	1,299,423	264,852	207,874
1566	Regional Coordination - General	78.7%	0.0%	21.3%	573,960	451,640	-	122,321
1611	VP General Counsel - General	55.5%	11.7%	32.8%	407,085	225,914	47,593	133,578
1631	Legal and Regulatory	61.7%	10.1%	28.2%	13,267,964	8,185,327	1,336,250	3,746,386
1641	Market Analysis	24.3%	18.9%	56.8%	3,143,821	762,429	594,730	1,786,662
1642	MSC	9.2%	25.0%	65.8%	640,750	59,075	160,188	421,488
1651	Board of Governors	62.8%	11.1%	26.1%	163,100	102,430	18,096	42,574
1661	Compliance - General	83.0%	5.5%	11.4%	1,508,684	1,252,579	83,643	172,462
1662	Compliance - Audits	83.4%	5.5%	11.2%	432,275	360,447	23,561	48,268
1711	VP Market Services - General	36.9%	17.9%	45.2%	265,872	97,998	47,668	120,206
1721	Billing and Settlements-General	32.7%	5.8%	61.5%	369,577	120,872	21,496	227,210
1722	Application Support	19.0%	7.0%	74.0%	529,120	100,497	37,035	391,589
1723	Tariff and Contract Implementation	90.0%	0.0%	10.0%	926,927	834,235	-	92,693
1724	BBS - PSS	16.9%	7.8%	75.2%	1,190,794	201,745	93,038	896,011
1725	BBS - FSS	15.6%	7.3%	77.1%	1,327,052	206,887	96,818	1,023,547
1731	Contracts and Special Projects	74.9%	2.4%	22.7%	1,491,926	1,116,734	35,840	339,352
1741	Client Relations	40.4%	9.3%	50.3%	2,392,472	967,171	222,126	1,203,175
1751	Market Operations - General	20.0%	30.0%	50.0%	974,907	194,981	292,472	487,453
1752	Manager of Markets	29.0%	30.0%	41.0%	2,452,454	710,758	735,736	1,005,960
1753	Market Engineering	32.8%	27.7%	39.7%	2,137,489	696,378	582,238	848,874
1755	Business Solutions	25.8%	10.1%	64.1%	976,030	252,145	98,553	625,332
1756	Market Quality - General	37.0%	33.0%	30.0%	2,189,942	810,447	722,838	656,656
1757	Market Integration	22.3%	30.9%	46.8%	862,344	192,356	266,428	403,559
1811	VP Corporate and Strategic Development - General	63.2%	10.6%	26.2%	515,096	325,411	54,516	135,168
1821	Communications	63.6%	10.9%	25.5%	886,197	563,731	96,696	225,769
1831	Strategic Development	63.6%	10.9%	25.5%	715,258	455,028	78,033	182,197
1841	Human Resources	62.8%	11.1%	26.1%	4,847,375	3,044,628	537,698	1,265,050
1851	Project Office	62.8%	10.3%	26.8%	684,022	429,766	70,639	183,617
1861	Regulatory Policy	62.8%	10.3%	26.9%	1,457,116	915,183	150,566	391,367
		62.3%	10.5%	27.2%	171,739,129	107,047,267	18,000,872	46,690,990

**California Independent System Operator
Statement BK4_Operating Reserve
Calculation of Operating & Capital Reserve Account Balance as of 12/2001**

Per 11/2/2001 Filing									
	CAS	CONG	Market Ops/ ASREO	Total	CAS	CONG	Market Ops/ ASREO	Total	Difference
1 Beginning Reserve Balance, 1/1/2001	9,806	1,839	8,784	20,429	9,806	1,839	8,784	20,429	
2 Calculation of Contribution to Reserve from Operations									
3 Revenue:									
4 GNC Rates, 2001 Revenue	100,095	16,771	101,226	218,091	100,314	16,936	101,038	218,288	
5 Other (Interest Income, WSCC reimbursement)	2,240	199	1,201	3,640	2,847	365	1,745	4,957	
5a Other (non cash items)									
6 Expenses:									
7 O&M	(83,956)	(12,109)	(67,736)	(163,800)	(81,901)	(12,618)	(62,226)	(156,745)	
7a O&M: Internally Capitalized Labor Costs									
8 Debt Service	(18,619)	(5,509)	(21,783)	(45,911)	(19,025)	(5,630)	(22,258)	(46,913)	
9 Contribution to Operating Reserve	(240)	(648)	12,908	12,020	2,117	(969)	18,192	19,339	
10 Other Reserve Uses									
11 Use of Reserve for CapEx	(7,248)	(513)	(5,068)	(12,829)	(10,994)	(779)	(7,686)	(19,459)	
12 Amendment 33 Fines (per original filing)	2,400	450	2,150	5,000	2,400	450	2,150	5,000	
13 Amendment 33 Fines (additional collections)					17,976	3,371	16,104	37,450	
15 Ending Reserve Balance	4,718	1,127	18,775	24,620	21,305	3,912	37,543	62,759	
16 Less: Reserve Requirement (15% of 2002 Budget, 1	14,962	2,848	8,418	26,228					
17 FY2002 Operating Budget	99,747	18,985	56,123	174,855					
18 Equals: Revenue Credit Available	(10,244)	(1,720)	10,356	(1,608)					

Reference	General Notes	Allocation Notes	CAS	CONG	Market Ops/ ASREO	Total
	Per 2001 Section 35 Filing.		48.0%	9.0%	43.0%	100.0%
197	2001 Collections, updated from 11/2/2001 filing.		46.0%	7.8%	46.3%	100.0%
1,317	Updated from 11/2/2001 filing.	Security coordinator fees assigned to CAS, remainder (mainly interest) spread proportionately.	57.4%	7.4%	35.2%	100.0%
(247)	Non cash items (arbitrage rebate liability)	Spread proportionately.	48.0%	9.0%	43.0%	100.0%
7,055	Updated based on actual 2001 results. Excludes internally capitalized labor cost.	Per Section 35.13 filing Period I data for 2001	52.3%	8.1%	39.7%	100.0%
(1,002)	Non 2001 bonds were issued. Budgeted Debt service was \$50,513 (\$32,233 principal plus \$11,785 interest) less \$8,494 on 2001 bonds, plus variance of interest expense of \$2,895. Non-cash interest expense item for \$3,052 excluded from calculation (FAS 133 mark to market)	Variance spread proportionately. Allocation based on filed 2001 debt service allocation factors.	40.6%	12.0%	47.4%	100.0%
(6,630)	Total 2001 spending of \$25,800 plus \$1617 internally capitalized labor cost. Of this amount, \$7,958 is funded from 2000 bond proceeds, balance from Reserve.	Allocation per 11/2/2001 filing, Exh. 9, page 8 of 10	56.3%	4.0%	39.5%	100.0%
-	Actual fines provided toward 2002 rates per Reserve post-11/2/2001 filing (based on assessment as of April 2002.)	Allocated based on proportion of Same as above.	48.0%	9.0%	43.0%	100.0%
37,450	Additional fines recognized in Operating Reserve post-11/2/2001 filing (based on assessment as of April 2002.)	Same as above.	48.0%	9.0%	43.0%	100.0%

California Independent System Operator
Statement BK4_Operating Reserve

Calculation of Available Revenue Credit for 2003

	Budget			Actual/Forecast			Difference	General Notes	Allocation Notes	Market		
	CAS	CONG	Market Ops/ ASREQ	CAS	CONG	Market Ops/ ASREQ				CAS	CONG	Market Ops/ ASREQ
1 Beginning Reserve Balance, 1/1/2002	\$ 21,305	\$ 3,912	\$ 37,543	\$ 21,305	\$ 3,912	\$ 37,543				\$ 21,305	\$ 3,912	\$ 37,543
2 Calculation of Contribution to Reserve from Operations												
3 Revenue:												
4 GMC Rates: 2002 Calendar Year Revenue	141,815	27,791	75,188	132,866	29,105	62,364	224,334	(20,460) Per pending 2002 GMC settlement, revenue requirements per category are: CAS: \$138,586, CONG: \$27,787, ASREQ: \$72,827, or total of \$239,200. Based on "black box" settlement rates, total collections were to be: CAS: \$136,254, CONG: \$27,787, ASREQ: \$ 63,375, or total of \$227,417. Actual collections differ due to changes in volume.	Actual 2002 forecasted collections.	59.2%	13.0%	27.8%
5 Other	1,983	146	480	2,473	311	1,024	3,808	1,198 Interest exceeds budget due to higher balances held, offset by lower interest rates.		64.9%	8.2%	26.9%
6 Expenses:												
7 O&M	(101,781)	(19,129)	(56,555)	(95,770)	(18,019)	(53,224)	(167,014)	10,451 Actual expenses assumed to be approximately \$5.0 million under \$171.8 million spending target, and \$10.7 million under original 11/2/2001 filed budget.	Allocation: Per 11/2/2001 filing (CAM: Exh. ISO04, page 149 of 161, Line 227)	57.3%	10.8%	31.9%
8 Debt Service	(21,012)	(5,152)	(21,859)	(20,092)	(4,481)	(19,938)	(44,510)	3,513 Actual debt service does not include \$20 million planned 2002 offering. Principal & interest on 2002 bond offering would have been \$3,513. Principal & interest on existing debt service is \$44,510.	Allocation: Actual 2002: budget less non-issued 2002 debt as allocated in CAM.	45.1%	10.1%	44.8%
8a Cash Funded CapEx	(5,559)	(645)	(2,096)	(5,559)	(645)	(2,096)	(8,301)	- Additional use of reserve for CapEx is shown below.	Allocation per 11/2/2001 filing, cash funded CapEx. Exh. ISO-4, page 152 of 161.	67.0%	7.8%	25.3%
9 Contribution to Operating Reserve	15,446	3,011	(4,842)	13,918	6,270	(11,870)	8,318					
10 Other Reserve Uses												
11 Use of Reserve for CapEx (above budgeted Cash Funded CapEx)				(3,589)	(2,617)	(7,494)	(13,699)	(13,699) Use of reserve is based on current forecast of total 2002 CapEx Spending of:	Allocation to GMC categories is per 11/2/2001 filing. Exh. ISO-4, page 152 of 161.	26.2%	19.1%	54.7%
12 Amendment 33 Fines (adjustment based on new MMCP)				(11,136)	(2,088)	(9,976)	(23,200)	22,000 Reduced fines, due to lower MMCP in FERC refund proceeding.	Allocation same as above, 2001 schedule.	48.0%	9.0%	43.0%
12a Reallocation of Fines per 2002 GMC Settlement				(2,389)	(207)	2,596	(0)	Reallocation per terms of 2002 GMC Settlement	Up to \$9 million reallocated per 2002 GMC settlement			
13 Interest on Refunds from 2002 GMC Settlement				(46)	(29)	(85)	(160)	(160) Anticipated interest payable on 2002 GMC settlement	Apportioned according to relative share of refunds.	29.0%	18.0%	53.0%
14 Net Increase in Operating Reserve	15,446	3,011	(4,842)	(3,243)	1,329	(26,828)	(28,742)					
15 Ending Reserve Balance	36,751	6,922	32,701	18,062	5,241	10,715	34,018					
16 Less: Reserve Requirement (15% of 2003 Budget)	16,066	2,694	7,001	13,911	2,834	9,016	25,761					
17 FY2003 Operating Budget	107,105	17,958	46,675	92,739	18,891	60,109	171,739					
18 Equals: Revenue Credit Available	\$ 20,685	\$ 4,229	\$ 25,700	\$ 4,151	\$ 2,407	\$ 1,698	\$ 8,257					

California Independent System Operator
Statement BL
Rate Design Information
December 31, 2003

Rate design is essentially unchanged from 2001 filed GMC.

2002 GMC settlement provided for three GMC service categories, with billing determinants the same as in 2001.

The cost allocation matrix provides an overview of the cost allocation process to calculation revenue requirements for each GMC service category.

California Independent System Operator
Statement BM
Construction Program Statement
December 31, 2003

The California ISO is not requesting a return on assets under construction.

During 2003, the ISO will have software and other assets under-development.
See Statement AM for details.

**Cost Allocation Matrix
And
Documentary Support**



CALIFORNIA ISO

2003 COST ALLOCATION MATRIX

November 8, 2002

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APPENDICES

- A. 2003 Capital Projects
- B. Operating Reserve Calculation
- C. Cost Allocation Matrix

I. OVERVIEW OF COST ALLOCATION PROCESS

This section provides an overview of the cost allocation matrix, a table which summarizes the California Independent System Operator's ("ISO") 2003 operating budget according to the three unbundled service categories:

- Control Area Services, abbreviated as "CAS"
- Congestion Management, abbreviated as "CONG"
- Ancillary Services and Real-Time Energy Operations (abbreviated as or "ASREO" or "Market Operations") The application of this charge to 50% of A/S self-provision is eliminated in 2003 (per the pending 2002 GMC Settlement.)

A description of the three categories follows in the next section, "ISO Unbundled Service Category Descriptions." The cost allocation matrix lists all ISO costs that are elements of the grid management charge, including operating costs and debt service, and the effect of the operating reserve.

The operating costs are organized according to "cost centers"¹ and are grouped according to categories called "Departmental Roll-Ups." For example, the following cost centers: "1521 Grid Planning", "1542 Outage Coordination", and "1543 Operations Engineering", are included in the "Operations Direct" Departmental Roll-up. The budgeted amounts for each cost center are either directly assigned to the three unbundled service categories or are allocated to the categories in the cost allocation matrix.

The ISO has continued to refine the cost-unbundling process since 2001, when the ISO implemented an unbundled Grid Management Charge. For that year, directors and managers from each cost center assigned their overall costs to the three unbundled service categories. Certain costs related to department overhead, overall corporate overhead, or services that benefit multiple departments and functions were allocated based overall operating costs or headcount. Beginning for budget year 2002, managers and directors of each cost center assign each expense line item within their cost center to the unbundled categories or a general category. This refinement provides an enhanced level of accuracy in the documentation of the allocation percentages for each cost center.

Operating and Maintenance Budget Costs

Cost centers are grouped according to "Direct" and "Indirect" Departmental Rollups. Cost centers that fall within a "Direct" Department Rollup are allocated by direct assignment. Cost centers that fall within an "Indirect" Department Rollup are allocated by based on the results of the direct assignments. Descriptions of the direct and indirect allocation methodologies are presented below:

Directly Assigned Costs:

Direct costs are those that are directly related to one or more of the three unbundled service categories. Each expense line item within the directly assigned cost center is allocated according to ratios provided by the cost center's manager or director. The costs are then totaled for each of the three unbundled service categories. The total for each unbundled service category within the cost center is then divided by the total amount budgeted for the cost center to arrive at the cost center's overall allocation percentages.

Managers and directors of cost centers with directly assigned costs also have the option to allocate a percentage of their overall costs to a "general" category. Costs in this category include those that support several aspects of the work done in their cost center. These costs are subsequently spread over the three unbundled service categories.

¹ Cost centers are synonymous with departments. All O&M costs are assigned to a cost center in the ISO's Oracle based accounting system.

The simplified example below shows how costs for "Cost Center X " are allocated to the three unbundled serve categories. Note that the factors are provided for each subcomponent of these expenses. For example, each staff person in a department is directly assigned to the unbundled categories.

Step 1: Managers provide ratios for each line item.

Cost Center X	Total \$s		% CAS	% CONG	% ASREO	% General
Salaries	\$100	=	25%	25%	25%	25%
Travel	\$100	=	25%	25%	50%	

Step 2: Budgeted costs are totaled for each unbundled service category.

Cost Center X	Total \$s		CAS \$s	CONG \$	ASREO\$	General \$s
Salaries	\$100	=	\$25	\$25	\$25	\$25
Travel	\$100	=	\$25	\$25	\$50	
Total	\$200	=	\$50	\$50	\$75	\$25

Step 3: Allocation percentages for general dollars are calculated.

Cost Center X	Total		CAS	CONG	ASREO
Total amount: (Without General)	\$175	=	\$50	\$50	\$75
Allocation percentages (Without General)	100%	=	28.57%	28.57%	42.86%

Step 4: General dollars are allocated to the three unbundled service categories.

General

CAS: $\$25 \times 28.57\% = \7.14
 CONG: $\$25 \times 28.57\% = \7.14
 ASREO: $\$25 \times 42.86\% = \10.71

Cost Center X	Total \$		CAS \$	CONG \$	ASREO \$
General Costs	\$25	--->	\$7.143	\$7.143	\$10.714

Step 5: Costs are totaled for each unbundled service category.

Cost Center X	Total		CAS	CONG	ASREO
Total Without General:	\$175		\$50	\$50	\$75
General Costs	\$25	--->	\$7.143	\$7.143	\$10.714
Total	\$200	=	\$57.143	\$57.143	\$85.714

Step 6: Allocation Percentages are computed for the cost center.

Cost Center X	Total		CAS	CONG	ASREO
Total	\$200	=	\$57.143	\$57.143	\$85.714
Allocation percentages	100%	=	28.57%	28.57%	42.86%

Indirect Costs

Cost centers that provide services that cannot be directly assigned to the unbundled service categories are allocated in a different manner. Allocation factors for these indirect costs are developed using five approaches:

- Allocated Based on Department Direct Costs: Cost centers that are directly related to specific departments are allocated based on those department's direct costs. For example, costs within the Indirect Operations Departmental Roll-up are allocated according to the Direct Operations Departmental Rollup allocation factors. Correspondingly, cost centers included in the Indirect Information Technology Departmental Rollup are allocated according to the Direct Information Technology Departmental Rollup.
- Allocated Based on Supervised Departments' Costs: Cost centers that are directly related to specific departments which the cost center supervises are allocated based on those departments' direct costs.
- Allocated based on Direct Operating Costs: – Cost centers which involve services that benefit multiple departments are allocated based on total direct operating costs of those departments. For example, cost center 1631, Legal & Regulatory, serves the entire company, and is thus allocated according to ratios of direct operating costs.
- Allocated Based on Labor Dollar Ratios: Cost centers which benefit multiple departments that are more closely related to employees than overall direct operating costs are allocated based on labor dollars ratios. For example, 1841, Human Resources, is allocated to the three unbundled services based on labor dollar ratios.
- Allocated based on Labor Dollar Ratios – Special: – Cost center 1441, Vendor Management, is allocated using a modified labor dollar ratio approach. The methodology for this is shown in the cost allocation matrix, and is described later in this document.

The cost centers and the allocation methodologies are listed in the table that follows, "Allocation Descriptive Detail". Note, however, that even these indirect cost centers may, and have, assigned individual costs directly to the unbundled service categories where appropriate.

Other costs or revenues which are elements of the ISO's overall revenue requirement include:

	<u>Allocated:</u>
Interest revenues	Overall O&M allocation results
SC application & other fees	Overall O&M allocation results
WECC Security Coordination Reimbursement	100% CAS

Capital Costs: Debt Service and Cash Funded Capital Expenditures

The total budgeted debt service costs for 2003 (including the debt service coverage requirement of 25%) are \$55 million, representing principal and interest payments related to earlier bond issuances in 1998 and 2000 of \$337.5 million. As a result of ISO's expected inability to issue new debt in 2003 at reasonable interest rates due to a poor credit rating, \$22 million for 2003 budgeted capital expenditures will be funded directly from the GMC.

The assignment/allocation methodology used to allocate the debt service and cash funded capital expenditures to the three unbundled service categories involved either directly assigning costs to the unbundled categories, where possible, or if not possible, allocation based on various methods. Additional details of this process and the proposed 2003 capital projects are provided in Section VI of this report.

Revenue Credit/Deficiency

In addition to 2003 costs, the 2003 revenue requirement includes prior year costs and adjustments resulting from the ISO's Financial & Capital Operating Reserves Account ("Operating Reserve"). The calculation of the Operating Reserve revenue credit or deficiency for each unbundled service category is shown in Section V of this report.

Summary of Cost Allocation Results

The attached cost allocation matrix summarizes these results and ratios that show the percentage of total ISO costs associated with the provision of each of the three unbundled services offered by the ISO. The budgeted 2003 allocation ratios developed are as listed below. These are net allocation factors, after the application of the 2002 revenue credit or deficiency from the Operating Reserve.

1.	CAS	58%
2.	CONG	11.5%
3.	ASREO	30.5%

These ratios represent the portions of the ISO's overall Revenue Requirement for 2003 for each of the three unbundled service categories as follows (in thousands). The following page provides an overview of the total revenue requirement.

1.	CAS	\$137,857
2.	CONG	\$27,400
3.	ASREO	<u>\$72,343</u>
	Total	\$237,600

After determining the revenue requirement associated with each of the three unbundled categories, the volume forecasts for each category are developed. The billing determinants for each category are as follows:

1.	CAS	Control Area Gross Load and Exports
2.	CONG	Net scheduled Inter-Zonal flows per path, Excluding Existing Transmission Contracts
3.	ASREO	Purchases and sales of Ancillary Services and Real Time Energy whether instructed or uninstructed. ²

The forecasted volumes of the billing determinant for each unbundled service category for 2003 are as follows (in thousands of MWhs):

1.	CAS	242,386
2.	CONG	85,562
3.	ASREO	55,809

Finally, a unit charge per MWh is developed to recover the costs for the three unbundled service categories by dividing the revenue requirement for each of the three categories by the associated billing determinant volumes. The unit charges for 2003 are as follows (in \$ per MWh):

1.	CAS	0.569
2.	CONG	0.320
3.	ASREO	1.296

A description of the tasks and responsibilities of each cost center, the results of their allocations, and any commentary related to these allocations is provided below in the section entitled "Allocation Descriptive Detail." The cost allocation matrix and the descriptive text, which is included for each cost center, explains the methodology used for allocating all operating costs.

² An ISO compliance filing related to a FERC Order issued on October 9, in Docket ER02-1656-001, would include day-ahead market volumes here.

The overall revenue requirement for 2003 of \$237.6 million, is calculated as follows: (\$ in thousands):

Revenue Requirement (\$ in '000)	
Operating & Maintenance Budget	171,783
Financing Budget:	
Principal-Existing Debt	35,300
Interest-Existing Debt	8,497
Operating Reserve (25% of Principal & Interest)	10,949
Subtotal, Financing Collection	54,746
Capital Project Funding (full CapEx Budget Funded)	22,000
Less: Expense Recovery Budget:	
Interest Earnings	(1,252)
SC Application & Training Fees	(120)
WECC Reimbursement/NERC Reimbursement	(1,256)
Subtotal, Expense Recovery Budget	(2,628)
Subtotal, Revenue Requirement before Revenue Credit	245,857
(Revenue Credit)/Deficiency From Operating Reserve	(8,257)
(12/31/2002 Reserve Balance varies by Service Category)	
Total Revenue Requirement	237,600

II. ALLOCATION METHOD SUMMARY

A description of the methods used to allocate specific operating and debt service costs to the three unbundled service categories follows. In this table, the cost centers are listed in the order in which they appear in the cost allocation matrix.

1500	Operations	
1521	Grid Planning	Direct Assignment
1542	Outage Coordination	Direct Assignment
1543	Loads and Resources	Direct Assignment
1544	Real-Time Scheduling	Direct Assignment
1545	Grid Operations	Direct Assignment
1546	Security Coordination	Direct Assignment
1549	Operations Training Group	Direct Assignment
1554	Special Projects Engineering	Direct Assignment
1555	Operations Support Group	Direct Assignment
1558	Transmission Maintenance	Direct Assignment
1561	Operations Engineering South (Previously Southern Area Engineering)	Direct Assignment
1562	Operations Engineering North (Previously Northern Area Engineering)	Direct Assignment
1563	Coordinated Operations	Direct Assignment
1565	Pre-Scheduling and Support	Direct Assignment
1566	Regional Coordination	Direct Assignment
1559	Operations Application Support	Direct Assignment
1500	Operations – Indirect	
1511	VP - Grid Operations General	Department Direct costs
1547	Engineering and Maintenance	Supervised Department costs (1543, 1561, 1562, 1558)
1548	Operations Support and Training Group – General	Supervised Department costs (1549, 1555, 1559, 1563)
1564	Operations Scheduling	Supervised Department Costs (1544, 1542, 1565)
1700	VP Market Services	
1722	Application Support	Direct Assignment
1723	Tariff and Contract Implementation	Direct Assignment
1724	BBS - PSS	Direct Assignment
1725	BBS - FSS	Direct Assignment
1731	Contracts and Special Projects	Direct Assignment
1741	Client Relations	Direct Assignment

1752	Manager of Markets	Direct Assignment
1753	Market Application & Testing	Direct Assignment
1755	Market Support and Development	Direct Assignment
1756	Market Quality	Direct Assignment
1757	Market Integration	Direct Assignment
1700	Market Services – Indirect	
1711	VP - Market Services	Department Direct costs
1721	Billing and Settlements	Supervised Department Costs (1722, 1723, 1724, 1725)
1751	Market Operations	Supervised Department Costs (1752, 1753, 1755, 1757)
1400	Chief Information Officer	
1411	Chief Information Officer- General	Direct Operating costs
1424	Asset Management	Direct Assignment
1441	Outsourced Contracts	Labor Dollar Ratios - Special
1432	Computer Operations-General	Supervised Department Costs (1431, 1442, 1451)
1431	End User Support	Direct Operating costs
1433	Network Operations	Labor Dollar Ratios - Special
1442	Production Support	Direct Operating costs
1451	Information Security	Direct Operating costs
1422	Corp & Enterprise Apps-General	Supervised Department Costs (1466, 1468, 1469)
1466	Enterprise Apps	Direct Operating costs
1468	Corporate Application Support	Direct Operating costs
1469	Analytical & Reporting	Direct Operating costs
1463	Operations Applications General	Supervised Department Costs (1461, 1462, 1467, 1481)
1461	Control Systems	Direct Assignment
1462	Field Data Acquisition System (FDAS)	Direct Assignment
1467	Settlement Systems Services	Direct Assignment
1481	Markets and Scheduling	Direct Operating costs
1471	Infrastructure Engineering	Direct Operating costs
1600	Legal - Direct	
1641	Market Analysis	Direct Assignment
1661	Compliance	Direct Assignment
1662	Data Quality Group	Direct Assignment

1300	Finance - Corporate Indirect	
1311	CFO - General	Supervised Department Costs (1321, 1331, 1351, 1361)
1321	Accounting	Direct Operating costs
1331	Treasury and Financial Planning	Direct Operating costs
1351	Facilities	Labor Dollar Ratios
1361	Office Administration	Labor Dollar Ratios
1600	Legal: Chief Counsel – Indirect	
1611	General Counsel – General	Supervised Department Costs (1631, 1641, 1651, 1661, 1662)
1631	Legal and Regulatory	Direct Operating costs
1800	VP Corporate and Strategic Development – Indirect	
1811	VP Corporate and Strategic Devt. - General	Supervised Department costs (1821, 1831, 1841, 1851, 1861)
1821	Communications	Direct Operating costs
1841	Human Resources	Labor Dollar Ratios
1831	Strategic Development	Direct Operating costs
1851	Project Office	Direct Operating costs
1861	Regulatory Policy	Direct Operating costs
1100	CEO / Corporate Indirect	
1111	CEO - General	Labor Dollar Ratios
1651	Board of Governors	Labor Dollar Ratios
1241	MD02	Direct Assignment

III. UNBUNDLED SERVICE CATEGORY DESCRIPTIONS

A description of the three categories of services performed by the ISO is as follows:

1. **Control Area Operations (Grid Reliability):** This category is responsible for managing the Control Area and the ISO Controlled Grid to "keep the lights on," i.e., ensure safe, reliable operation of the transmission grid and dispatch of bulk power supplies, including but not limited to:
 - performing operational studies;
 - system security analyses;
 - transmission maintenance standards;
 - system planning to ensure overall reliability;
 - integration with other Control Areas;
 - emergency management;
 - outage coordination;
 - transmission planning; and
 - scheduling generation, imports, exports, and wheeling in the Day-Ahead and Hour-Ahead of actual operations.
 - monitoring and use of ancillary services (both market and self-provided);
2. **Congestion Management** -This category is responsible for dealing with Congestion, which exists when power flowing on a transmission path exceeds the transmission path capacity. Congestion management is conducted by the ISO during the scheduling process and results in the economic rationing of transmission service in order to prevent congestion.
3. **Ancillary Services and Real-Time Energy Operations** This category is responsible for providing for ancillary service and energy related services, including, but not limited to: providing open and non-discriminatory access for market making activities for participants through Ancillary Services auctions and Energy balancing services, Posting of market information; Market surveillance and analysis; Settlement, billing, and metering related to these.

ISO costs not directly attributable to the above service categories are identified as "General" costs during the budgeting process. These "General" costs are later allocated to the above three GMC service categories using various approaches. If a cost can be directly assigned to the categories above, rather than allocated as a General cost, that is the preferable approach.

Clarification regarding MD02

MD02 will significantly change all aspects of the ISO's energy market structure, and will affect all of the above service categories. For 2004, the ISO expects to have a new GMC rate structure in place as a result of a recently commenced stakeholder process on the GMC. However, 2003 will be a transitional year where the above categories will be used. The various components of MD02 (and anticipated commencement dates) as they relate to the above categories are listed below:

1. CAS

- **Determination of resource adequacy;** (Phase III: assume late 2003 or beyond)
- **Schedule feasibility;** (Phase II: assume mid 2003)
- **Real-time Load and Generation balancing** (Phase IB: BEEP→Sec. Constrained Econ. Dispatch)

2. CONG

- **Locational Marginal Pricing (LMP), and nodal vs. zonal calculations** (Phase III: assume late 2003)

3. ASREO:

- **Bid mitigation (Real Time: Phase I-Oct 2002, and Forward Energy Market: Phase II- assume mid 2003)**
- **Day-ahead energy market** (Phase II: assume mid 2003)

IV. COST CENTER (DEPARTMENT) DESCRIPTIONS

All ISO cost centers are listed and described in the following section of this report. For "Direct Assignment" cost centers, allocation results are listed.

1100 Chief Executive Officer

1111 CEO - General

Description:

The CEO oversees and directs all operations of the ISO and reports to the Board of Governors.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios

1241 MD02

Description:

The MD02 cost center is responsible for the implementation of the corporate wide market redesign effort known as MD02. The project will span multiple years, from 2002 to 2004.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
32%	33%	35%

1521 Grid Planning

Description:

The ISO Grid Planning Department is charged with reviewing the Participating Transmission Owners ("PTOs") Bulk Power Program (a five-year Program is filed with the ISO every year) and reviewing the studies the PTOs perform for connecting new generators or load to the ISO Controlled Grid. Either the ISO recommendations (if any) are implemented by the PTOs or the problem is resolved via dispute resolution processes.

Additionally, Grid Planning conducts studies to determine Reliability Must-Run ("RMR") contract requirements and dual fuel generator requirements, and provides support to Operating Engineering. Grid Planning has been involved in the preparation of the new ISO Reliability criteria, conducts several meetings per year with stakeholder groups, and is working toward common facility ratings (when feasible).

Additionally, Grid Planning leads or supports several Regional and National technical/engineering groups including the Western Electricity Coordinating Council ("WECC"), the Western Interconnection Coordination Forum, and the North American Electric Reliability Council ("NERC").

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
100%

CONG
0%

ASREO
0%

1300 Chief Financial Officer

1311 CFO - General

Description:

The Chief Financial Officer directly oversees the activities of the Accounting (Controller) , Treasury, and Financial Planning groups, and the Facilities and Office Administration functions. All of these are functions which support all ISO services.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1321 Accounting

Description:

The ISO Accounting Department is comprised of four areas of responsibility. Each area performs specific functions that enable the department as a whole to provide the best possible financial accounting services to the ISO. Each area and a brief description of its functions is listed below.

- 1) Controllership/Accounting Administration:
 - * Responsible for implementing internal control policies and procedures. This area acts as the umbrella for all other areas of the department.
- 2) General Accounting and Financial Reporting:
 - * Responsible for preparing, analyzing and distributing financial and management reports to various internal and external users.
 - * Responsible for coordinating the financial, operational, and settlements control, and other audits. These audits ensure that the ISO is in conformity with generally accepted accounting principles and is in compliance with certain established procedures.
 - * Responsible for preparing and submitting various tax returns and other informational filings to federal, state, and local agencies.
 - * Responsible for the integrity and maintenance of the general ledger and fixed assets systems. Tasks include reconciliations of accounts and bank statements, preparation and input of journal vouchers, and analyses of expenditures.
- 3) Cash and Credit:
 - * Responsible for processing payments for goods and services where a valid purchase order was placed with the invoicing vendor as well as for those goods and services received by the ISO which were not ordered by purchase order, including the reimbursement of employee travel expenses.
 - * Assists in the market settlement process by collecting and distributing cash to the market players. This responsibility includes the settlement process for GMC, market, FTR, FERC, SRA, emissions, start-up and other types.
 - * Responsible for the receipt of monies, banking interfaces and general cashier operations.
- 4) Purchasing:
 - * Responsible for obtaining products, services and travel for the ISO. Acts as authorized agent to create and distribute formal purchase orders to suppliers.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1331 Financial Planning and Treasury

Description:

The Financial Planning and Treasury group is responsible for the following:

- Treasury and Cash Management;
- Insurance/ Risk Management;
- Debt administration;
- Budgeting/Financial Planning;
- Financial Administration of Capital Projects;
- Benchmarking;
- Contractor Administration;
- GMC/Rates/Unbundling; and
- Accounting System Support and Maintenance

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1351 Facilities

Description:

The Facilities Department is responsible for the physical building environment of the ISO. Its role is to provide and manage a safe, efficient, and comfortable work environment with a highly reliable building infrastructure that fosters teamwork and collaboration. This role can be broken down into several areas:

- Facilities Planning: The allocation of space to accommodate staff and staff changes along with the redesign, modifications, and furnishing of that space.
- Critical Systems: Providing and ensuring high-reliability infrastructure to accommodate Information technology equipment and operating systems housed in the computer rooms and Dispatch control center.
- Building Maintenance: The maintenance of the general office areas and computer facilities with respect to heating/ventilation/air conditioning, indoor air quality, building electrical distribution, structural systems, etc.
- Housekeeping: Janitorial upkeep of the building interiors as well as the appearance of the grounds and other exterior elements.
- Property Leases: Administration of all existing property lease agreements including payments, landlord-tenant issues, and negotiation of changes.
- New Facility Development: Planning, development, and transition into all newly acquired ISO properties, leased or owned.

- Administrative: Tracking, reporting, and benchmarking all ISO Facilities activities and costs.
- Contingency Planning: Working with disaster recovery contractors to insure that the necessary information regarding the buildings, insurance, and business unit requirements are available before any incidents occur.
- Strategic Planning: Continuously looking at the current status of the ISO, possible future changes to the ISO business requirements, the local real estate market and changes in financial opportunities.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios

1361 Office Administration

Description:

The Corporate Services Department has primary responsibility over several distinct corporate functions consisting of Physical Security, Corporate Safety, Administrative and Office Support Services. The main goal of the Corporate Services Department is to ensure a safe and secure work environment and provide the administrative and office support necessary for ISO employees to perform their jobs at the highest levels possible.

Physical Security – Responsible for providing physical protection of ISO personnel and property. This includes workplace violence prevention, investigations of criminal acts, executive protection, risk management/threat assessment, life safety system monitoring, critical systems monitoring and medical first responders.

Safety - Responsible for ensuring compliance with all aspects of corporate safety program including risk assessment, management and mitigation, workers compensation administration, ergonomic compliance and other related safety programs. Responsibilities extend to all visitors, contractors and employees on ISO property or performing services directly controlled by the ISO. Also responsible for ensuring compliance with all applicable local, state, and federal safety laws and regulations.

Administrative and Office Support - Responsible for facilitating corporate support functions including mail services, shipping and receiving, reception desk, office supplies, office automation equipment, conference room set-up and management and related office support services. Also responsible for ensuring consistent policies and procedures are in place for corporate administrative staff.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios

1400 Chief Information Officer

1411 Chief Information Officer- General

Description:

The Chief Information Officer assumes responsibility for all ISO information services infrastructure, strategies, and key business processes.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Department Direct Costs

1471 IT Planning

Description:

The IT Planning Department (formerly Infrastructure Engineering) includes Technology Architecture, Data Architecture, Application Architecture and Information Architecture. These functions define the approaches used to capture and represent both business and software system information, determine and specify high-level modeling approaches and guidelines, identify opportunities for the sharing and reuse of information, lead the construction of information models, define a common terminology based on core business concepts, define and maintain the ISO's architecture and standards; and provide direction and guidance to vendors of infrastructure products and services. The department also coordinates and maintains the IS Division Strategic Plan, facilitates and coordinates the development and maintenance of Division policies and procedures, coordinates engagements with external advisory, assessment, and benchmarking services, and performs advanced technology investigations and evaluations. It furthermore represents IS interests in inter-ISO and RTO activities.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1420 Asset Management Group

1424 Asset Management

Description:

The IS Asset Management group (AM) is responsible for enterprise programs and processes related to managing technology assets. Assets include hardware, storage arrays, software licenses, all maintenance, and other IS-related services through their lifecycle. The IS-related services include hardware maintenance and software upgrades and support. AM also assists with the management of the Asset and the Change Management modules of an integrated management tool known as "CHASE". CHASE is the framework that

each business unit uses to control the deployment of modifications to their existing system software and maintaining the UNIX and NT custom software release repositories.

The current IT environment includes approximately:

· Desktops	980
· Laptops	276
· NT Servers	125
· Unix Servers	259
· Lease Lines of Credit	4

Yearly trend (from 9/01 to 7/02) shows the IT environment continues to grow in excess of 13% from the primary equipment distribution as follows:

· Servers	316 to 351
· Desktops	990 to 1128

AM manages and coordinates the process for technology related contracts, from bidding the requirements, constructing the contract documents, negotiating the prices and terms, and administering the resulting agreement from beginning to expiration.

AM coordinates IS budget development and administration, hardware warranty and maintenance contract management, software licensing, maintenance contract management, lease administration, asset management, and technology lifecycle process. It tracks expenditures against IS budgets and tracks invoice payments against purchase orders.

AM coordinates activities with procurement, provisioning and technical support groups and prepares lease/purchase requisitions. It verifies invoice accuracy and administers processes for approval and payment.

AM is also responsible for the Change and Configuration Management processes for the IT infrastructure and promotes corporate-wide compliance with Change Management, as well as providing Configuration Management support through CHASE.

In 2003, AM expects to continue to provide the following services:

- * Procure or lease equipment and software as determined including refreshes for scheduled servers and workstations throughout ISO.
- * Procure hardware maintenance for existing and new equipment.
- * Procure maintenance for existing and new software upgrades and renewals.
- * Manage relationships with all prime third party vendors including Oracle, Compaq, HP/Compaq Financial Services, Fleet Business Credit Corporation, De Lage Landen Financial Services, LaSalle Leasing, Sun Microsystems, Legato, iPlanet, IBM, Gartner Group, SoftSmiths, Structure Consulting Group, Actuate, EPRI, Iron Mountain Data Security, Veritas and Vitria.
- * Coordinate capital and operating budget for the IS (18) cost centers.
- * Provide accounting analysis for monthly variance reports and provide year-end forecasts as needed.
- * Provide special analyses for finance and accounting to assist corporate level funding allocations to support various requirements.
- * Assist with cost analyses for Capital project requests from multiple groups within ISO.
- * Track expenditures against budgets; track invoice payments against purchase orders.
- * Manage and coordinate the process for technology related contracts, from bidding the requirements, constructing the contract documents, negotiating the prices and terms, and administering the resulting agreement from beginning to expiration.

- * Coordinate IS budget development and administration, hardware warranty and maintenance contract management, software licensing, maintenance contract management, lease administration, asset management, and technology lifecycle process.
- * Verify invoice accuracy and administer processes for approval and payment.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS 67%	CONG 7%	ASREO 26%
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1441 Outsourced Contracts

Description:

This department's primary function is to oversee contracts and costs for the outsourced telecommunications services with the IS Asset Management Group. This department is responsible for administering the MCI contract including asset management, billing and vendor management. In addition, this department provides contract and invoicing review for other telecommunications vendors such as Pacific Bell, Intercall, Arch Communications (paging), AT&T Wireless (cell phones), and Internap (third party internet services).

Outsourced Contracts oversees the contract with MCI for the Energy Communication Network ("ECN") which includes a high-speed, high-availability fiber-optic statewide network connecting the Folsom and Alhambra ISO sites, the Area Control Centers, regional security coordinators, and all Market Participants. The ECN is utilized to control the transmission systems, generators, and Ancillary Service providers. It provides the "marketplace" for the direct Market Participants. In addition, it integrates all power revenue metering points and supports the consolidation of metering data.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios-Special

1430 Computer Operations Center

1431 End User Support

Description:

IT User Support Services provides corporate-wide computing infrastructure support including the following:

- * Platform Support – Enterprise NT Computing hardware, operating system, and layered product configuration, installation, testing, and maintenance, along with regular system administration duties to

ensure the reliability and effective performance of the computer platforms. This includes both servers and workstations, as well as the integration of third-party products.

- * **System Management** – Regular monitoring of computing infrastructure hardware and software, along with database and application processes to ensure seven-day a week and 24-hour a day availability of platforms and business systems. This function includes the escalation, notification, and documentation of system failures. In addition, system engineers analyze system activity and performance to provide capacity management, including the recommendation for short- and long-term computing infrastructure enhancements. System Management also provides Tivoli (system monitoring software) and NetView design, development, implementation and support of the production and development environments.
- * **Help Desk and Desk Side Support** – Installation, maintenance, and support of the office automation infrastructure, including support to internal users in the use of office automation tools, both hardware and software. In addition, the Help Desk provides central call logging and issue management for office automation, internal communication infrastructure, and facility-related problems and issues.

Responsibilities also include Tape Management for backup and recovery, and paging and cell phone administration.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1432 Computer Operations - General

Description:

This is the general cost center for the Director of Computer Operations Center. End User Support Services (cost center 1431), Production Support Services (cost center 1442), Network Operations (cost Center 1433) and Information Security Services (cost center 1451) report to this Director. This cost center provides for the cost of general support including such items as the administrative assistant, the System Engineering Manager and the general director-level expenses.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1433 Network Operations

Description:

The Network Operations Department was formed during 2002 as a result of the IS reorganization. Network Services is a combination of the Network Engineering unit and the Network Operations unit.

Network Services responsibilities include engineering and support for the ISO's network services, including interfacing with MCI Worldcom on the ISO's Energy Control Network (ECN). The common goal of Network Services is to provide 24x7x365 availability of the ISO's networks. Activities in the Network Services Department support all three ISO service areas.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios-Special

1442 Production Support

Description:

The Production Support Services Department consists of UNIX Administration and Data Base Administration.

Although these groups have different skills sets, the common goal of Production Support Services is to provide 24 x 7 availability, and secure reliable systems and databases, and assist in the implementation and design review of new systems and databases.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1451 Information Security

Description:

The functions of Information Security Services (ISS) are, in part, mandated by Presidential Decision Directive 63 and Executive Orders, which define the protection of Critical Infrastructures to preserve national security and economic stability. In addition, the ISO Tariff establishes that the ISO is responsible for the confidentiality of information used to conduct business in the California Electric Market. ISS is responsible for the development, implementation, and maintenance (including overall security operations and strategic direction) of the ISO Information Security Program and information security staff. The Information Security Program ensures the protection of organizational information and information systems against unauthorized access, use, misuse, modification of information, or denial of use, whether in storage, processing, or transit. Includes measures necessary to detect, document, and counter such threats. Activities that support this continuous process are information security policies, procedures, and standards development for both internal users and market participants. ISS is also responsible for the ISO Information Security Awareness Program that provides education, awareness of and compliance with these policies, procedures and standards. As well, ISS is responsible for the ISO Enterprise Security Architecture that provides security

requirements for the design, engineering and implementation of security infrastructure for existing and new network, host, and application solutions.

Other activities ISS provides are the monitoring and auditing of security logs, administration of remote access platforms and digital certificates, enabling applications to use certificates, encryption technologies, responding to and investigating security incidents and leading the Security Incident Response Team (SIRT). ISS also supports business continuity planning and testing for the ISO and external parties.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1460 Corporate & Enterprise Applications

1422 Corporate & Enterprise Applications - General

Description:

This group is responsible for the management and administration of the Corporate & Enterprise Applications department. The department is responsible for developing and supporting business applications for our customers. The units reporting to the Corporate & Enterprise Applications group consists of the Corporate Applications, Enterprise Applications, and Analytical & Reporting teams in the cost centers listed below. Please see the descriptions for the cost centers above for detailed information about the customers and systems supported by these teams.

- 1422 Corporate & Enterprise Applications
- 1469 Analytical & Reporting (Data Warehouse)
- 1466 Enterprise Applications
- 1468 Corporate Applications

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1466 Enterprise Applications

Description:

Enterprise – wide applications and some applications related to operations engineering, settlements, market quality and client relations. Design, implement and support a wide variety of ISO custom and packaged applications and support various business units in their needs related to Information Services. Responsibilities also include application support to Information services as a customer

For new requirements, this team is responsible for performing the initial requirements analysis, evaluating products, and installing, configuring and customizing pre-packaged and custom applications for the stated customers. For implemented systems, responsibilities of this team include application administration, problem management, on-going maintenance, enhancements, and integration of supported software. Supported systems include but are not limited to the following:

- CHASE (Enterprise Services Mgmt.)
- Transmission Registry
- Resource Registry
- Ancillary Services Certification
- TORNADO
- Settlements Validation Tool
- RMR Invoice and Notification Organizer (RINO)
- Reliability Management System (RMS)
- RMR Payment Voucher
- OpsDB
- IMTS
- Online Settlement Dispute System
- RMR Real Time Tool
- Operations Procedure Tracker
- NRI
- RMS
- Rational Suite
- Casewise
- Visual Source Safe

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1468 Corporate Application Support

Description:

The Corporate Applications team supports business application software for Corporate & Strategic Development (Human Resources, Project Office, and Communications), Finance and Accounting, Facilities, Security, and Legal & Regulatory Affairs. This team also supports various enterprise-wide applications including Internet and Intranet.

For new requirements, this team is responsible for performing the initial requirements analysis, evaluating products, and installing, configuring and customizing pre-packaged applications for the stated customers. For implemented systems, responsibilities of this team include application administration, problem management, on-going maintenance, enhancements, and integration of supported software. Supported systems include but are not limited to the following:

- * Oracle Financials (Corporate); General Ledger, Accounts Payable, Accounts Receivable, Projects, Purchasing, Fixed Assets, Oracle Financial Analyzer, and Cash Management

- * Oracle Financials (Market); General Ledger, Accounts Payable, Accounts Receivable, and Electronic Data Interchange
- * Best! Software - AbraHuman Resources Management System; Payroll and Roles (self-service web application)
- * Documentum - Enterprise Document Management System
- * Internet & Intranet
- * Numerous in-house supplemental applications

This team has customer relationship management responsibilities for those departments listed above and primarily supports the "General" departments of the organization. Some of the communication aspects of the Internet site serve CAS and ASREO. The Market Financials system is the only system managed by this department that directly supports ASREO.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1469 Analytical and Reporting

Description:

The Analytical and Reporting group is responsible for and supports the Data Warehouse which focuses on providing the company the ability to analyze, report, query and source non-real-time information from our core operational systems to end-users and second tier applications providing minimal impact to those key operational systems.

These core operational systems includes:

- * Automated Dispatch System (ADS)
- * Out of Sequence Market Operations Settlement Information System (Osmosis)
- * Global Reliability Resource Management Applications (GRMMA)
- * Scheduling & Logging for CA ISO (SLIC)
- * Meter Data Acquisition System (MDAS)
- * Resource Registry (RR)
- * Scheduling Infrastructure (SI)
- * Settlements

The second tier applications the Data Warehouse sources are:

- * Compliance (CAP)
- * Settlements / Reliability Must Run (RMR) -RAVE
- * Market Monitoring

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1480 Operations Applications

1461 Control Systems

Description:

Control Systems Services is responsible for providing real-time as well as historical operational data to Real Time Grid Operations and other related functions for the purpose of operating the ISO Controlled Grid. Responsibilities include the maintenance and operation of ISO owned data acquisition and database systems related to the delivery and display of operational data. Control Systems Services cost center ensures operational data meets or exceeds the reliability and availability requirements for the safe, efficient and reliable operation of the ISO Controlled Grid. The delivery and presentation of the operational data is in accordance with all applicable ISO technical standards, practices, procedures and policies. In addition to maintaining and operating the data acquisition and database systems, the Control Systems Services cost center maintains/will maintain the existing and future interfaces to ISO internal and external systems related to the collection archiving and dissemination of real-time operational data.

The Control Systems Services cost center provides the following services as they relate to the collection, delivery and presentation of operational data:

- EMS system support and maintenance
- RIG / DPG and SCADA support maintenance and development
- PI system support and maintenance
- Network Applications support and maintenance
- Grid Operator Training Simulator (GOTS)

Support of User Organizations:

- Grid Operations
- Operations and Engineering
- Outage Scheduling
- Market Compliance
- Market Operations
- Meter Data Acquisition Systems (MDAS)
- Operations Support & Training (OSAT)
- Information Systems
- Data Warehouse

24X7 On Call Support:

- Energy Management System
- SCADA systems (RIG, DPG, ICCP systems)
- Plant Information Systems
- System Interfaces (EMS to Market Systems, SLIC, ETC, TR etc.)

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
100%	0%	0%

1462 Field Data Acquisition System (FDAS)

Description:

The responsibilities of the Field Data Acquisition Systems group are as follows:

- * Supporting the Remote Intelligent Gateway ("RIG") interface system in the daily operation of power generation, scheduling, and control of the ISO Controlled Grid. The Automatic Generation Control (AGC) system simultaneously controls Generating Unit output to match resources to load and maintain frequency. Generating Units offering regulation services must be capable of being controlled by the ISO EMS. RIG interface units meet the ISO standards for transporting AGC signals. The ISO has the ability to send either set point or raise/lower signals. Additionally, the RIG has multiple ports to allow control to be switched between the Generator and the ISO.
- * Collection, verification and processing of raw meter data into Settlement Quality Meter Data (SQMD), which the ISO uses for generating preliminary and final financial settlement statements for the Market Participants, Market Surveillance and reports.
- * Providing Settlement Quality Meter Data (SQMD) for the ISO billing system, including:
 - Auditing the ISO meter inspection process and providing engineering judgment related to proposed and existing metering systems.
 - Operating and maintaining Meter Data Acquisition Systems ("MDAS") that directly acquires metering data from ISO metered entities and receives metering data from SCs.
 - Auditing metering data collection, storage and processing systems of the SCs.
 - Maintaining the metering standards and specifications for approved meters and metering systems.
 - Coordinating and approving proposed metering system-engineering designs.
- * Providing support for MDAS systems including
 - System Administration of MDAS NT domain and servers
 - Ad hoc queries and reports for business users
 - Monitoring and maintaining data integrity

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
30%	8%	62%

1463 Operations Applications - General

Description:

The Operations Systems Services group supports Control Systems Services (1461), Field Data Acquisition Systems (1462), Settlements Systems Services (1467), and Markets and Scheduling (1481).

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1467 Settlement Systems Services

Description:

Settlement Systems Services (S3) is responsible for the development, maintenance and support of the Settlement System and applications. The Settlements system oversees the financial settlement process (billing and payment) for products and services purchased and sold by the ISO where each settlement will involve a price and a quantity. The Settlements system deals with a variety of services, schemes and contracts all of which are to be considered in finalizing the settlements. The Settlements system finally generates many different charges that will be collected/paid to/from the Business Associates. Also, the Settlement system calculates the Grid Management Charges that will be collected from all the participating Business Associates for providing the services.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
15%	7%	78%

1481 Markets and Scheduling

Description:

Markets and Scheduling (M&S) is responsible for the analysis, design, software development, and 24X7 support the of ISO's real-time Market/Scheduling and Compliance applications. This includes, but not limited to, support of the following major applications: SLIC, BITS, ADS, SI/SA, ETC, OASIS, GRRMA, OSMOSIS, ALFS, OATI/ETAG, and CAP. In addition, M&S provides similar services for Integration efforts between the EMS and Market/Scheduling systems.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1500 VP Grid Operations

1511 VP Grid Operations - General

Description:

The VP Grid Operations oversees all aspects of the ISO Operations division and is responsible for the safe and reliable operation of the power grid; assumes responsibility for ensuring that transmission standards and reliability of electric operations are maintained at high levels; oversees or influences directly the development and implementation of numerous processes, procedures and technologies necessary to enable the deployment of the ISO organization; and assumes responsibility for the development of operations and engineering capabilities necessary to promote the timely implementation of the ISO activities consistent with applicable orders of regulatory bodies including FERC orders, NAESB, NERC and WECC policies.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Department Direct Costs

1530 Operations Scheduling Group

1542 Outage Coordination

Description:

Outage Coordination performs activities related to the following:

- Approving or denying outage requests to enable necessary maintenance to preserve reliability of generation and transmission facilities while at the same time assuring real-time operating reliability.
- Long-term planning (up to 12 months) for outage coordination for both generation and transmission facilities, interfacing complex generation and transmission facility outages into the existing ISO Outage Coordination Plan.
- Recording, maintaining, and reporting data related to outages.
- Ensuring accurate path ratings and integrated outages to ensure minimum reliability standards are adhered to. The coordinators work closely with Operating Engineers to help accomplish this.
- Finalizing path ratings and allocation percentages, which are then passed on to the inter-tie scheduling group. Additionally, these allocations are passed on to Existing Contracts holders and posted on the Internet as part of the Control Area responsibilities.
- Mitigating congestion when transfer paths are derated. Although this process of mitigating congestion is similar to "scheduling" above, it differs in that by allocating the reduced percentages to the scheduling group, congestion is pre-empted by reducing schedules on a scheduled basis, which allows for better management of congestion.
- Conducting generator inspections to follow-up on forced outages, assuring appropriate attention to repairs, as well as monitoring resource withholding opportunities. These inspections continued in 2002 and are expected to continue through 2003.
- Reporting outage data and managing data. In 2001, new reports included Daily Generator Outage Reports (5), daily Website Postings (4), Forecast vs. Actual Outages, multitudes of special reports

addressing data requests from FERC, EOB, CPUC and others. This reporting requirement continued through 2002 and the number and frequency of such reports increased as expected. It is likely this reporting requirement will continue through 2003.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
100%	0%	0%

1544 Real-Time Scheduling

Description:

Real-Time Scheduling group consists of a team of NERC and WECC certified operators working shift work in the Control Center in Folsom and Alhambra. Primary Duties/Responsibilities are as follows:

- Implements real time interchange schedules with adjacent control areas.
- Primary contact with Schedule Coordinators for all real time schedule issues
- Monitors and adjust interchange transactions as necessary on real time basis to maintain schedules within path limitations.
- Coordinates with Gen. Dispatch, GRC and CERS to obtain required imbalance energy through existing Market processes and Out of Market sources as needed.
- Performs Allocation and Implementation of real time schedule curtailments based on Unscheduled Flow or Path derates.
- Provides Control Area and Transmission Provider Approval for Electronic Tagging System in Real Time.
- Provides Services as PSE for Electronic Tagging to support CERS sales & exchanges on interties.
- Records and Logs information pertaining to Intertie scheduling.
- Provides Primary ISO responsibility for compliance with NERC Policy 3 and WECC MORC Section 3.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
75%	15%	10%

1564 Operations Scheduling - General

Description:

Operations Scheduling is the primary interface between the ISO and its 11 adjacent Control Areas as a part of the WECC interconnection. Metered and scheduled interchange is coordinated on a pre-schedule, Real Time, and after-the-fact basis with the neighboring Control Areas. Direct and distinct functions also are performed to enable the ISO markets, congestion, and settlements process. All of these functions require accommodations to assure that Existing Contracts are honored.

All interchange transactions must be coordinated with adjacent and external Control Areas within the limits of the ISO jurisdictional transmission system. This includes implementing and monitoring all interchange schedules into and out of the ISO Control Area regardless of whether they are scheduled on Existing Transmission Contract ("ETC") or New Firm Uses ("NFU") transmission. Interchange scheduled on behalf of all SCs must be reconciled to meet WECC and NERC criteria.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1565 Pre-Scheduling and Support

Description:

The staff of Pre-Scheduling and Support coordinates and schedules energy resources to meet system load requirements and pre-checks all schedules with adjacent utilities to ensure correct intertie totals. Primary internal contacts are with settlements and billing department, legal and regulatory, the Department of Market Analysis and client relations. Due to continuing investigations there have been a need to provide data for the legal and regulatory department. This group serves as a liaison between real-time, pre-schedule and after-the-fact staff. It supports CONG and ASREO as needed with these duties. In addition this group maintains records of ETC's and ATC's for the PTO's while publishing them on a daily basis. The ETC/ATC publication is a cumbersome process that requires minute attention to detail and increasing manual intervention.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
74%	15%	11%

1540 Engineering and Maintenance Group

1543 Loads and Resources

Description:

The Loads and Resources group is responsible for the following activities:

- Preparing control area and local area load and resource adequacy assessments; writing and publication of ISO Summer and Winter Assessment Reports;
- Preparation of the FERC 714 report;
- Engineering support for environmental issues impacting control area resources;
- Developing and maintaining various ISO operating procedures;
- Participating in WECC committees and workgroups related to interconnected power system operations;
- Providing support for Existing Contract, MSS and System Units, and other Scheduling issues;
- Providing engineering support for ISO contracts issues (e.g., RMR contract, Participating Generator Agreement ("PGA"), etc.)
- Providing engineering support for ISO projects (e.g., Automated Dispatch System ("ADS"), Generator Communication Project ("GCP"), etc.)
- Supporting EMS project development.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
100%	0%	0%

1547 Engineering and Maintenance - General

Description:

The Director of Engineering and Maintenance manages the following work groups:

- Transmission Facilities
- Operations Engineering
- Northern Engineering
- Southern Engineering
- Loads and Resources

The responsibilities of this department are:

- Develop ISO Operating Procedures
- Work with Outage Coordination in analyzing clearances
- Prepare summer and winter assessments for the local areas
- Support Real Time Operation and provide on-call services
- Review transmission plans, projects, and new generation for the local areas
- Provide Engineering support for RMR and reliability generation
- Prepare disturbance reports for the local areas
- Participate in WECC working groups and related activities

Cost Allocation Methodology and Percentages:

Allocated based on Supervised Departments costs

1558 Transmission Maintenance

Description:

Transmission Maintenance manages the creation, implementation, and enforcement of ISO Maintenance Standards; provides for high quality, safe, and reliable service; and manages the creation and implementation of the New Resource Interconnection Processes. Transmission Maintenance works with PTO's to manage the Transmission Register and data and the Transmission Availability reporting processes and databases; works with the PTO's to resolve engineering issues or practices that may impact the availability of the ISO controlled grid; assists with the development of generation maintenance standards as required by SB39xx; provides engineering support to other departments within the ISO on engineering issues effecting the Grid reliability, including protection systems, Transmission facility system design and ratings, etc.; and leads incident investigations on suspected maintenance or work procedure errors.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
98%	0%	2%

1561 Operations Engineering South

Description:

Southern Area Operations Engineering is responsible for the technical support of the southern portions of area operation and Bulk system operations. Nearly all Area OE responsibilities directly support the category of CAS.

Core functions of the Area OE include the following: Conduct seasonal operating studies, establish seasonal OTCs and write procedures, support Outage Coordination in the analysis of Transmission and Generation clearances, identify and prepare for grid reliability concerns of the upcoming season (including proposing and managing short-term projects), provide ongoing active participation in and guidance to the Grid Planning process, provide on-call OE support for real-time emergencies, and represent the ISO in technical reliability groups and committees of WECC and regional reliability fora.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
100%

CONG
0%

ASREO
0%

1562 Operations Engineering North

Description:

Northern Area Operations Engineering is responsible for the technical support of the northern portions of the ISO Grid. Nearly all Area OE responsibilities directly support the category of "CAS".

Core functions of the Area OEs include the following: Conduct seasonal operating studies and write procedures, support Outage Coordination in the analysis of Transmission and Generation clearances, identify and prepare for grid reliability concerns of the upcoming season (including proposing and managing short-term projects), provide ongoing active participation in and guidance to the Grid Planning process, provide on-call OE support for real-time emergencies, and represent the ISO in technical reliability groups and committees.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
100%

CONG
0%

ASREO
0%

1550 Regional Coordination Group

1546 Security Coordination

Description:

Security Coordination monitors real-time system conditions to observe and mitigate potential problems as well as react to system emergencies in the Western Interconnection, with the primary focus on the California-Mexico Sub-region of WECC (ISO, LDWP and CFE control areas). Security Coordinators have the final authority to direct operations before, during, and after problems or disturbances with a regional impact.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
100%

CONG
0%

ASREO
0%

1554 Special Projects Engineering

Description:

The primary role of Special Project Engineering is to provide Operations personnel with the best technology, tools and advanced applications that solve operating problems, improve grid reliability and facilitate the accurate and timely reporting to various regional reliability organizations and government agencies. Special Projects Engineering provides reports to FERC, NERC and WECC on Control Area Operations. It provides support to all groups within the Operations Division, to other departments within the ISO, and to Market Participants, to ensure and enhance system reliability as well as to facilitate and expand workably competitive markets.

Specific roles and responsibilities include:

- Managing Special Projects that support Operations;
- Developing Wind Generation Forecasting tools
- Creating and Maintaining of Transmission Maps and Geographic data;
- Researching and Developing – Analysis and Installation of tools to improve grid reliability;
- Participating in NERC and WECC committees and task forces relating to Operations and Scheduling;
- Field-testing proposed NERC and WECC Standards;
- Developing concepts for operational control of Distributed Generation resources;
- Developing and direct R&D programs such as the three-year CERTS program; and
- Developing Board Documents for proposed changes in ISO Operations and Markets.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
84%

CONG
0%

ASREO
16%

1566 Regional Coordination - General

Description:

Regional Coordination responsibilities include being an active interface with WECC and NERC committees, subcommittees, task forces and work groups; participating in and influencing the transition of NERC to its new organization, NAERO, as well as the formation of the new industry group, the North American Energy Standards Board; tracking the aforementioned groups' work and reporting to executive management; WECC and NERC compliance reporting; the RTO effort including seams issues and coordination with both internal and external organizations in support of CAS, CONG and ASREO.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
83%

CONG
0%

ASREO
17%

1560 OSAT Group

1548 OSAT Group - General

Description:

The Director of Operations Support and Training (OSAT) is responsible for: overseeing preparation and administration of training across all operations groups, other groups in the ISO, and Market Participants; providing support for ISO efforts to interface with and incorporate markets and deregulation from an operations perspective as they develop inside and outside the ISO; updating, creating and maintaining all ISO Operating Procedures; implementing Emergency Response programs and procedures within the ISO and in coordination with state and federal external agencies; and providing final operations approval of revised and newly developed EMS Displays as required and requested by Control Room personnel.

OSAT provides training and support to all groups within the Grid Operations Division, to other departments within the ISO (particularly ASREO) and to Market Participants to ensure and enhance system reliability as well as to facilitate and expand workably competitive markets. The primary role of OSAT is to provide support to all departments within the Grid Operations Division, including the development of training programs, real-time operations support, development of tools for operations, and coordination of internal and external activities impacting operations.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1549 Operations Training

Description:

The Operations Training group is responsible for identifying, creating, developing and facilitating or administering appropriate training material for grid operations, scheduling, other ISO groups; procuring and implementing necessary hardware and software to accomplish this training; monitoring the activities of

various groups (internal and external, e.g., operations support, operations engineering, NERC & WECC personnel) to support the various operations training needs including procedures, reports, EMS needs, tools development and other support activities as needed. Specific roles and responsibilities include:

- Directing the activities of the staff responsible for development and provision of Operations Training to assure appropriate material and processes are created to accomplish training for operation, and other ISO groups;
- Managing support functions to assure training on procedures, tools and other training needs are met for all operations groups, other ISO departments, and external entities;
- Managing vendor relationships and maintaining accountability for work performed;
- Preparing and managing the training budget;
- Representing the ISO in WECC, NERC, CSIC and other fora as required.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
62%	24%	14%

1555 Operations Support Group

Description:

The Operations Support Group is responsible for supporting the various market and grid operations needs of the ISO Real Time operations control room floor and the ASREO and Grid Operations business units. Included in these support functions are emergency preparedness and response coordination, emergency event notification, interconnected control area, UDC, PTO and MSS agreement support, Ancillary Services and RMR certification testing, creation, tracking and maintenance of procedures for Grid, Market and Scheduling Operations, various reporting functions including WECC RMS data collection and reporting, development and maintenance of the ISO business continuity plan including business recovery contingency procedures, and other support activities as needed. Specific roles and responsibilities include:

- Managing Operations support functions to assure that procedures, tools, reporting, and other support needs are met for all operations groups, other ISO departments and external entities;
- Preparing and managing the Operations Support Cost Center budget;
- Representing the ISO in WECC, NERC and other fora as required;
- Identifying and managing changes in the Tariff, protocols, and market design that would improve market and grid operations;
- State and federal agency and intra-control area entity communications interdependency support;
- Managing and participating in projects related to the creation or enhancement of ISO operations, functions, processes, procedures or communications;
- Testing and documenting Ancillary Service and RMR certification;
- Coordinating/Collaborating with Planning and Operations Engineering & Maintenance to ensure all prerequisites are met before new generators interconnect with the ISO Grid;
- Managing the Alert, Warning and Emergency notification process ;
- Reporting on WECC Reliability Management System compliance.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
61%

CONG
21%

ASREO
18%

1559 Operations Application Support

Description:

OSAT Operations Applications Support's primary role is to provide safe, reliable electric transmission service to all Californians within the ISO control area at the lowest reasonable cost through the development, enhancement and support of specialized custom applications and expert systems designed to improve the efficiency and effectiveness of ISO real-time operations. Specific tasks of the group include:

- Communication with other business units to insure that Operations Systems has the ability to maintain the functionality of existing processes in support of changes to interconnected systems.
- Coordination of Operations Systems and ISO business units to direct the acquisition of new systems and applications in support of end user requirements.
- Actively seek the replacement of existing systems as necessary by providing specifications for RFIs, RFQs, or bid proposals to implement changes to development, test and production environments.
- Coordinate personnel from within the Operations Applications department for the development of specifications and bids for the procurement of new systems or applications, and provide improvements or modifications to existing systems and applications.
- During project implementation, develop levels of expertise for Operations Applications support staff and assure vendor compliance to project design specifications by maintaining consistent staff involvement in all phases of project development.
- Development of standards and procedures for the testing of delivered products to assure they meet all requirements of the original specifications.
- Provision of improvements or modifications to existing systems and applications to support end user requirements through project design, product development, coordination of comprehensive testing of deliverables to assure all requirements of the original specifications have been followed.
- Coordination of project transition from factory development and testing to a production environment by providing training for end-users, developing general system information for all ISO personnel, delivery of all applicable manuals, and provide interface information on vendors for Operations Applications support personnel.
- Ensurance of Operations Applications staff adhere to ISO change management and configuration management policies and procedures in support of Grid Operations systems, applications and databases.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
79%

CONG
10%

ASREO
11%

1563 Coordinated Operations

Description:

The Coordinated Operations Group is responsible for identifying issues that impact efficient and reliable Grid Operations (especially as they interface with outside entities such as CERS, and internal groups such as OE, MO, MQ, OSAT, Scheduling, Settlements, Legal & Regulatory, Compliance and Outage Coordination), and then developing enterprise wide solutions for the benefit of the ISO. The group is playing and will continue to play a key role in MD02 development and implementation by providing expert input from the perspective of Grid Operations.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
60%

CONG
10%

ASREO
30%

1570 Grid Operations Group

1545 Grid Operations - General

Description:

The Grid Operations group is responsible for the following:

- Overseeing and performing all Real Time Operations of the ISO Electrical Grid and Control Area, including managing all aspects of the California Control Area;
- Ensuring reliable and safe operation of the ISO Controlled Grid;
- Ensuring reliable operation includes any authority needed to maintain control of the Grid, including authority over all PTO's and Utility Distribution Companies ("UDC's") in regards to system reliability and system emergencies, the ability to order must run generating units on-line, and manual Load shedding as needed;
- Coordinating Load and system restoration after any contingency or major system disturbance in cooperation with the WECC Security Coordinator;
- Declaring, when appropriate, a Statewide System Emergency as detailed in the Dispatch Protocol, suspending market operations, and setting administrative prices for Ancillary Services needed to resolve the emergency;
- Ensuring compliance with all WECC and NERC criteria, as well as ISO protocols and procedures;
- Working with the WECC Security Coordinator to ensure compliance with all policies and operating procedures applicable to the Western Interconnection;
- Controlling applicable generation to meet inter-tie obligations, contribute to frequency control, and meet any emergency responses and WECC and NERC criteria, in order to support the transmission system and operation of the energy market in the most reliable manner;
- Maintaining documentation for generation operations;

- Procuring additional Ancillary Services as necessary;
- Managing operation of eligible Regulatory Must-Take, Must-Run, and RMR generation;
- Dispatching interruptible loads to maintain required reserve levels during system emergencies; and
- Coordinating generation resources to meet system load requirements and satisfy contractual obligations, and responding to system frequency deviations and voltage issues.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
80%

CONG
10%

ASREO
10%

1600 VP General Counsel

1611 VP General Counsel - General

Description:

The General Counsel cost center (1611) reflects the administrative and office support for the General Counsel. The General Counsel office provides service relating to all the unbundled GMC categories.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1631 Legal and Regulatory

Description:

The Legal & Regulatory Department's responsibilities fall broadly into four functional areas: legal (including contracts and human resource support), litigation (including civil litigation, dispute resolution and investigations), regulatory, and legislative. The majority of the department's costs and resources are associated with the regulatory area, with increasing costs in the litigation area. In the regulatory area, the department directs the preparation of pleadings, Tariff amendments and other regulatory filings; develops factual records and other supporting materials; communicates and advocates the Company's policy objectives to regulatory authorities; reviews and monitors regulatory activities as they may affect the Company's objectives; responds to regulatory inquiries and investigations; and provides advice and counsel concerning Tariff and other regulatory requirements. The department pursues these activities before both state (Electricity Oversight Board, Public Utility Commission, California Energy Commission, California Power Authority) and federal (Federal Energy Regulatory Commission) regulatory authorities.

The litigation area represents the Company in civil litigation and arbitral forums; advises management on disputes and dispute resolution matters; oversees internal and external investigations of the Company and produces ISO records and materials for investigators of third parties; and serves as a contact point for members of the public, regulators and other interested parties in obtaining ISO information and records. The legislative area serves as a contact point for members of the legislature, advises policymakers at the state and federal levels concerning the Company's operations, practices and policies; provides comments and testimony on proposed legislation; responds to inquiries from lawmakers and the state and federal executive offices, and otherwise facilitates communication among Company management and state and federal policymakers. In the legal area, the department negotiates and drafts key vendor contracts and other agreements and counsels management on contract, employment, intellectual property and other general corporate matters. Additionally, the department maintains the corporate records, including the corporate bylaws and Board minutes.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation

Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1641 Market Analysis

Description:

The Department of Market Analysis (DMA) reviews and monitors the efficiency and effectiveness of the ISO markets (Ancillary Service, Congestion Management and Real-Time), generates periodic reports of market performance, investigates observed or reported rule violations and/or market anomalies (e.g. gaming behavior), and develops and/or evaluates sanctions and/or proposed market design changes.

In addition, the department conducts specialized studies and analyses and responds to information requests, serving in essence as the Company's in-house economic consultants. Specific functions of DMA include:

1. Monitoring the market and reporting on market performance, including:
 - a. Indices of market performance, including prices, competitive baseline costs, loads, supply availability, outages and bidding patterns
 - b. Prices in related markets (such as natural gas, emissions, surrounding areas, etc.)
 - c. Level of imports/exports
 - d. Ancillary Service Bid Sufficiency
 - e. Congestion Management Market and Firm Transmission Rights
 - f. Competitiveness of the Market
2. Investigating and reporting on potential gaming and market power abuses.
3. Identifying, reviewing and reporting deliberate or inadvertent violations of market rules or contracts that affect the efficiency of the market.
4. Performing special studies of the impacts of bidding behavior on market efficiency and performance.
5. Performing special studies on market efficiency and performance, both independently and at the request of ISO management, ISO Board of Governors, FERC and various outside agencies.
6. Responding to numerous data requests (including subpoenas).
7. Reviewing ISO rules and protocols from a market performance perspective, and recommending specific changes in market rules and protocols.
8. Working with other areas of the ISO to implement these changes affecting market performance.
9. Supporting the Market Surveillance Committee, by completing special analysis to support reporting and recommendations of the MSC to ISO management.
10. Reporting to Federal Energy Regulatory Commission, California Public Utility Commission, Electricity Oversight Board and many other governmental and regulatory agencies.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
23%

CONG
19%

ASREO
58%

1642 Market Surveillance Committee

Description:

The role of the ISO Market Surveillance Committee (MSC) is to provide independent external expertise on the ISO market monitoring process as described in the Market Monitoring and Information Protocol (MMIP) and, in particular, to provide independent expert advice and recommendations to the ISO CEO and Governing Board. The MSC is comprised of a body of three or more (currently, four) independent and recognized experts whose combined professional expertise and experience shall encompass the following:

- economics, with emphasis on antitrust, competition, and market power issues in the electricity industry;
- experience in operational aspects of generation and transmission in electricity markets;
- experience in antitrust or competition law in regulated industries; and
- financial expertise relevant to energy or other commodity trading.

The MSC provides recommendations based on evaluation of market data in the form of written reports to the CEO and Governing Board. The MSC may also submit reports to FERC. These reports also may relate to the monitoring program referred to in the MMIP, the analysis of information, the evaluation criteria or any corrective or enforcement actions proposed by the ISO Department of Market Analysis (DMA) or proposed on its own initiative. Upon request of the MSC, the CEO shall publish reports and recommendations of the MSC or incorporate them, if consistent, into the ISO's own reports or recommendations.

At the recommendation of the CEO, the Governing Board may implement MSC recommendations on market rules, Tariff changes and penalties and sanctions.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
9%

CONG
25%

ASREO
66%

1651 Board of Governors

Description:

This cost center captures Board of Governors expenses for Board meetings, Board member compensation and travel and expense reimbursement for Board members to attend Board meetings and to perform other duties on behalf of the ISO.

Board expenses are considered overhead, and are allocated to the three GMC service categories.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation

Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios

1660 Compliance Group

1661 Compliance - General

Description:

The responsibilities of the Compliance Department fall into three categories: Operational Compliance, Compliance Audits and Compliance Systems. Operational Compliance monitors and measures operational performance (e.g., fulfillment of capacity obligations and the delivery of specific quantities of energy within specific timeframes) consistent with contractual commitments and Tariff requirements. Efforts in the past year have continued to focus on encouraging suppliers to follow dispatch instructions and assure compliance with must-offer obligations. Compliance Audits monitors and corrects UFE and meter data timeliness and accuracy problems. These programs include trend analysis for purposes of identifying potential meter errors, site visits for purposes of testing participants' meter units, and training and assistance to Scheduling Coordinators on self-audit requirements. Compliance Systems focuses on developing innovative applications using a rules engine and the ISO's new architecture to assure extendability across the organization, modification as rule changes are required without redesigning software, and replication to automate new Compliance programs efficiently. Additionally the Compliance Department implements and calculates authorized penalties and sanctions for instances of noncompliance, and these programs will be expanded for 2003 through the ISO's Oversight and Investigation Activities Review (O&I Review). Apart from these activities, in recent months the department has assumed a substantial role in supporting state agencies' efforts related to demand programs, and in developing the ISO's Participating Intermittent Resource program. Compliance has also supported investigations by multiple external agencies, providing data, analyses, and extensive interviews.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
82%	5%	13%

1662 Compliance - Audits

Description:

See description under 1661.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation

Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
84%

CONG
5%

ASREO
12%

1700 VP Market Services

1711 VP Market Services - General

Description:

The VP of Market Services sets policy, plans, directs, and coordinates through subordinate Directors the activities of the Client Relations, Settlements, Market Operations, Market Quality, and Contracts and Special Project functions of the ISO.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Department Direct Costs

1731 Contracts and Special Projects

Description:

The Contracts and Special Projects department is tasked with:

- Developing and negotiating contracts with Market Participants;
- Assisting other Departments and Sections regarding contracts, compliance, FERC matters, and other special projects.

CONTRACTS WORK RESPONSIBILITIES

Development of Agreements with New Clients and Existing Clients:

- Develop new agreements; execute pro forma agreements as needed to expand participation in the ISO, Interconnected Control Area Operating Agreements ("ICAOAs") with other Control Area operators that have not yet executed the ICAOA, and other types of *pro forma* agreements; and
- Assist in enhancing client understanding of ISO agreement terms and conditions.

Contract Activities Based on Regulatory Directives:

- Amend agreements as needed and file with FERC;
- Revise and maintain the standard pro forma agreements; and
- If FERC sets the agreement for hearing, negotiate the settlement of all interventions. If settlement cannot be reached, participate and provide testimony for the litigation proceedings.

Special Agreements:

- Develop and negotiate new agreements and negotiate changes needed to special agreements, such as the TCA and MSS;
- Develop, negotiate and administer any subsequent reliability agreements that may be needed with the changing market design, including ACAP;
- Assist in crafting amendments to the Reliability Must-Run ("RMR") agreement and obtain executed agreements resulting thereof;
- Develop, negotiate and administer replacement of RMR Condition 2 agreements when ACAP is in place;
- Develop Black Start, Voltage Support, and Emergency Assistance Agreements;
- Develop and negotiate Aggregated Distributed Generation Pilot Project agreements;

- Develop and negotiate Demand Response program agreements; and
- Develop and negotiate a QF PGA, if ordered by FERC.

Administration of Contracts:

- Responsible for administration of all contracts executed with Market Participants, including but not limited to contract interpretation, deadlines tracking, and records management;
- Administer RMR, including but not limited to assisting Settlements in the monthly invoicing process, assisting Operations with implementation issues, negotiating amendments to the RMR Agreement, negotiating settlement for all disputes issues, negotiate rates for existing RMR contracts, and develop rates for new agreements; and
- Review operating procedures and operating instructions for consistency with the ISO agreements and ISO Tariff.

Special Projects:

- Administer the ADR requirements of the ISO Tariff;
- Participate in FERC litigation regarding the municipal utilities;
- Act as project leader for the Access Charge proceeding;
- Facilitate relationship with State agencies during the California crisis, including CERS;
- Support or lead teams on Existing Contracts issues;
- Act as project leader for Governmental Entity participation, including as MSS and PTO;
- Maintain a library of all FERC orders impacting agreements and the ISO Tariff;
- Participate in FERC proceedings not initiated by Contracts, including complaints, QF issues and GMC proceedings;
- Assist as needed in the MD02 process;
- Lead the response to the PG&E Plan of Reorganization proceeding, including implementation of the new organizations;
- Participate in the Participating Load Working Group;
- Participate in the New Resource Interconnection work group;
- Participate in CPUC proceedings, as needed;
- Support the ISO's involvement in environmental justice;
- Responsible for ISO Tariff search program;
- Administer and maintain Agreement tracking system; and
- Participate in the Generator Communications Project that establishes telemetry requirements for generators.

OTHER PROJECTS / WORK REQUIREMENTS

Support of other Departments as needed, which may include the Legal and Regulatory Department, other Market Services Departments, Operations, Market Surveillance or IS.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
77%	2%	21%

1741 Client Relations

Description:

The Client Relations group is the primary business interface between the ISO and its clients (i.e., SCs, transmission owners, Participating Generators, municipalities, and adjacent control areas). To fulfill this responsibility, the Client Relations staff:

- Manages the overall business relationship between the ISO and each of its Clients at all levels;
- Facilitates the business requirements for Participating Generators;
- Resolves operational, market, settlement and Tariff issues on behalf of Clients;
- Certifies and trains Clients (Scheduling Coordinators, Participating Generators and others) for participation in the ISO markets;
- Manages the stakeholder process for market and operational changes; and
- Communicates effectively with market participants on market, operational and regulatory issues.

Because of the broad scope of Client Relations' daily interactions with Clients, staff supports business, strategic and operational activities that affect ISO services in all primary areas: CAS; CONG; and ASREO

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
38%	9%	53%

1720 Settlements

1721 Billing and Settlements-General

Description:

Settlement and Billing functions are performed for all transactions in the Control Area. Information regarding these transactions is forwarded on a regular basis to the ISO. Scheduling information for Day-Ahead and Hour-Ahead is validated prior to Real Time operations to insure compliance with ISO Tariff and protocols. Subsequent to the Settlement Period, operating and billing data is compiled by the Settlements and Field Data Acquisition departments in order to produce, in accordance with the ISO's payment calendar, both a preliminary and a final settlement statement for each Market Participant.

Examples of major billing and price components necessary for determining final billing are as follows: market clearing prices, bid prices, ex-post prices, and metered information from generators, loads, and intertie points. These financial transactions involve billions of dollars each year. Preliminary Statements and Final Settlements are transmitted daily in accordance with the ISO calendar to each Market Participant. The monthly Grid Management Charges are summarized on Preliminary and last Final Statement for the trade month. Monthly Preliminary Invoices, which summarize all charges on the month's Preliminary Statements, and Monthly Final Invoices, which summarize the difference between the summed Preliminary Statements and the summed Final Statements, are sent to each Market Participant in order to collect and pay for use of ISO market and Control Area needs. These functions support all three service areas.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1722 Application Support

Description:

The Business Process Development group assures the best use of technology to facilitate the expedient, timely and accurate delivery of settlement statements and invoices to ISO's Market Participants. The group identifies potential issues with existing business processes/protocols and assists management in formulating solutions. It facilitates the definition and implementation of new settlement protocols/processes. It also serves as the primary department interface with the Information Services (IS) Division to ensure adequate system, operation support and development services are in place to support the mission of the Settlements & Billing Department.

The primary functions include:

- Work with Department staff to identify and prioritize process and technology enhancements to support ISO's Settlements and Billing operation.
- Monitor ISO market design activities, interpret Tariff changes, define detail process requirements, and determine automation and implementation strategies.
- Prepare business requirement documents for system development projects, facilitate and assist in the detail system design, monitor project progress and test new systems/software to assure compliance with business rules.
- Identify potential issues with existing business rules and assist senior management in formulating solutions and new settlement protocols.
- As the primary IS liaison, assure adequate system resources, operation support and development services are in place to support the Department's operation.
- Represent the Department in enterprise wide technology development efforts.
- Collaborate with other Market Services and ISO Departments to improve data flows for effective and efficient business operation.

Functions support all three service categories.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
19%	7%	74%

1723 Tariff and Contract Implementation

Description:

The RMR Settlement group, under the Manager of Tariff and Contract Implementation, performs all tasks associated with the validation of RMR invoices provided by the RMR Generator Owners. In this role, the RMR Settlement Group deals with, on almost a daily basis, the ISO dispatchers who handle the RMR units and RMR charges. The RMR Settlement group implements all needed settlement validation modifications brought about by majority decisions of the members of the RMR Contract Schedule O task force.

Additionally, the RMR Settlements group validates invoices of the Summer Reliability Generators. The Manager of Tariff and Contract Implementation supports the efforts of the RMR Settlement group in dealing with both internal and external RMR-related matters, as well as assists the Director of Settlements in the development and implementation of ISO Tariff modifications and other contract implementation issues. Because this group deals with a broad range of issues related to the ISO CAS and ASREO area, it should be considered in both of these categories.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS 90%	CONG 0%	ASREO 10%
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1724 BBS - PSS

Description:

The Preliminary Settlements group is responsible for the accuracy and timeliness of Preliminary Settlement Statements, the correct implementation of the necessary manual work-around to the existing Settlements software, and issuing the Preliminary Invoice to Market Participants. The group coordinates with the Operations group to obtain information necessary for production of correct Settlement Statements, and investigates the Settlement impact of proposed operating conditions. The group works with Application Support group and software vendors to design, test, and enhance Settlement software.

The group is responsible for maintaining and operating a billing system for Market Participants, ensuring timely and accurate bills. The group is responsible for Settlements' specific review of the Tariff and making recommendations for changing the Tariff and protocols. The group participates in the redesign projects including MD02. Settlements also handles data requests, discovery requirements, bankruptcy litigation, Market re-runs and FERC mandates, as they relate to Settlements information. The function supports all three GMC service categories.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
17%

CONG
8%

ASREO
75%

1725 BBS - FSS

Description:

The department is responsible for the accuracy and timeliness of Final Settlement Statements and correct implementation of necessary manual work-arounds to the existing Settlements software and issuing the Final Invoice to Market Participants. The group supports the Client Relations, Market Operations, Metering and Market Quality groups in resolving Market Participant issues and the correct implementation of approved disputed items. The group is also responsible for maintaining and operating the billing system for Market Participants, ensuring timely and accurate bills. The group coordinates with Operations to obtain information necessary for production of correct Settlement Statements and supports the various ISO and stakeholder project teams. Settlements also handles all data requests, discovery requirements, Bankruptcy litigation, Market re-runs and FERC mandates as they relate to Settlements information. Settlements also supports the ISO's Market redesign effort. The function supports all three GMC service categories.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
16%

CONG
7%

ASREO
77%

1750 Market Operations Group

1751 Market Operations - General

Description:

This cost center contains the Director of Market Operations, who oversees the groups listed in the 1750 rollup. The group is responsible for conducting Day-Ahead, Hour-Ahead and Real Time Markets, including:

- Managing inter- and intra-zonal congestion and making changes (via Adjustment Bids);
- Re-dispatching schedules to resolve congestion at the lowest possible cost to customers;
- Managing the Ancillary Service and imbalance energy markets, and calculating the market clearing prices for spinning, non-spinning, replacement and regulation;
- Ensuring that the SCs posting of requirements regarding congestion, losses and Ancillary Services, etc., is reliable;
- Ensuring continuous interface between the ISO and the SCs that will allow SCs to make best use of transmission resources;
- Providing technical expertise on the design of the California market related to the bidding, scheduling, and settlement systems;
- Reviewing market design and prices on a daily basis;
- Providing engineering analysis to support SCs, settlements, and daily operations;

- Providing technical analysis, input, and review of vendor supplied design documents for compliance with ISO-defined requirements;
- Ensuring thorough testing of vendor supplied applications by creating test objectives, conditions, and scripts to be used for module;
- Designing and performing integration testing;
- Documenting and managing vendor-supplied scheduling application software changes in accordance with release management procedures;
- Conducting SC training and SC certification testing;
- Performing software life cycle activities in support of in-house scheduling software requirements necessary for market reliability and accuracy as detailed in the FERC filing and ISO protocols;
- Administering all interface applications between the SI database and all other subsystems;
- Providing system administration support for test and development environments; and
- Providing an advisory role to ISO Market Surveillance group on market power issues.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1752 Manager of Markets

Description:

Markets

Grid Resource Coordinators (GRCs) on this team are responsible for operating all ISO markets for the Day Ahead, Hour Ahead and Real-time operations. GRC's on this team author, review and maintain all documented procedures and protocols in accordance with ISO Tariff and policies. This team is the primary interface with Operations.

Functions:

- Forecast ISO control area load requirements
- Determine in coordination with Operations the hourly Ancillary Service requirements and procurement
- Facilitate Congestion Management markets
- Procure Real-Time Energy (BEEP) for ISO system needs
- Log and procure Out-of-Market energy purchases
- Log and procure Out of Sequence energy purchases
- Define and document Market Operations' procedures
- Coordinate and plan market service requirements with Operations
- Coordinate with Client Services to Communicate with Market Participants
- Provide Training to Market Participants and ISO internal employees
- Perform Automated Mitigation features

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
29%

CONG
30%

ASREO
41%

1753 Market Engineering

Description:

The Market Engineering group is responsible for conducting Day-Ahead, Hour-Ahead and Real Time Markets, including:

- Managing inter- and intra-zonal congestion and making changes (via Adjustment Bids);
- Re-dispatching schedules to resolve congestion at the lowest possible cost to customers;
- Managing the Ancillary Service and imbalance energy markets; and calculating the market clearing prices for spinning, non-spinning, replacement and regulation;
- Ensuring that the SCs posting of requirements regarding congestion, losses and Ancillary Services, etc., is reliable;
- Ensuring continuous interface between the ISO and the SCs that will allow SCs to make best use of transmission resources;
- Providing technical expertise on the design of the California market related to the bidding, scheduling, and settlement systems;
- Reviewing market design and prices on a daily basis;
- Providing engineering analysis to support SCs, settlements, and daily operations;
- Providing technical analysis, input, and review of vendor supplied design documents for compliance with ISO-defined requirements;
- Ensuring thorough testing of vendor supplied applications by creating test objectives, conditions, and scripts to be used for module;
- Designing and performing integration testing;
- Documenting and managing vendor-supplied scheduling application software changes in accordance with release management procedures;
- Conducting SC training and SC certification testing;
- Performing software life cycle activities in support of in-house scheduling software requirements necessary for market reliability and accuracy as detailed in the FERC filing and ISO protocols;
- Administering all interface applications between the SI database and all other subsystems;
- Providing system administration support for test and development environments; and
- Providing an advisory role to ISO Market Surveillance group on market power issues.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on:

Direct Assignment

CAS
32%

CONG
28%

ASREO
40%

1755 Business Solutions

Description:

The Market Development and Support group has the overall responsibility of the SI application and all other Market Application (i.e. RMR scheduling, Operator Interface, Existing Transmission Contract application, and Interchange Transaction Scheduling) and Database development, support and security, for support of Day-Ahead, Hour-Ahead and the Real Time Energy Markets. This group also is responsible for overseeing and administering all interface applications between the SI operational databases and all other subsystems (e.g., EMS, SA, BBS, BITS, etc.). Provides system administration support for test and development environments. This position ensures facilitation of Markets through reliable Market applications and databases. All applications and interfaces must be designed and operated to increase the transparency and the efficiency of the Markets. Working with SCs is critical to the success of the ISO in providing needed interfaces to facilitate Markets.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
35%	10%	54%

1757 Market Integration

Description:

Engineers on the Market Integration team engage in market engineering, information and scheduling design. They are responsible for verifying all business requirements are implemented as per the design of Business Solutions, Market Engineering, and in accordance with ISO Tariff. They provide the technical expertise for ensuring all Market Systems are integrated with legacy applications, processes and procedures. Engineers on this team also analyze the operational and financial impacts of market functionality and provide recommendations on new protocols or procedures based on the analysis.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS	CONG	ASREO
25%	30%	45%

1760 Market Quality Group

1756 Market Quality - General

Description:

Market Quality provides a central team in Market Services that ensures the quality of the “bid to book” market transaction data prior to the settlements process. Market Quality achieves this by identifying, monitoring, recommending, implementing and/or executing processes, procedures, system enhancements and controls in the ISO's business process flow to ensure accurate market transaction data flows throughout the ISO business processes. The Market Quality team works together with the ISO's Operations and Market Services business personnel and systems to accomplish this task. Market Quality business processes have been implemented in the following areas:

- Technical dispute analysis and resolution
- Grid and Market Operations transactional review and correction
- Meter data and RMR transactional review and correction
- Master File Data Coordination

Specific tasks performed by the team include the following responsibilities:

- Develop and deploy Market Quality standards, procedures and controls for new and existing business processes including market, settlement, and metering.
- Continually review current market, settlement and operational process to ensure efficiencies. identify potential problems and design quality assurance solutions for preventative and/or corrective actions.
- Identify software inefficiencies on business systems; work with business owners to enhance software efficiency and design solutions for monitoring and quality control.
- Identify policy issues, conduct impact assessment and work with Client Relations, ISO business system owners and policy office to resolve such issues.
- Review new ISO Tariff and contract language to ensure intent of agreements is being met by software, manual process and floor procedures; ensure controls and processes are in place to avoid relevant client disputes.
- Monitor disputes, resolve discrepancies and determine, develop and deploy necessary changes to business processes, procedures and controls to resolve issues.
- Participate in Market and Settlement design teams to develop new market functionality that ensures the quality of market and settlement information and transactions throughout the business process.
- Calculate billable quantities and business transactions when necessary to ensure valid results and quality settlements data.
- Participate in Market and Settlement implementation, testing and Market Simulation of new Market functionality from business quality perspective as well as a customer perspective. Test potential problem scenarios to identify short and long term solutions.
- Ensure that Grid and Market Operations transactional processes and procedures adhere to the Market Quality standards, controls and procedures. Identify areas where additional training is required.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

CAS
37%

CONG
33%

ASREO
30%

1800 VP Corporate and Strategic Development

1811 VP Corporate and Strategic Development - General

Description:

This cost center contains the costs of the VP for Corporate and Strategic Development. The VP of Corporate and Strategic Development oversees the Human Resources Department, the Communications Department, and the Policy Office (the Policy Office is comprised of Strategic Development, Regulatory Policy and the Project Office), and is the liaison to the Board of Governors.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Supervised Departments costs

1821 Communications

Description:

The Communications group is responsible for the Corporate Communications functions of the ISO, including internal and external communications and media relations. The functions of this group include:

- Serving as Public Information Coordinators during all electrical emergencies; holding news conferences and coordinating print, radio and TV news coverage from ISO control room, playing an important role in maintaining reliability of the Grid by promoting conservation.
- Developing and distributing news releases, advisories and media kits, and serving as media spokespersons for the ISO.
- Ensuring consistent internal communications;
- Planning and executing corporate special events;
- Developing and Publishing the Corporate Annual Report
- Maintaining ISO Speakers Bureau and Speech Bank;
- Reviewing and analyzing expenditures, operations, and workflow of the unit to maximize operational efficiency of the organization;
- Coordinating development of business plans, processes, and procedures to manage internal and external communications.

This group is an overhead group.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1841 Human Resources

Description:

The Human Resources Department is responsible for health and welfare benefits design and administration, compensation design and administration, payroll, employee relations, training, recruitment and employee retention, oversight of the staff augmentation function through external contractors, and employee records management. Human Resources is an overhead department; Human Resources activities, tasks, and projects serve employees throughout the organization.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios

1830 Policy Office

1831 Strategic Development

Description:

Strategic Development is a collaborative component to the Policy Office, responsible primarily for Market Design initiatives and policies. See Regulatory Policy (Cost Center 1861) for further definition.

This group is an overhead group.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1851 Project Office

Description:

The Project Office is responsible for development, delivery and monitoring of the Project processes at ISO. Additionally, this group facilitates the development and monitoring of corporate goals, and provides corporate reporting for projects and the corporate goals. This group is also responsible for development, maintenance, and implementation of corporate policies not owned by HR, Operations and/or Legal and Regulatory.

The Project Office is an overhead group.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

1861 Regulatory Policy

Description:

The Strategic Development, Regulatory Policy and Project Office collectively form the Policy Office (PO). Regulatory Policy is the focal point for articulating the long-term strategy of the ISO and leading the development of ISO policy positions that are consistent with the business and regulatory strategy. Regulatory Policy should provide considered, steady policy guidance for daily operations as well as a foundation for responding to unexpected events and developments. In addition to leading the development of policy positions, the office will be active in ensuring that these positions are consistently communicated internally and externally in all forums (across ISO departments, Board of Governors, regulatory and legislative environs, and engineering venues such as the WECC and stakeholder forums).

The Policy Office will often direct policy development work, but other departments must do much of the work itself. This office is not a self-contained work unit - policy must be developed from a broad array of perspectives from within and outside of the company. "Directing work" means framing the policy questions and identifying the information/analyses necessary to properly answer the questions, managing the work process necessary to develop information, final integration of input, and written articulation of the policy. The Policy Office should facilitate cross-departmental collaboration and initiate interaction with other agencies.

Departmental Mission Statement: To articulate Strategic Objectives and ensure interdepartmental cooperation in the development and implementation of corporate and regulatory policies and plans in a way that guides performance of the ISO's Core Functions.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Direct Operating Costs

2100 Other Group

2111 Other

Description:

This department exists for budgeting purposes only, and contains the funds related to changes in staff costs for the upcoming year.

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Allocated based on Labor Dollar Ratios

V. OPERATING RESERVE CALCULATION

The 2003 revenue requirement includes a provision related to the Operating & Capital Reserves Account ("Operating Reserve"). This is consistent with the calculation of the ISO revenue requirement in previous years. See Appendix B for the Reserve Calculation for 2003.

From the inception of the ISO's operations, funds collected above and beyond those needed to cover budgeted operating expenses have been used to fund the Operating Reserve. These funds are collected every year at the rate of 25% of budgeted debt service (consisting of principal and interest payments.) The operating reserve is targeted to build to a level equal to 15% of overall budgeted operating expenses (excluding debt service).

The Operating Reserve is calculated separately by unbundled service category. The analysis referred to above shows the operating reserve balances for two years: 2001 and 2002. The 2001 analysis is necessary, as the December 31, 2001 reserve calculation was used in setting the 2002 GMC rates, but this calculation was done prior to the end of 2001, and actual results differed from that forecast. The revised calculation uses actual results to arrive at a beginning reserve balance as of January 1, 2002.

The analysis shows the effects of events in 2002 on the operating reserve, both from a budget and an actual/forecast perspective.

At December 31, 2002, it is anticipated that for each unbundled GMC category, the reserve balance will exceed the reserve requirement, and accordingly, a revenue credit will be available. The amount of the revenue credit available to apply toward 2003 depends on (1) actual costs incurred by each service category during the year (2) revenue under or over-collections for each service category during the year, (3) other revenues such as ISO fines, (4) use of the operating reserve to fund capital expenditures in 2002, and (5) reserve balances for each service at the beginning of the current year.

VI. CAPITAL BUDGET PROJECT ALLOCATIONS

Capital costs are grouped in the Cost Allocation Matrix according to the six categories shown below:

1. Infrastructure (Direct Assignment): Items include the EMS, Scheduling Infrastructure (SI), Balance of Business Systems (BBS), MDAS (Meter Data Acquisition System), RMR (Reliability Must Run), Market Analysis software, User groups, startup costs, and working capital. A brief description of the systems are as follows:

Scheduling Infrastructure (SI): SI provides the information management services needed by the scheduling system. It includes the hardware, software and databases that allow the ISO to collect, validate, store, transfer, archive and audit the energy and ancillary services schedules nominated or accepted by the ISO from SC's.

Scheduling Applications (SA): SA are the applications used by the ISO's scheduling personnel to assess the state of the transmission system, to evaluate the Preferred Schedules submitted by SCs and to establish committed operating schedules. These applications include congestion and transmission management software necessary to assist in congestion management and to determine the transmission price associated with the use of congested inter-zonal transmission paths.

Balance of Business Systems (BBS): BBS refers to the computer and other systems to support the following business processes: 1) Settlements to calculate payments owed between the ISO and SCs for imbalances, congestion and ancillary services and other charge types; 2) Billing and Credit to support accounting, invoicing, payment and collection of these payments; and 3) General accounting systems and administrative functions associated with daily ISO operations.

Meter Data Acquisition System (MDAS) – MDAS, also called Field Data Acquisition (FDA), is used to collect metering data from all generators and others connected directly to the transmission lines, tie points and zonal interface points. This refers to the metering standards, data servers, interface equipment, databases and software that allow the ISO to collect that data.

2. Infrastructure (Allocated Items): This category includes items which are generally used by all ISO functions, and are allocated based on the results of the total operating cost allocation, labor dollar ratios, or specific Department results. Examples include Issue management system (Remedy), Security System (CUDA), Corporate Accounting System (Oracle), HR System, Imperitiv, etc.

3. Startup (Allocated Items): These infrastructure items are used by all ISO functions, and are allocated based on either the results of the operating cost allocation or total infrastructure costs.

4. Other Software and Enhancements (Direct Assignment): Items included in this category are allocated based on direct assignment and include EMS/MDAS and the Participating Load program, and SA/SI/BBS.

5. 2000 and 2001 Capital Debt Service: Items in this category include: SA/SI/BBS, EMS/CIM/FDA, EMS, SA/SI/BBS, facilities, furniture, office equipment, land, and building costs. They are allocated based on direct assignment, operating costs and labor dollar ratios.

6. 2003 Cash Funded Capital Expenditures: The cash funded capital expenditures are allocated to the three unbundled service categories based on various approaches, including direct allocation for MD02 and Operating Systems, and

Descriptions of the 2003 capital projects are included in Appendix A, including cost allocations methods and results. Values of individual capital projects have not been provided to prevent such data from being used in project bidding.

COST ALLOCATION MATRIX
APPENDIX A
2003 PROPOSED CAPITAL PROJECTS

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Data Center Infrastructure
Reference Number 014 **Priority** 1 Essential

Overview

To meet infrastructure build out for raised floor, including the purchase of computer equipment racks and mount for system equipment, seismic bracing, under floor receptacles and rack mounted static switches.

Impacts if Project is Not Implemented

Approved projects will not be implemented or delayed.

Expenditure Justification

ISO infrastructure requirement.

Continuation of started project.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
45%	10%	45%	0%	100%

Unbundling Methodology

This project provides capital funds for data center infrastructure installations on projects that are O & M funded. No funds from this project will be used for installations on other projects with approved Capital funds. Direct allocation by manager.

2003 Proposed Capital Projects

Category 2003 Corporate Systems
Project Name Software Purchased - Non Project License True-up
Reference Number 124 **Priority** 1 Essential

Overview

Third party software required to providing applications not covered under individual projects or expansion for growth (additional licenses) for applications currently used. Expenses for YTD2002 are \$356K made up from Oracle, Legato and miscellaneous desktop applications. Future needs are projected to include Veritas, Vitria, Compaq, and Talarian middleware providing support for the major production ISO application set.

Requests for funds under this account will be submitted to the Project Steering Committee in excess of \$25K to review need and ISO business priorities.

Impacts if Project is Not Implemented

If these software applications were not purchased support for the real-time production applications running the Markets and Scheduling activities may be impacted.

Expenditure Justification

ISO infrastructure requirement.

Supports corporate goal/strategic plan.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
0%	0%	0%	100%	100%

Unbundling Methodology

Generally for enterprise licenses, misc. purchases. Allocation on Operating Costs.

2003 Proposed Capital Projects

Category 2003 Corporate Systems
Project Name HR/Payroll System
Reference Number 167 **Priority** 1 Essential

Overview

Replacement of current HRIS and Payroll System -

The current HRIS and Payroll system was selected when the package was first released to the market. Due to the lack of maturity in the product and the implementation of customizations, the ISO has struggled a great deal to meet day-to-day deadlines. While every payroll deadline has been met, workarounds in the HRIS and Payroll system have averaged 5 hours of overtime in the business unit during each payroll cycle and an average of 75 hours for year end processing. Past upgrades have been unstable, containing undocumented changes and internal redesigns that wreak havoc with the ISO customizations, sometimes resulting in up to 30 or 40 hours of overtime and staff from Legal and IS stuffing checks to meet mailing deadlines. Additionally, upgrades to the system are bundled with legislative updates, eliminating any choice by the ISO to stay with the current version or implement new versions when it is convenient for the business unit and IS.

Impacts if Project is Not Implemented

Impacts if current system not stabilized and a replacement not obtained - High probability that HR functions would not be able to be performed, including creation of paychecks. Current plan is to continue to work with current system and plan to stabilize the system by externalizing all ISO customizations and to implement more controls. This will be a time-consuming effort since implementing controls requires the development of additional external customization to supplement where the package is lacking. If this stabilization effort is unsuccessful, replacement of the system will definitely be required.

Replacement of the HRIS/payroll system is critical but not required.
Payback unknown until assessment completed.

Expenditure Justification

Internal productivity, cost savings, avoided costs.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
0%	0%	0%	100%	100%

Unbundling Methodology

Company wide impacts. Allocation on Operating Costs.

2003 Proposed Capital Projects

Category 2003 Corporate Systems
Project Name Computer Direct Purchases
Reference Number 173 **Priority** 1 Essential

Overview

This is a new program proposed for this fiscal year to allow the ISO to determine the best financial decision on its IT equipment acquisitions. Traditionally the ISO has determined that leasing IT equipment for a term of 3 years allowed for technology changes, determination of a steady-state for applications, and retention of capital funds. The proposed funds will provide for procuring long term assets with a useful life in excess of 3 years. The amount requested will provide for a small population of servers and desktops to be replaced at the end of lease during FY2003. Current lease schedules indicate a total of 100 servers (retail value of \$6M) and 300 desktops (retail value of \$1M) will be replaced next year.

Future purchases under this capital fund will provide some relief on the existing O&M budget for equipment lease costs.

Impacts if Project is Not Implemented

If Leasing activity continues, the cost effectiveness of IT investments decreases generating an increase in O&M costs.

Expenditure Justification

ISO infrastructure requirement.

Supports corporate goal/strategic plan.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
0%	0%	0%	100%	100%

Unbundling Methodology

These funds will provide computer equipment that serve the entire ISO and all applications supporting its business needs. Allocation on Operating Costs.

2003 Proposed Capital Projects

Category 2003 Corporate Systems
Project Name Internet Gateway Anti-Virus (Tier 3)
Reference Number 178 **Priority** 1 Essential

Overview

Description Withheld for Security Purposes.

Impacts if Project is Not Implemented

Description Withheld for Security Purposes.

Expenditure Justification

Internal productivity, cost savings, avoided costs.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
0%	0%	0%	100%	100%

Unbundling Methodology

Company Wide exposure. Allocation on Operating Costs.

2003 Proposed Capital Projects

Category 2003 Furniture/Facilities/Office Equipment

Project Name Facilities Leasehold Improvements

Reference Number 013 **Priority** 1 Essential

Overview

Provide for various leasehold improvement projects and furniture requirements, as needed, to support ISO staff residing in our Folsom and Alhambra locations. The projects include 1) Ergonomic chair purchases, 2) Workstation enhancements 3) Filing Cabinets 4) Active sound masking for open office area 151 5) Architectural improvements to the 151 hallways, and 6) misc. installations for small projects.

Impacts if Project is Not Implemented

Operational efficiency, employee safety and/ or reliability will be impaired if needed improvements are not made to the physical facility as needed.

Expenditure Justification

Supports corporate goal/strategic plan.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
0%	0%	0%	100%	100%

Unbundling Methodology

General benefit of whole company, will be allocated by Direct Labor.

2003 Proposed Capital Projects

Category 2003 Furniture/Facilities/Office Equipment

Project Name Facilities Automation

Reference Number 093 **Priority** 1 Essential

Overview

This project provides facilities with a facilities computer maintenance management system ("CMMS") and program that will aid in maintaining building as-built drawing. The CMMS software will enable the us to track and document work performed on all ISO assets maintained by the Facilities Department. In addition, it will enable Facilities to track maintenance activities that reduce the cost for excessive or ineffective vendor repairs, prompt us when preventative maintenance tasks are due, and better track costs in many categories. The drawing program provides a secure environment storing our building drawings and still allow our vendors access to make as-built changes.

Impacts if Project is Not Implemented

Facilities would continue to struggle to meet the space planning needs of the ISO under tight space constraints and in the face of preparing for a new campus. The reliability of the preventative maintenance programs would continue to rely on a series of unrelated documents and spreadsheets. We would also be unable to make informed decisions on purchases and repairs. We currently have no way to allow vendors to update a single drawing, we have a large number of sets which overlap and are nearly impossible to deal with.

Expenditure Justification

Internal productivity, cost savings, avoided costs.

ISO infrastructure requirement.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
0%	0%	0%	100%	100%

Unbundling Methodology

Company wide benefit. Direct Labor used for Allocation.

2003 Proposed Capital Projects

Category 2003 Furniture/Facilities/Office Equipment
Project Name Replace Camera Monitoring/Control System
Reference Number 131 **Priority** 1 Essential

Overview

The existing camera switching and control unit has reached max capacity, there is no additional room for expansion. The system also lacks the functionality required given current security requirements. They system is also over 5 years old.

Impacts if Project is Not Implemented

If the system fails there might be a considerable period without some camera coverage.

Expenditure Justification

ISO infrastructure requirement.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
0%	0%	0%	100%	100%

Unbundling Methodology

Company wide benefit, not system specific. Allocation on Direct Labor.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Control Area / BITS BITS/ETAG Phase 2
Reference Number 040 **Priority** 1 Essential

Overview

This project would provide control area check out utilizing similar technology to the ADS dispatching System. This system would provide a GRID interface similar to the Transmission Scheduling Interface in BITS, allowing only Control Areas to see permitted Transmission MW by Tie point. This system would integrate with BITS to allow for Check out during Real-Time.

Impacts if Project is Not Implemented

If the project is not implemented, then ISO will still continue checking out via telephone.

Expenditure Justification

Grid reliability.

Market-savings/efficiency/accuracy/analysis.

Internal productivity, cost savings, avoided costs.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
75%	15%	10%	0%	100%

Unbundling Methodology

This provides the means for electronic and Audited communications for Control Area checks. This would reduce the time necessary in communicating Transmission schedules between control Areas. - Used 2003 Real Time Scheduling cost allocation.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Integration of Settlement Workaround Tools
Reference Number 041 **Priority** 1 Essential

Overview

The goal of this project is to integrate the existing Settlement Workaround tools into the Settlement System, eliminating the manual work and associated human errors. Many of these tools were designed to handle special settlement exemptions and corresponding allocations. These tools require daily manual execution. There is no central storage for the data created by these tools. It makes it difficult to audit/trace the charges generated by these tools. Such shortcomings will be overcome when these tools are incorporated as an integral part of the Settlement System.

Impacts if Project is Not Implemented

Without the integration of these manual tools, ISO will continue to process certain settlement charges manually, with a higher operation cost and higher probability for errors.

Expenditure Justification

Market-savings/efficiency/accuracy/analysis.

Internal productivity, cost savings, avoided costs.

Supports corporate goal/strategic plan.

Market-savings/efficiency/accuracy/analysis.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
16%	7%	77%	0%	100%

Unbundling Methodology

The project aims at improving ISO's settlement operation which is under the Market Operations category. Used 2003 Settlement department allocation. Direct Allocation.

2003 Proposed Capital Projects

Category 2003 Operating Systems

Project Name Migration of Settlement Client Application to Web Based Platform

Reference Number 042 **Priority** 1 Essential

Overview

The Settlement Client Application is used by ISO staff to view and validate settlement data. It is built on the Power Builder (Ver. 5) platform and utilizes a proprietary software library. This platform is obsolete and maintenance/enhancement has become very costly and ineffective. The goal of this project is to rebuild the application on an open and standard platform to minimize long term maintenance cost and take advantage of potential improvements from a newer technology platform. For example, once the Client Application is moved to a Web-based platform, the infrastructure will be in place to make the Settlement data available to the Scheduling Coordinators via a secure Web-client (i.e. - XML); supporting the IS Strategic Plan and ISO corporate goal to enhance organizational transparency and external communication.

Impacts if Project is Not Implemented

Without the migration, ISO will continue to maintain the Settlement Client Application on the existing platform. This does not support the IS Strategic Plan or ISO Corporate Goals to implement the infrastructure necessary to enhance transparency and external communication. Moreover, ISO will continue to incur high maintenance costs to upkeep the changes needed to support business requirements. The existing platform does not currently provide the functionality needed by the Settlement Analysts to efficiently process their work. Currently, analysts must use a combination of other data query tools in addition to the Client interface for the Settlement validation. Finally, with this migration, the existing Settlement system infrastructure will not be able to support the open platform needed to make the Settlement data more accessible to Scheduling Coordinators.

Expenditure Justification

Internal productivity, cost savings, avoided costs.

ISO infrastructure requirement.

Supports corporate goal/strategic plan.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
16%	7%	77%	0%	100%

Unbundling Methodology

This project involves only the Settlement System which is used to support Market Operations. 2003 Settlements Department cost allocation used as basis. Direct Allocation.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name EMS Grid Operations Training Simulator (GOTS)
Reference Number 140 **Priority** 1 Essential

Overview

The GOTS system that is being implemented as part of EMS phase 2 has many new attributes that were developed by ABB specifically for ISO. It is anticipated that over the course of the next few years, enhancements and incremental changes will need to be accomplished for the many users in support Real Time Operations and OSAT.

Impacts if Project is Not Implemented

Specific Impacts are unknown at this time. Depending on the next years experiences of beginning the training programs on the GOTS system there could be small to large changes requested.

Expenditure Justification

Grid reliability.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
100%	0%	0%	0%	100%

Unbundling Methodology

Depending on emerging criteria, changes to GOTS are anticipated as well as new features to allow optimization of Grid Operator training. Direct allocation.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name AGC CPS1 and CPS2 Control
Reference Number 143 **Priority** 1 Essential

Overview

The EMS project had an original scope of implementing a control algorithm within AGC that would control to CPS1 and CPS2 criteria. Since then, ISO has identified areas that need to be changed which are out of scope. There can be anticipated incremental changes until the design is installed early in 2003.

Impacts if Project is Not Implemented

The original scope will not be aligned with changes identified as required by ISO engineering.

Expenditure Justification

Grid reliability.

Continuation of started project.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
100%	0%	0%	0%	100%

Unbundling Methodology

Same as original system allocation. Control Area Grid Operations.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Cubix Replacement for the MV90 Meter Data Collection System
Reference Number 180 **Priority** 1 Essential

Overview

Replace the two (Folsom and Alhambra) Cubix systems that were purchased when the ISO started. These systems contain 63 processors each and are used to collect Meter Data from the generators. They are off support, failing, and can not be upgraded. Obtaining parts for the failed systems is very hard. The systems are P166 with 32 MB RAM and no open slots for more RAM. They can only take 2GB or smaller hard disk drives which are not made any more.

Impacts if Project is Not Implemented

The current system will continue to deteriorate and could leave the ISO without a reliable system to collect meter data.

Expenditure Justification

Internal productivity, cost savings, avoided costs.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
30%	8%	62%	0%	100%

Unbundling Methodology

Allocated as 2003 Meter Data Group breaks its costs.

2003 Proposed Capital Projects

Category 2003 MD02
Project Name MD02 Phase 2 & Phase 3
Reference Number 181 **Priority** 1 Essential

Overview

2003 sections of ISO Market Redsign that will impact the following areas.

Phase 2

Integrated Forward Energy Markets (IFM)

AMP Mods 2

Settlements Mods 2

Residual Unit Commitment (RUC) -

Load Forecast Augmentation -

Market Transactions System (MTS)

Phase 3

LMP Studies -

Locational Marginal Pricing (LMP) using Full Network Model (FNM)

DMA Mods

Meter Data Acquisition System (MDAS)

Energy Management System (EMS)

Settlement Mods 3

Transmission and Contract Optimization System (TCOS)

Congestion Revenue Rights (CRR)

Scheduling Infrastructure Graphical User Interface (SIGUI)

Master File Re-Design (MFRD)

Market Financials Upgrade

Impacts if Project is Not Implemented

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
32%	33%	35%	0%	100%

Unbundling Methodology

Based on know elements and estimated impacts on Unbundling categories.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Compliance Programs and Initiatives - Priority 1
Reference Number 073 **Priority** 1 Essential

Overview

These projects support the development and monitoring of compliance parameters of the ISO Tariff and FERC orders. A detailed breakdown of projects and initiatives is available from Compliance.

Impacts if Project is Not Implemented

Compliance will not be able to develop the necessary programs that are needed to monitor the compliance with the tariff.

Expenditure Justification

Internal productivity, cost savings, avoided costs.

FERC/NERC/WECC mandate.

Market-savings/efficiency/accuracy/analysis.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
82%	5%	13%	0%	100%

Unbundling Methodology

The Compliance department is the enforcement arm of reliability. Enforced rules in the market encourage correct market behavior. Compliance staff is tasked with the responsibility to insure compliance with the ISO tariff requirements. 2003 Compliance Department allocation.

2003 Proposed Capital Projects

Category 2003 Operating Systems

Project Name Obtain Software to Implement London Economics Methodology And Enhancements

Reference Number 129 ***Priority*** 1 Essential

Overview

Obtain yearly license for a program similar to PROMOD in order to evaluate economic transmission projects. Hire contractor to modify an existing PROMOD type program to perform the analysis required by the London Methodology to evaluate new economic transmission lines.

Impacts if Project is Not Implemented

Economic transmission evaluations will be done by DMA as time permits.

Expenditure Justification

Market-savings/efficiency/accuracy/analysis.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
100%	0%	0%	0%	100%

Unbundling Methodology

Software will be utilized to do economic analysis for new transmission line projects. The lines will promote market efficiency and remove market power issues. Direct Allocation.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Implement NERC Frequency Response Standard (FRS)
Reference Number 132 **Priority** 1 Essential

Overview

NERC has been working for more than a year to create a new Reliability Standard for Frequency Response. Although all large units are suppose to have a 5% Governor Droop setting, the reality is many units do not achieve this level of performance. NERC is proposing to have a Frequency Response Standard that all control areas are expected to meet and they must have a predictive capability to forecast the response of the units that are currently operating at any specific time. This proposed standard was scheduled for implementation by June 2003. The last NERC meeting resulted in a temporary postponement of the implementation date but we expect the standard to go into effect sometime in 2003. We have been tracking and reporting our success/failure to meet this proposed standard over the past year and unfortunately we fail to meet it approximately 50% of the time. We obviously need a new tool to predict how well we will do each hour or segment if there is an incident (loss of a major generator or transmission facility). On the average, there is an incident every 31 hours on the Western Power Grid.

The purpose of this project is to collect statistical data from PI and EMS on the Frequency Response rate for the 200 largest generators on our system and to build a statistical profile for each unit. Unit response will vary with the seasons and we need a system to capture all the data points and build these probability functions. The data should be stored in a common system for use in the real-time forecasting tool.

Modify the Resource Registry to save information on Frequency Response characteristics for all generating units in the ISO control area. All units will be "Certified" in 2003 for Frequency Response capabilities and the Resource Registry should be the Official data base for actual generator response data.

Operations will develop the mathematical functions and concepts for this new frequency response forecasting tool. Then the specification will be provided to the IT organization to create the architecture for the system and to develop the code and test the resulting system. Funding should include the cost to develop the algorithms, design of the architecture, modification of the Resource registry as needed, creation of the data extraction software for PI, and the creation of the code for the new software tool. We expect there is probably be a Compliance piece that may have to be designed and created.

Impacts if Project is Not Implemented

WECC is expected to adopt this new Frequency Response Standard and include it in the Reliability Management System standards. Failure to meet the standard will result in fines and penalties. We need some type of a tool that will help us meet this proposed standard.

Expenditure Justification

FERC/NERC/WECC mandate.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
100%	0%	0%	0%	100%

Unbundling Methodology

Generator Frequency Response is essential for grid reliability and a key service for Control Area reliability.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Intelligent Load Following and Ramping Tool
Reference Number 135 **Priority** 1 Essential

Overview

Develop and implement a new tool for the Generation Dispatchers to guide them in the optimum amount of supplemental energy that should be dispatched in each 10 minute period for the next 90 minutes. This project supports Corporate Goal #1 to improve Supplemental Energy dispatch such that the Units providing Regulation Service can be re-dispatch to return to their POP's. This tool estimates the load and resource changes both scheduled and forecasted for the next 90 minutes. It tracks the generator's current response rate to dispatch instructions and recommends the amount of energy that should be dispatched (INC'd or DEC'd) in the next intervals. It anticipates changes in energy schedules on the hour and uses the ramp planning tool to pick the optimum dispatch for each interval in the ramp period. The goal is to help the Generation Dispatchers meet system performance goals and reduce the amount of manual calculations and guessing they must do the balance load and generation in real-time. The goal is to also reduce the amount of Regulation required, reduce the amount of supplemental energy dispatch to the optimum amount and to reduce the wear and tear on the generating units by sending them fewer changes.

Impacts if Project is Not Implemented

Continued reliance on the Generation Dispatchers to manual calculate and guess the amount of supplemental energy to dispatch. Potentially miss achieving the Corporate Goal for improved operation. Over procurement of energy and regulation services. Wear and tear on generators from being jerked up and down by less than optimum dispatch notices.

Expenditure Justification

Supports corporate goal/strategic plan.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
90%	0%	10%	0%	100%

Unbundling Methodology

Most of the benefits are for real-time operation of the control area and control of ACE. If the project can result in lower procurement of Regulation Services and enable generators providing Regulation Services to operate closer to their POP's then there is an impact on the Ancillary Services area.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Market Power Simulation Model
Reference Number 165 **Priority** 1 Essential

Overview

The market power simulation model is a production cost model that would be used by DMA to compute competitive baseline prices to analyze the overall efficiency of the ISO markets. Currently, a simplistic analysis is used by DMA to estimate the level of price mark-up over efficient competitive market levels. However, such analysis has often been criticized for not taking account of all costs and factors that need to be considered in computing generation production costs such as actual heat rates, ramp rates, start-up costs, etc. In order to address these criticisms, DMA must enhance its analysis with a comprehensive market power simulation model. In addition, in the July 17 FERC order, the Commission ordered the ISO to file on a weekly basis the proposed 12-month competitiveness index as an indication of market health. To accurately compute the index in a defensible manner, DMA must have the market power simulation model.

Impacts if Project is Not Implemented

Without this project, ISO filings referencing market power problems in the ISO's markets will continue to be discounted to a degree without a more sophisticated analysis of actual production costs. This could jeopardize ISO's assessment of competitive market outcomes and proposed market power mitigation measures that are based on such analysis. Additionally, DMA will not be able to accurately comply with the July 17 FERC order provision of filing the 12-month competitiveness index with the Commission.

Expenditure Justification

FERC/NERC/WECC mandate.

Market-savings/efficiency/accuracy/analysis.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
23%	19%	58%	0%	100%

Unbundling Methodology

The model would be used to monitor the overall efficiency of the ISO's markets to support ISO proposed market design changes. 2003 DMA cost allocation used for basis.

2003 Proposed Capital Projects

Category 2003 Operating Systems
Project Name Strategic Bidding Model
Reference Number 166 **Priority** 1 Essential

Overview

The strategic bidding model would be used by DMA to improve market analysis of ISO markets and potentially be used as one component in the economic analysis of transmission expansion projects. In the area of market analysis, the model would be used for the general diagnosis of market power positions of suppliers in the market. DMA's current techniques for analyzing market power positions must be enhanced to hold up to scrutiny in regulatory filings. This model allows for the study of bidding in response to structural changes in the market such as long-term contracts and price response demand. The model could also be used to simulate market participant bidding behaviors under different transmission resource scenarios to enhance the ISO's methodology for evaluating transmission expansion projects. Under the methodology currently being developed by London Economics, the strategic bidding behavior model currently used is simplistic and provides potentially indefensible results. The LE methodology, or any methodology used to evaluate proposed transmission projects, would be significantly enhanced by the inclusion of a comprehensive strategic bidding model.

Impacts if Project is Not Implemented

Without this project, DMA's current market power analysis cannot account for structural changes in the market and thus will continue to be susceptible to criticism in reports and regulatory filings. Such criticism could jeopardize mitigation measures based on such analysis. Additionally, the methodology for evaluating proposed transmission expansion projects may provide questionable results and be difficult to defend in regulatory proceedings without the use of a comprehensive strategic bidding model.

Expenditure Justification

Market-savings/efficiency/accuracy/analysis.

Supports corporate goal/strategic plan.

Functional Allocations

<i>CAS</i>	<i>CONG</i>	<i>ASREO/MO</i>	<i>General</i>	<i>Total</i>
23%	19%	58%	0%	100%

Unbundling Methodology

The strategic bidding model will be used to enhance the process of economic analysis of transmission expansion projects and would also be used to diagnose market power positions of market participants. 2003 DMA cost allocation used as cost basis.

COST ALLOCATION MATRIX APPENDIX B

OPERATING AND CAPITAL RESERVES ACCOUNT CALCULATION



Calculation of Operating & Capital Reserve Account Balance as of 12/2001

		Per 11/2/2001 Filing				Actual				Difference		General Notes		Allocation Notes		CAS	CONG	Market Ops/ ASREO	Total
		CAS	CONG	Market Ops/ ASREO	Total	CAS	CONG	Market Ops/ ASREO	Total										
1	Beginning Reserve Balance, 1/1/2001	9,806	1,839	8,784	20,429	9,806	1,839	8,784	20,429			Per 2001 Section 35 Filing				48.0%	9.0%	43.0%	100.0%
2	Calculation of Contribution to Reserve from Operations																		
3	Revenue:																		
4	GMC Rates: 2001 Revenue	100,095	16,771	101,226	218,091	100,314	16,936	101,038	218,288			197 2001 Collections, updated from 11/2/2001 filing.				46.0%	7.8%	46.3%	100.0%
5	Other (Interest Income, WSCC reimbursement)	2,240	199	1,201	3,640	2,847	365	1,745	4,957			1,317 Updated from 11/2/2001 filing.				57.4%	7.4%	35.2%	100.0%
5a	Other (non cash items)																		
6	Expenses:																		
7	O&M	(83,956)	(12,109)	(67,736)	(163,800)	(81,901)	(12,618)	(62,226)	(156,745)			(247) Non cash items (arbitrage rebate liability)				48.0%	9.0%	43.0%	100.0%
7a	O&M: Internally Capitalized Labor Costs											7,055 Updated based on actual 2001 results. Excludes internally capitalized labor cost.				52.3%	8.1%	39.7%	100.0%
8	Debt Service	(18,619)	(5,509)	(21,783)	(45,911)	(19,025)	(5,630)	(22,258)	(46,913)			(1,002) No 2001 bonds were issued. Budgeted Debt service was \$50,513 (\$32,233 principal plus \$11,785 interest) less \$8,494 on 2001 bonds, plus variance of interest expense of \$2,895. Non-cash interest expense item for \$3,052 excluded from calculation (FAS 133 mark to market)				40.6%	12.0%	47.4%	100.0%
9	Contribution to Operating Reserve	(240)	(648)	12,908	12,020	2,117	(969)	18,192	19,339							56.5%	4.0%	39.5%	100.0%
10	Other Reserve Uses																		
11	Use of Reserve for CapEx	(7,248)	(513)	(5,068)	(12,829)	(10,994)	(779)	(7,686)	(19,459)			(6,630) Total 2001 spending of \$25,800 plus \$1617 internally capitalized labor cost. Of this amount, \$7,958 is funded from 2000 bond proceeds, balance from Reserve. Actual fines provided toward 2002 rates per 11/2/2001 filing.				48.0%	9.0%	43.0%	100.0%
12	Amendment 33 Fines (per original filing)	2,400	450	2,150	5,000	2,400	450	2,150	5,000			37,450 Additional fines recognized in Operating Reserve post-11/2/2001 filing (based on assessment as of April 2002.)				48.0%	9.0%	43.0%	100.0%
13	Amendment 33 Fines (additional collections)					17,976	3,371	16,104	37,450										
15	Ending Reserve Balance	4,718	1,127	18,775	24,620	21,305	3,912	37,543	62,759										
16	Less: Reserve Requirement (15% of 2002 Budget, 1	14,962	2,848	8,418	26,228														
17	FY2002 Operating Budget	99,747	18,985	56,123	174,855														
18	Equals: Revenue Credit Available	(10,244)	(1,720)	10,356	(1,608)														



CALIFORNIA ISO

Calculation of Available Revenue Credit for 2003

Budget

Actual/Forecast

	CAS	CONG	Market Ops/ ASREQ	Total	Difference	General Notes	Allocation Notes	CAS	CONG	Market Ops/ ASREQ	Total
1 Beginning Reserve Balance, 1/1/2002	\$ 21,305	\$ 3,912	\$ 37,543	\$ 62,759				\$ 21,305	\$ 3,912	\$ 37,543	\$ 62,759
2 Calculation of Contribution to Reserve from Operations											
3 Revenue:											
4 GMC Rates: 2002 Calendar Year Revenue	141,815	27,791	75,188	244,794							
5 Other	1,983	146	480	2,610							
6 Expenses:											
7 O&M	(101,781)	(19,129)	(56,555)	(177,465)							
8 Debt Service	(21,012)	(5,152)	(21,859)	(48,023)							
8a Cash Funded CapEx	(5,559)	(645)	(2,096)	(8,301)							
9 Contribution to Operating Reserve	15,446	3,011	(4,842)	13,615							
10 Other Reserve Uses											
11 Use of Reserve for CapEx (above budgeted Cash Funded CapEx)											
12 Amendment 33 Fines (adjustment based on new MMCP)											
12a Reallocation of Fines per 2002 GMC Settlement											
13 Interest on Refunds from 2002 GMC Settlement											
14 Net Increase in Operating Reserve	15,446	3,011	(4,842)	13,615							
15 Ending Reserve Balance	36,751	6,922	32,701	76,375							
16 Less: Reserve Requirement (15% of 2003 Budget)	16,066	2,694	7,001	25,761							
17 FY2003 Operating Budget	107,105	17,958	46,675	171,739							
18 Equals: Revenue Credit Available	\$ 20,685	\$ 4,229	\$ 25,700	\$ 50,614							

(20,460)	Per pending 2002 GMC settlement, revenue requirements per category are CAS: \$138,586, CONG: \$27,787, ASREQ: \$72,827, or total of \$239,200. Based on "black box" settlement rates, total collections were to be: CAS: \$136,254, CONG: \$27,787, ASREQ: \$ 63,375, or total of \$227,417. Actual collections differ due to changes in volume.	Actual 2002 forecasted collections.	59.2%	13.0%	27.8%	100.0%
1,198	Interest exceeds budget due to higher balances held, offset by lower interest rates.	Security coordinator fees assigned to CAS. Remainder (mainly interest) spread proportionately.	64.9%	8.2%	26.9%	100.0%
10,451	Actual expenses assumed to be approximately \$5.0 million under \$171.8 million spending target, and \$10.7 million under original 11/2/2001 filed budget.	Allocation: Per 11/2/2001 filing (CAM: Exh. ISO-4, page 149 of 161, Line 227)	57.3%	10.8%	31.9%	100.0%
3,513	Actual debt service does not include \$20 million planned 2002 offering. Principal & Interest on 2002 bond offering would have been \$3,513. Principal & Interest on existing debt service is \$44,510.	Allocation: Actual 2002: budget less non-issued 2002 debt as allocated in CAM.	45.1%	10.1%	44.8%	100.0%
-	Additional use of reserve for CapEx is shown below.	Allocation per 11/2/2001 filing, cash funded CapEx. Exh. ISO-4, page 152 of 161.	67.0%	7.8%	25.3%	100.0%
(13,699)	Use of reserve is based on current forecast of total 2002 CapEx Spending of 22,000.	Allocation to GMC categories is per 11/2/2001 filing. Exh. ISO-4, page 152 of 161.	26.2%	19.1%	54.7%	100.0%
(23,200)	Reduced fines, due to lower MMCP in FERC refund proceeding. Reallocation per terms of 2002 GMC Settlement.	Allocation same as above, 2001 schedule. Up to \$9 million reallocated per 2002 GMC settlement.	48.0%	9.0%	43.0%	100.0%
(160)	Anticipated interest payable on 2002 GMC settlement.	Apportioned according to relative share of refunds.	29.0%	18.0%	53.0%	100.0%

\$ 4,151 \$ 2,407 \$ 1,698 \$ 8,257 \$(42,357)

COST ALLOCATION MATRIX APPENDIX C

COST ALLOCATION MATRIX

California ISO

Cost Allocation Matrix: FY2003 Budget

Summary Table of Results

Appendix C

Category	Control Area Operations	Congestion Management	ASREO/MO	Total
Cost Allocation Percentages, Prior to Reserve Credit Revenue Requirement prior to Reserve Credit	57.8% \$142,008,072	12.1% \$29,807,894	30.1% \$74,041,110	100.0% \$245,857,076
Cost Allocation Percentage, After Reserve Credit Revenue Requirement, After Reserve Credit	58.0% \$ 137,856,869	11.5% 27,400,521	30.4% 72,342,982	100.0% 237,600,371

Rounded to (in thousands):

\$ 137,857 \$ 27,401 \$ 72,343 \$ 237,600

Attached Worksheets

Summary Cost Allocation Matrix

Cost Allocation Matrix

Telecommunications - Total Salaries Method

Telecommunications - Specific Salaries Method

Worksheet for Allocation of Certain Supervisory Departments

Appendix C1
Appendix C2
Appendix C3
Appendix C4
Appendix C5

CALIFORNIA ISO SUMMARY COST ALLOCATION MATRIX - 2003 BUDGET

Appendix C1

Line#	ISO Dept #	OPERATING COSTS	Amount Salaries	Amount Operations	Allocation			Cost Allocated		
					ASREO/MO	Allocation/ Assignment Method	Control Area Services	Congestion Mgmt.	Control Area Services	ASREO/MO
1		Gross Operating Costs								
2		1600 Operations - Direct								
3	1521	Grid Planning	\$ 2,041,338	\$ 2,425,338	0.0%	Direct Assignment			\$2,425,338	\$0
4	1542	Outage Coordination	\$ 1,580,356	\$ 1,780,930	0.0%	Direct Assignment			\$1,780,930	\$0
5	1543	Loads and Resources	\$ 943,936	\$ 1,006,436	0.0%	Direct Assignment			\$1,006,436	\$0
6	1544	Real-Time Scheduling	\$ 2,576,768	\$ 2,680,968	15.0%	Direct Assignment			\$2,010,726	\$268,087
7	1545	Grid Operations - General	\$ 6,844,825	\$ 7,167,325	10.2%	Direct Assignment			\$5,702,047	\$733,879
8	1546	Security Coordination	\$ 1,207,891	\$ 1,295,891	0.0%	Direct Assignment			\$1,255,891	\$0
9	1549	Operations Training	\$ 1,919,268	\$ 3,064,253	24.1%	Direct Assignment			\$1,890,463	\$435,942
10	1554	Special Projects Engineering	\$ 601,931	\$ 860,981	15.9%	Direct Assignment			\$725,153	\$136,945
11	1555	Operations Support Group	\$ 974,683	\$ 1,025,163	21.5%	Direct Assignment			\$620,880	\$184,201
12	1558	Transmission Maintenance	\$ 1,141,103	\$ 1,804,953	1.8%	Direct Assignment			\$1,773,365	\$31,588
13	1561	Operations Engineering South	\$ 1,034,681	\$ 1,240,187	0.0%	Direct Assignment			\$1,240,187	\$0
14	1562	Operations Engineering North	\$ 1,168,863	\$ 1,226,703	0.0%	Direct Assignment			\$1,226,703	\$0
15	1563	Coordinated Operations	\$ 584,551	\$ 677,951	10.0%	Direct Assignment			\$406,771	\$203,385
16	1565	Pre-Scheduling and Support	\$ 1,660,765	\$ 1,697,365	14.6%	Direct Assignment			\$1,254,021	\$194,938
17	1566	Regional Coordination - General	\$ 423,012	\$ 554,912	83.2%	Direct Assignment			\$461,569	\$93,343
18	1569	Operations Application Support	\$ 447,958	\$ 458,472	78.9%	Direct Assignment			\$361,629	\$48,717
19		1800 Operations - Indirect								
20	1511	VP Grid Operations - General	\$ 365,202	\$ 1,011,957	18.3%	Allocated based on Department Direct Co			\$671,941	\$154,956
21	1547	Engineering and Maintenance - General	\$ 289,222	\$ 1,154,222	94.9%	Allocated based on Supervised Department			\$1,095,550	\$45,534
22	1548	OSAT Group - General	\$ 182,432	\$ 267,932	76.6%	Allocated based on Supervised Department			\$205,246	\$44,585
23	1564	Operations Scheduling - General	\$ 281,362	\$ 322,862	81.9%	Allocated based on Supervised Department			\$264,489	\$34,101
24		1900 VP Market Services								
25	1722	Application Support	\$ 414,256	\$ 510,466	19.0%	Direct Assignment			\$96,796	\$377,957
26	1723	Tariff and Contract Implementation	\$ 667,205	\$ 896,883	90.0%	Direct Assignment			\$807,195	\$89,688
27	1724	BBS - PSS	\$ 942,333	\$ 1,148,361	16.8%	Direct Assignment			\$193,228	\$866,623
28	1725	BBS - FSS	\$ 1,037,777	\$ 1,280,321	15.6%	Direct Assignment			\$200,292	\$94,667
29	1731	Contracts and Special Projects	\$ 1,153,955	\$ 1,439,963	76.6%	Direct Assignment			\$1,102,613	\$302,416
30	1741	Client Relations	\$ 2,054,540	\$ 2,299,956	37.8%	Direct Assignment			\$869,540	\$1,212,323
31	1752	Manager of Markets	\$ 2,156,353	\$ 2,355,353	28.8%	Direct Assignment			\$877,679	\$706,606
32	1753	Market Engineering	\$ 1,680,883	\$ 2,061,799	31.7%	Direct Assignment			\$653,659	\$971,068
33	1755	Business Solutions	\$ 739,166	\$ 942,745	25.2%	Direct Assignment			\$237,599	\$829,452
34	1756	Market Quality - General	\$ 1,940,408	\$ 2,102,565	37.1%	Direct Assignment			\$780,139	\$606,471
35	1757	Market Integration	\$ 587,361	\$ 835,895	25.1%	Direct Assignment			\$210,108	\$626,540
36		1900 Market Services - Indirect								
37	1711	VP Market Services - General	\$ 394,287	\$ 248,117	36.9%	Allocated based on Department Direct Co			\$91,454	\$112,179
38	1721	Billing and Settlements-General	\$ 347,911	\$ 353,911	33.8%	Allocated based on Supervised Department			\$119,708	\$214,008
39	1751	Market Operations - General	\$ 331,747	\$ 959,968	20.0%	Allocated based on Supervised Department			\$191,994	\$479,984
40		1900 Information Services - Direct								
41	1424	Asset Management	\$ 845,319	\$ 2,142,168	67.3%	Direct Assignment			\$14,627,029	\$5,621,224
42	1441	Outsourced Contracts	\$ 159,466	\$ 298,837	60.1%	Allocated based on Labor Dollar Ratios-S			\$17,831,873	\$3,174,793
43	1461	Control Systems	\$ 2,186,977	\$ 2,321,654	100.0%	Direct Assignment			\$2,321,654	\$0
44	1462	Field Data Acquisition System (FDAS)	\$ 1,805,783	\$ 2,508,556	29.9%	Direct Assignment			\$749,148	\$1,553,986
45	1467	Settlement Systems Services	\$ 980,615	\$ 1,064,350	15.0%	Direct Assignment			\$159,653	\$830,193
46		1900 VP Information Services - Indirect								
47	1411	Chief Information Officer- General	\$ 391,143	\$ 212,246	62.3%	Allocated based on Department Direct Co			\$132,151	\$61,771
48	1422	Corporate & Enterprise Applications - General	\$ 233,320	\$ 248,320	61.7%	Allocated based on Supervised Department			\$153,121	\$70,426
49	1431	End User Support	\$ 491,208	\$ 6,565,001	63.0%	Allocated based on Direct Operating Cost			\$4,137,311	\$1,744,215
50	1432	Computer Operations - General	\$ 403,068	\$ 430,975	10.0%	Allocated based on Supervised Department			\$261,613	\$43,218
51	1433	Network Operations	\$ 1,549,597	\$ 1,629,905	63.0%	Allocated based on Labor Dollar Ratios-S			\$1,027,178	\$169,687
52	1442	Production Support	\$ 2,440,565	\$ 2,581,165	56.1%	Allocated based on Direct Operating Cost			\$1,449,293	\$92,452
53	1451	Information Security	\$ 1,038,281	\$ 1,509,500	63.0%	Allocated based on Direct Operating Cost			\$951,298	\$401,050
54	1463	Operations Applications - General	\$ 292,237	\$ 323,539	74.4%	Allocated based on Supervised Department			\$240,785	\$6,073

CALIFORNIA ISO SUMMARY COST ALLOCATION MATRIX - 2003 BUDGET

Appendix C1

Line#	ISO Dept #	OPERATING COSTS	Amount Salaries	Amount Operations	Allocation			Cost Allocated			
					Control Area Services	Congestion Mgmt.	ASREO/MO	Allocation/ Assignment Method	Control Area Services	Congestion Mgmt.	ASREO/MO
55	1466	Enterprise Applications	\$ 764,123	\$ 816,499	61.7%	9.4%	28.9%	Allocated based on Direct Operating Costs	\$503,932	\$76,504	\$236,063
56	1468	Corporate Application Support	\$ 1,188,702	\$ 1,333,287	60.6%	10.0%	29.4%	Allocated based on Direct Operating Costs	\$807,360	\$133,374	\$392,553
57	1469	Analytical and Reporting	\$ 984,106	\$ 1,055,106	63.0%	10.4%	26.6%	Allocated based on Direct Operating Costs	\$664,935	\$109,846	\$280,325
58	1471	IT Planning	\$ 628,349	\$ 770,116	63.0%	10.4%	26.6%	Allocated based on Direct Operating Costs	\$485,333	\$80,176	\$204,607
59	1481	Markets and Scheduling	\$ 1,267,761	\$ 1,520,628	56.1%	9.3%	34.6%	Allocated based on Direct Operating Costs	\$853,410	\$140,981	\$526,236
60	1800	Legal - Direct									
61	1641	Market Analysis	\$ 1,997,346	\$ 3,053,880	22.6%	19.3%	58.1%	Direct Assignment	\$688,824	\$589,477	\$1,775,579
62	1642	Market Surveillance Committee	\$ -	\$ 640,750	9.2%	25.0%	65.8%				
63	1661	Compliance - General	\$ 1,150,095	\$ 1,456,895	81.8%	5.5%	12.7%	Direct Assignment	\$1,191,963	\$80,118	\$184,814
64	1662	Compliance - Audits	\$ 357,191	\$ 416,191	83.7%	4.8%	11.5%	Direct Assignment	\$348,359	\$19,916	\$47,916
65	1300	Finance - Corporate Indirect									
66	1311	CFO - General	\$ 420,090	\$ 424,204	60.9%	10.7%	28.4%	Allocated based on Supervised Department	\$258,324	\$45,271	\$120,609
67	1321	Accounting	\$ 836,830	\$ 2,168,530	47.4%	7.8%	44.9%	Allocated based on Direct Operating Costs	\$1,026,831	\$169,066	\$972,634
68	1331	Financial Planning and Treasury	\$ 714,782	\$ 2,511,009	59.7%	10.3%	29.9%	Allocated based on Direct Operating Costs	\$1,500,141	\$259,113	\$751,756
69	1351	Facilities	\$ 641,351	\$ 5,812,962	63.6%	10.9%	25.5%	Allocated based on Labor Dollar Ratios	\$3,696,841	\$634,581	\$1,481,540
70	1361	Office Administration	\$ 643,601	\$ 2,227,171	63.6%	10.9%	25.5%	Allocated based on Labor Dollar Ratios	\$1,416,403	\$243,133	\$667,835
71	1800	Legal - Chief Counsel - Corporate Indirect									
72	1611	VP General Counsel - General	\$ 468,583	\$ 385,985	57.2%	11.1%	31.6%	Allocated based on Supervised Department	\$220,950	\$43,016	\$122,019
73	1631	Legal and Regulatory	\$ 3,330,071	\$ 13,118,010	61.7%	10.1%	28.2%	Allocated based on Direct Operating Costs	\$8,091,295	\$1,321,586	\$3,705,130
74	800	VP Corporate and Strategic Development - Corporate Indirect									
75	1811	VP Corporate and Strategic Development - General	\$ 392,226	\$ 497,434	63.1%	10.6%	26.3%	Allocated based on Supervised Department	\$314,050	\$52,657	\$130,727
76	1821	Communications	\$ 452,711	\$ 865,811	63.6%	10.9%	25.5%	Allocated based on Direct Operating Costs	\$550,626	\$94,518	\$220,668
77	1831	Strategic Development	\$ 477,745	\$ 693,745	63.6%	10.9%	25.5%	Allocated based on Direct Operating Costs	\$441,198	\$75,734	\$176,814
78	1851	Project Office	\$ 583,258	\$ 657,758	62.8%	10.3%	26.9%	Allocated based on Direct Operating Costs	\$412,998	\$68,003	\$176,757
79	1861	Regulatory Policy	\$ 585,142	\$ 1,430,767	62.8%	10.3%	26.9%	Allocated based on Direct Operating Costs	\$998,361	\$147,921	\$384,485
80	1241	MD02-Corporate Indirect									
81	1241	MD02	\$ 882,609	\$ 909,609	32.0%	33.0%	35.0%	Direct Assignment	\$281,075	\$300,171	\$318,363
82	800	CEO / Human Resources - Corporate Indirect									
83	1111	CEO - General	\$ 744,874	\$ 730,899	62.8%	11.1%	26.1%	Allocated based on Labor Dollar Ratios	\$459,021	\$81,094	\$190,785
84	1841	Human Resources	\$ 1,166,617	\$ 4,794,842	62.8%	11.1%	26.1%	Allocated based on Labor Dollar Ratios	\$3,011,265	\$531,990	\$1,251,586
85	1651	Board of Governors	\$ -	\$ 163,100	62.8%	11.1%	26.1%	Allocated based on Labor Dollar Ratios	\$102,430	\$42,574	\$0
86		Salary Adjustments, FY2001	\$ -	\$ 3,341,960	62.8%	11.1%	26.1%	Allocated based on Labor Dollar Ratios	\$2,098,824	\$370,792	\$872,344
87		Gross Operating Costs	\$ 74,216,069	\$ 171,739,129					\$106,988,192	\$17,840,685	\$46,269,502
88		Gross Operating Costs %							62.3%	10.5%	27.2%
89		Other Revenues									
90		Interest Revenues	\$ -	\$ (1,252,400)	62.3%	10.4%	27.2%	Operating Costs	(\$780,310)	(\$130,844)	(\$341,246)
91		SC Application and Training Fees	\$ -	\$ (120,000)	62.3%	10.4%	27.2%	Cost Center 1546	(\$74,766)	(\$12,537)	(\$32,697)
92		WSSC Security Coordination	\$ -	\$ (1,255,891)	100.0%	0.0%	0.0%	Operating Costs	(\$1,255,891)	\$0	\$0
93		Total Other Revenue	\$ -	\$ (2,628,291)					(\$2,110,967)	(\$143,381)	(\$373,943)
94		Total Other Revenue %							80.3%	5.5%	14.2%
95		Net Operating Costs									
96		Net Operating Costs	\$ -	\$ 169,110,838					\$104,877,225	\$17,697,304	\$45,995,560
97		Net Operating Costs %							62.1%	10.6%	27.4%
98		Capital									
99		EMS	\$ -	\$16,470,000	100.0%	0.0%	0.0%	Direct Assignment	\$16,470,000	\$0	\$0
100		SI	\$ -	\$27,102,000	39.0%	20.0%	41.0%	Direct Assignment	\$10,569,780	\$5,420,400	\$11,111,620
101		SA	\$ -	\$31,681,000	35.0%	25.0%	40.0%	Direct Assignment	\$11,088,350	\$7,920,250	\$12,672,400
102		BBS	\$ -	\$48,173,000	15.0%	7.0%	78.0%	Direct Assignment	\$7,225,950	\$3,372,110	\$37,574,940
103		MDAS	\$ -	\$8,166,000	30.0%	8.0%	62.0%	Direct Assignment	\$2,449,800	\$653,280	\$5,062,920
104		RMR-Software	\$ -	\$56,000	100.0%	0.0%	0.0%	Direct Assignment	\$56,000	\$0	\$0
105		Market Analysis Software	\$ -	\$238,000	0.0%	0.0%	100.0%	Direct Assignment	\$0	\$0	\$238,000
106		Vehicles MDAS	\$ -	\$96,000	30.0%	8.0%	62.0%	Direct Assignment	\$28,800	\$7,680	\$59,520

**CALIFORNIA ISO
SUMMARY COST ALLOCATION MATRIX - 2003 BUDGET**

Appendix C1

Line#	ISO Dept #	OPERATING COSTS	Amount Salaries	Amount Operations	Allocation				Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASREQ/MO	Allocation/ Assignment Method	Control Area Services	Congestion Mgmt.	ASREQ/MO
107		FERC Study Software		\$11,000	25.0%	25.0%	50.0%	Direct Assignment	\$2,750	\$2,750	\$5,500
108		GCP/RIG		\$975,000	100.0%	0.0%	0.0%	Direct Assignment	\$975,000	\$0	\$0
109		SRS Software		\$1,049,000	10.0%	75.0%	15.0%	Direct Assignment	\$104,900	\$786,750	\$157,350
110		ETC Software		\$891,000	100.0%	0.0%	0.0%	Direct Assignment	\$891,000	\$0	\$0
111		FTC Auction software		\$17,000	100.0%	75.0%	15.0%	Direct Assignment	\$1,700	\$12,750	\$2,550
112		ACC Upgrades		\$1,162,000	100.0%	0.0%	0.0%	Direct Assignment	\$1,162,000	\$0	\$0
113		Total Infrastructure Direct Assigned Items		\$136,087,000					\$51,026,030	\$18,175,970	\$66,885,000
114		Infrastructure - Allocated Items									
115		Issue Management System -Remedy		\$692,000	62.1%	10.6%	27.4%	Operating Costs	\$429,398	\$73,073	\$189,529
116		Security System - CIDA		\$6,993,000	62.1%	10.6%	27.4%	Operating Costs	\$4,339,282	\$738,435	\$1,915,283
117		Corporate Accounting - Oracle		\$2,993,000	62.1%	10.6%	27.4%	Operating Costs	\$1,857,210	\$315,050	\$819,740
118		Document Management System - EDMS		\$1,715,000	62.1%	10.6%	27.4%	Operating Costs	\$1,064,188	\$181,098	\$469,714
119		HR System - Imperial		\$138,000	62.1%	10.6%	27.4%	Operating Costs	\$84,390	\$14,361	\$37,248
120		HR System - ABRA		\$38,000	62.1%	10.6%	27.4%	Operating Costs	\$23,580	\$4,013	\$10,408
121		System Management and Monitoring - Tivoli		\$200,000	62.1%	10.6%	27.4%	Operating Costs	\$124,104	\$21,119	\$54,777
122		Data Warehouse		\$1,279,000	62.1%	10.6%	27.4%	Operating Costs	\$793,642	\$135,058	\$350,300
123		Network Software		\$630,000	62.1%	10.6%	27.4%	Operating Costs	\$390,926	\$66,526	\$172,548
124		Facilities		\$10,566,000	62.8%	11.1%	26.1%	Labor Dollar Ratios	\$6,635,678	\$1,172,304	\$2,758,018
125		Furniture		\$5,391,000	62.8%	11.1%	26.1%	Labor Dollar Ratios	\$3,385,666	\$598,135	\$1,407,200
126		Facilities-Office Equipment		\$1,330,000	62.8%	11.1%	26.1%	Labor Dollar Ratios	\$835,269	\$147,564	\$347,167
127		Transmission Display Software - TIDS		\$139,000	62.1%	10.6%	27.4%	Operating Costs	\$86,252	\$14,678	\$38,070
128		Other software and Enhancements		\$3,482,000	62.1%	10.6%	27.4%	Operating Costs	\$2,160,643	\$367,687	\$553,670
129		MCI Contract		\$27,040,000	60.1%	10.7%	29.2%	Telecom Dept	\$16,243,846	\$2,892,060	\$7,904,094
130		IBM Contract		\$6,816,000	60.7%	10.0%	29.3%	IT Dept	\$4,137,481	\$683,502	\$1,995,017
131		Total Infrastructure Allocated Items		\$69,440,000					\$42,591,556	\$7,425,662	\$19,422,782
132		Subtotal Infrastructure		\$205,627,000				Allocation %	\$93,617,586	\$25,601,632	\$86,307,782
133		Subtotal Infrastructure %							45.6%	12.5%	42.0%
134		Startup - Allocated Items									
135		Trustee Costs		\$5,692,000	45.6%	12.5%	42.0%	Infrastructure subtotal	\$2,592,707	\$709,028	\$2,390,265
136		Interest-Capitalized		\$1,261,000	45.6%	12.5%	42.0%	Infrastructure subtotal	\$574,386	\$157,077	\$529,537
137		User Groups		\$957,000	45.6%	12.5%	42.0%	Infrastructure subtotal	\$435,914	\$119,209	\$401,877
138		Startup Costs-through 3/31/98		\$52,897,000	62.1%	10.6%	27.4%	Operating Costs	\$32,823,535	\$5,585,731	\$14,487,734
139		Working Capital-3 months		\$21,892,000	62.1%	10.6%	27.4%	Operating Costs	\$13,480,274	\$2,290,597	\$5,941,129
140		Total Startup Allocated Items		\$82,489,000					\$49,886,815	\$8,861,643	\$23,750,542
141		Other Software and Enhancements									
142		2000 Spending: EMS/MDA S/P Participating Load Prog		\$1,651,155	91.5%	1.0%	7.5%	Direct Assignment	\$1,511,467	\$16,016	\$123,672
143		2000 Spending: SAS/IBBS		\$4,569,322	22.9%	51.6%	25.4%	Direct Assignment	\$1,047,746	\$2,359,598	\$1,161,979
144		2000 Spending: Other Systems/Vehicles		\$1,240,714	12.7%	0.7%	86.6%	Direct Assignment	\$157,198	\$8,561	\$1,074,955
145		2001 Spending: Other Systems		\$4,439,568	62.1%	10.6%	27.4%	Operating Costs	\$2,754,831	\$468,802	\$1,215,934
146		2000 Spending: Facilities/Furniture/Office Equipment		\$1,473,241	62.8%	11.1%	26.1%	Labor Dollar Ratios	\$925,227	\$163,457	\$384,557
147		Total Other Software and Enhancements		\$13,374,000					\$6,396,470	\$3,016,434	\$3,961,096
148		Total 1998 Bonds									
149		Total 1998 Bonds		\$301,400,000				Allocation %	\$149,900,871	\$37,479,709	\$114,019,420
150		Total 1998 Bonds %							49.7%	12.4%	37.8%
151		Total 2000 Bonds									
152		Land & Building Costs		\$9,300,000	62.8%	11.1%	26.1%	Labor Dollar Ratios	\$5,840,603	\$1,031,840	\$2,427,557
153		2000 Spending: SAS/IBBS		\$15,233,506	49.3%	0.5%	50.1%	Direct Assignment	\$7,514,689	\$82,261	\$7,636,557
154		2000 Spending: EMS/ICIM/FDA		\$1,435,154	83.1%	1.9%	15.0%	Direct Assignment	\$1,191,895	\$27,842	\$215,417
155		2000 Spending: Other Systems		\$4,000,555	62.1%	10.6%	27.4%	Operating Costs	\$2,482,416	\$422,444	\$1,095,695
156		2001 Spending: EMS		\$5,286,679	100.0%	0.0%	0.0%	Direct Assignment	\$5,286,679	\$0	\$0
157		2001 Spending: SAS/IBBS		\$844,106	40.1%	0.0%	59.9%	Direct Assignment	\$338,624	\$0	\$505,282
158		Total 2000 Bonds		\$36,100,000				Allocation %	\$22,655,106	\$1,564,387	\$11,880,507
159		Total 2000 Bonds %							62.8%	4.3%	32.9%
160		Total 1998 and 2000 Bonds									

CALIFORNIA ISO
SUMMARY COST ALLOCATION MATRIX - 2003 BUDGET

Appendix C1

Line#	ISO Dept #	OPERATING COSTS	Amount Salaries	Amount Operations	Control Area Services	Congestion Mgmt.	ASREO/MO	Allocation/ Assignment Method	Control Area Services	Congestion Mgmt.	ASREO/MO
161		Total 1998 and 2000 Bonds		\$337,500,000				Allocation %	\$172,555,977	51.1%	\$125,899,927
162		Total 1998 and 2000 Bonds %								11.6%	37.3%
163		Total Debt Service									
164		Debt Service - Existing Debt (1998 and 2000 Bonds): Including Re		\$54,746,238	51.1%	11.6%	37.3%	1998 & 2000 bonds	\$27,990,490		\$20,422,362
165		Total Debt Service Cost									
166		Total Debt Service Cost %		\$54,746,238				Allocation %	\$27,990,490	51.1%	\$20,422,362
167											37.3%
168		Cash Funded Cap Ex 2003 Capital Budget									
169		2003 Budget: Operating Systems		\$3,193,000	60.4%	7.9%	31.7%	Direct Assignment	\$1,928,253		\$1,011,542
170		2003 Budget: Furniture/Facilities/Office Equipment		\$445,000	62.8%	11.1%	26.1%	Labor Dollar Ratios	\$279,470		\$116,157
171		2003 Budget: Corporate Systems		\$3,320,000	62.1%	10.6%	27.4%	Operating Costs	\$2,060,119		\$909,301
172		2003 Budget: MD02		\$15,042,000	32.0%	33.0%	35.0%	Direct Assignment	\$4,813,440		\$5,264,700
173		Total Cash Funded Cap Ex		\$22,000,000				Allocation %	\$9,081,282	25.5%	\$7,301,700
174		Total Cash Funded Cap Ex %									33.2%
175		Gross O&M Costs		\$171,739,129	62.1%	10.6%	27.4%		\$107,047,267		\$46,690,990
176		Other Costs and Income		(\$2,628,291)	80.3%	5.5%	14.2%		(\$2,110,967)		(\$373,943)
177		Net O&M Costs		\$169,110,838	62.3%	10.5%	27.2%		\$104,936,300		\$46,317,047
178		Debt Service		\$54,746,238	51.1%	11.6%	37.3%		\$27,990,490		\$20,422,362
179		Cash Funded Cap Ex		\$22,000,000	41.3%	25.5%	33.2%		\$9,081,282		\$7,301,700
180		Total Cost of Service: Prior to Op. Reserve		\$245,857,076					\$142,008,072		\$74,041,110
181		Total Cost of Service %						Allocation % results before Revenue Credit or Deficiency	57.8%	12.1%	30.1%
182		(Revenue Credit)/Shortfall		(\$8,256,705)					\$ (4,151,203)		\$ (1,698,128)
183		Total Cost of Service		\$237,600,371					\$137,856,869		\$72,342,982
184		Total Cost of Service %						Net Allocation %	58.0%	11.5%	30.4%

COST ALLOCATION MATRIX - 2003 BUDGET

Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/ Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASREO/MO			Control Area Services	Congestion Mgmt.	ASREO/MO
1	1500	Operating - Direct Costs										
2	1521	Grid Planning	\$ 2,041,338	\$ 2,425,338	100.0%	0.0%	0.0%	Department	Direct Assignment	\$ 2,041,338	\$ -	\$ -
3					100.0%	0.0%	0.0%		Direct Assignment	\$ 2,425,338	\$ -	\$ -
4	1542	Outage Coordination	\$ 1,580,356	\$ 1,780,930	100.0%	0.0%	0.0%	Department	Direct Assignment	\$ 1,580,356	\$ -	\$ -
5		Total Costs			100.0%	0.0%	0.0%		Direct Assignment	\$ 1,780,930	\$ 0	\$ 0
6	1543	Loads and Resources	\$ 943,936	\$ 1,006,436	100.0%	0.0%	0.0%	Department	Direct Assignment	\$ 943,936	\$ -	\$ -
7		Total Costs			100.0%	0.0%	0.0%		Direct Assignment	\$ 1,006,436	\$ -	\$ -
8	1544	Real-Time Scheduling	\$ 2,578,768	\$ 2,680,968	75.0%	15.0%	10.0%	Department	Direct Assignment	\$ 1,934,076	\$ 386,815	\$ 257,877
9		Total Costs			75.0%	15.0%	10.0%		Direct Assignment	\$ 2,010,726	\$ 402,145	\$ 268,097
10	1545	Grid Operations - General	\$ 6,844,825	\$ 7,167,325	79.4%	10.3%	10.3%	Department	Direct Assignment	\$ 5,435,343	\$ 704,741	\$ 704,741
11		Total Costs			79.6%	10.2%	10.2%		Direct Assignment	\$ 5,702,047	\$ 733,879	\$ 731,399
12	1546	Security Coordination	\$ 1,207,891	\$ 1,255,891	100.0%	0.0%	0.0%	Department	Direct Assignment	\$ 1,207,891	\$ -	\$ -
13		Total Costs			100.0%	0.0%	0.0%		Direct Assignment	\$ 1,255,891	\$ 0	\$ 0
14	1554	Special Projects Engineering	\$ 601,931	\$ 860,981	81.3%	0.0%	18.7%	Department	Direct Assignment	\$ 489,655	\$ -	\$ 112,276
15		Total Costs			84.2%	-0.1%	15.9%		Direct Assignment	\$ 725,153	\$ (\$1,118)	\$ 136,945
16	1555	Operations Support Group	\$ 974,683	\$ 1,025,163	60.3%	22.0%	17.7%	Department	Direct Assignment	\$ 588,100	\$ 214,032	\$ 172,551
17		Total Costs			60.6%	21.5%	18.0%		Direct Assignment	\$ 620,880	\$ 220,082	\$ 184,201
18	1558	Transmission Maintenance	\$ 1,141,103	\$ 1,804,953	97.4%	0.0%	2.6%	Department	Direct Assignment	\$ 1,111,005	\$ -	\$ 30,098
19		Total Costs			98.2%	0.0%	1.8%		Direct Assignment	\$ 1,773,365	\$ 0	\$ 31,588
20	1561	Operations Engineering South	\$ 1,034,681	\$ 1,240,187	100.0%	0.0%	0.0%	Department	Direct Assignment	\$ 1,034,681	\$ -	\$ -
21		Total Costs			100.0%	0.0%	0.0%		Direct Assignment	\$ 1,240,187	\$ 0	\$ 0
22	1562	Operations Engineering North	\$ 1,168,863	\$ 1,226,703	100.0%	0.0%	0.0%	Department	Direct Assignment	\$ 1,168,863	\$ -	\$ -
23		Total Costs			100.0%	0.0%	0.0%		Direct Assignment	\$ 1,226,703	\$ 0	\$ 0
24	1563	Coordinated Operations	\$ 584,551	\$ 677,951	60.0%	10.0%	30.0%	Department	Direct Assignment	\$ 350,731	\$ 58,455	\$ 175,365
25		Total Costs			60.0%	10.0%	30.0%		Direct Assignment	\$ 406,771	\$ 67,795	\$ 203,385
26	1565	Pre-Scheduling and Support	\$ 1,660,765	\$ 1,697,365	73.3%	15.0%	11.7%	Department	Direct Assignment	\$ 1,217,556	\$ 248,314	\$ 194,895
27		Total Costs			73.9%	14.6%	11.5%		Direct Assignment	\$ 1,254,021	\$ 248,406	\$ 194,938
28	1566	Regional Coordination - General	\$ 423,012	\$ 554,912	77.3%	0.0%	22.7%	Department	Direct Assignment	\$ 327,193	\$ -	\$ 95,819
29		Total Costs			83.2%	0.0%	16.8%		Direct Assignment	\$ 461,569	\$ 0	\$ 93,343

**CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET**

Appendix C2

Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/ Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASREO/MO			Control Area Services	Congestion Mgmt.	ASREO/MO
30	1549	Operations Training	\$ 1,919,268	\$ 3,064,253	62.1%	24.6%	13.3%	Department	Direct Assignment	\$ 1,191,898	\$ 472,917	\$ 254,453
31		Total Costs			61.7%	24.1%	14.2%		Direct Assignment	\$ 1,890,463	\$ 737,849	\$ 435,942
32	1559	Operations Application Support	\$ 447,958	\$ 458,472	78.5%	10.7%	10.7%	Department	Direct Assignment	\$ 351,831	\$ 48,063	\$ 48,063
33		Total Operations Direct Salary Cost Only	\$ 25,153,928		78.9%	10.5%	10.6%		Direct Assignment	\$ 361,629	\$ 48,126	\$ 48,717
34		Total Operations Direct Salary %							Allocation %	\$ 20,974,453	\$ 2,133,338	\$ 2,046,138
35		Total Operations Direct Costs								83.4%	8.5%	8.1%
36		Total Operations Direct Costs %							Allocation %	\$ 24,142,109	\$ 2,457,164	\$ 2,328,555
37										83.5%	8.5%	8.0%
38		1500 Operations - Indirect Costs										
39	1511	VP Grid Operations - General	\$ 365,202		66.4%	18.3%	15.3%		Allocated based on Department Direct Costs	\$ 242,495	\$ 66,786	\$ 55,921
40		Total		\$ 1,011,957	66.4%	18.3%	15.3%	Calculation	Allocated based on Department Direct Costs	\$ 671,941	\$ 185,061	\$ 154,956
41	1547	Engineering and Maintenance - G	\$ 289,222		94.6%	1.2%	4.2%		Allocated based on Supervised Departments costs	\$ 273,558	\$ 3,469	\$ 12,194
42		Total Costs		\$ 1,154,222	94.9%	1.1%	3.9%	Calculation	Allocated based on Supervised Departments costs	\$ 1,095,550	\$ 13,138	\$ 45,534
43	1548	OSAT	\$ 162,432		72.8%	9.4%	17.9%		Allocated based on Supervised Departments costs	\$ 132,775	\$ 17,083	\$ 32,575
44		Total Costs		\$ 267,932	76.6%	6.8%	16.6%	Calculation	Allocated based on Supervised Departments costs	\$ 205,246	\$ 18,101	\$ 44,585
45	1564	Operations Scheduling - General	\$ 281,362		81.3%	10.9%	7.8%	Department	Allocated based on Supervised Departments costs	\$ 228,768	\$ 30,705	\$ 21,889
46		Total Costs		\$ 322,862	81.9%	10.6%	7.5%		Allocated based on Supervised Departments costs	\$ 264,489	\$ 34,101	\$ 24,272
47		Total Operations Indirect Salaries	\$ 1,118,218							\$ 877,595	\$ 118,043	\$ 122,580
48		Total Operations Indirect Costs		\$ 2,756,973						\$ 2,237,226	\$ 250,401	\$ 269,346
49		Total Operations Salaries	\$ 26,272,147							\$ 21,852,048	\$ 2,251,381	\$ 2,168,717
50		Total Operations Costs		\$ 31,684,801						\$ 26,379,335	\$ 2,707,564	\$ 2,597,902
51		Operations Indirect Costs as % of Total										
52	1700	VP Market Services										
53	1722	Application Support	\$ 414,256		19.0%	7.0%	74.0%	Department	Direct Assignment	\$ 78,709	\$ 28,998	\$ 306,549
54		Total Costs		\$ 510,466	19.0%	7.0%	74.0%		Direct Assignment	\$ 96,796	\$ 35,712	\$ 377,957
55	1723	Tariff and Contract Implementation	\$ 687,205		90.0%	0.0%	10.0%	Department	Direct Assignment	\$ 600,485	\$ -	\$ 66,721
56		Total Costs		\$ 896,883	90.0%	0.0%	10.0%		Direct Assignment	\$ 807,195	\$ -	\$ 89,688

CALIFORNIA ISO

COST ALLOCATION MATRIX - 2003 BUDGET

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Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASREC/IMO			Control Area Services	Congestion Mgmt.	ASREC/IMO
57	1724	BBS - PSS	\$ 942,333	\$	17.0%	7.8%	75.2%		Direct Assignment	\$ 159,879	\$ 73,833	\$ 708,621
58		Total Costs		\$ 1,148,361	16.8%	7.7%	75.5%	Department	Direct Assignment	\$ 153,228	\$ 88,510	\$ 866,623
59	1725	BBS - FSS	\$ 1,037,777	\$	15.6%	7.3%	77.2%		Direct Assignment	\$ 161,684	\$ 75,294	\$ 800,819
60		Total Costs		\$ 1,280,321	15.6%	7.4%	77.0%	Department	Direct Assignment	\$ 200,292	\$ 94,667	\$ 985,362
61	1731	Contracts and Special Projects	\$ 1,153,955	\$	74.4%	2.4%	23.2%		Direct Assignment	\$ 859,049	\$ 27,655	\$ 267,251
62		Total Costs		\$ 1,438,963	76.6%	2.4%	21.0%	Department	Direct Assignment	\$ 1,102,613	\$ 34,935	\$ 302,416
63	1741	Client Relations	\$ 2,054,540	\$	40.7%	9.3%	50.0%		Direct Assignment	\$ 836,710	\$ 190,286	\$ 1,027,544
64		Total Costs		\$ 2,299,956	37.8%	9.5%	52.7%	Department	Direct Assignment	\$ 869,540	\$ 218,093	\$ 1,212,323
65	1752	Manager of Markets	\$ 2,156,353	\$	29.0%	30.0%	41.0%		Direct Assignment	\$ 625,342	\$ 646,906	\$ 884,105
66		Total Costs		\$ 2,355,353	28.8%	30.0%	41.2%	Department	Direct Assignment	\$ 677,679	\$ 706,606	\$ 971,068
67	1753	Market Engineering	\$ 1,680,863	\$	32.8%	27.6%	39.6%		Direct Assignment	\$ 550,812	\$ 464,413	\$ 665,659
68		Total Costs		\$ 2,061,799	31.7%	28.1%	40.2%	Department	Direct Assignment	\$ 653,659	\$ 578,688	\$ 829,452
69	1755	Business Solutions	\$ 739,166	\$	26.0%	10.0%	64.0%		Direct Assignment	\$ 192,183	\$ 73,917	\$ 473,066
70		Total Costs		\$ 942,745	25.2%	10.5%	64.3%	Department	Direct Assignment	\$ 237,599	\$ 98,675	\$ 606,471
71	1756	Market Quality - General	\$ 1,940,408	\$	37.0%	33.0%	30.0%		Direct Assignment	\$ 717,951	\$ 640,335	\$ 582,122
72		Total Costs		\$ 2,102,565	37.1%	33.1%	29.8%	Department	Direct Assignment	\$ 780,139	\$ 695,886	\$ 626,540
73	1757	Market Integration	\$ 587,361	\$	25.0%	30.0%	45.0%		Direct Assignment	\$ 146,840	\$ 176,208	\$ 264,312
74		Total Costs		\$ 835,895	25.1%	30.0%	44.9%	Department	Direct Assignment	\$ 210,108	\$ 250,769	\$ 375,019
75	Total Market Services Direct Salaries		\$13,374,237							\$ 4,929,623	\$ 2,397,845	\$ 6,046,769
76	Total Market Services Direct Salaries %											
77	Total Market Services Direct Costs									\$ 5,828,847	\$ 2,802,541	\$ 7,242,919
78	Total Market Services Direct Costs %											
79				\$15,874,307						\$ 36.7%	\$ 17.7%	\$ 45.6%

Cost Allocation Methodology and Percentages:

The costs of this department are allocated to the ISO's three unbundled service categories based on the approach noted here. The results of the allocation process are shown in full on the ISO's Cost Allocation Matrix. Results are shown here only for departments which directly assign their costs to the three categories.

Direct Assignment

Control Area Services	Congestion Management	Ancillary Services and Energy Operations
84%	5%	12%

101%?

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COST ALLOCATION MATRIX - 2003 BUDGET

Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/ Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASRE/IMO			Control Area Services	Congestion Mgmt.	ASRE/IMO
80		1700- Market Services Indirect Costs										
81	1711	VP Market Services - General	\$ 394,287		36.9%	17.9%	45.2%		Allocated based on Department Direct Costs	\$ 145,331	\$ 70,691	\$ 178,265
82		Total		\$ 248,117	36.9%	17.9%	45.2%	Calculation	Allocated based on Department Direct Costs	91,454	44,484	112,179
83	1721	Billing and Settlements-General	\$ 347,911		32.7%	5.8%	61.5%		Allocated based on Department Direct Costs	\$ 113,722	\$ 20,242	\$ 213,948
84		Total Costs		\$ 353,911	33.8%	5.7%	60.5%	Calculation	Allocated based on Supervised Departments costs	\$ 119,708	\$ 20,195	\$ 214,008
85	1751	Market Operations - General	\$ 331,747		20.0%	30.0%	50.0%		Allocated based on Department Direct Costs	\$ 66,349	\$ 99,524	\$ 165,874
86		Total Costs		\$ 959,968	20.0%	30.0%	50.0%	Calculation	Allocated based on Department Direct Costs	\$ 191,994	\$ 287,990	\$ 479,984
87		Total Market Services Indirect Salaries	\$ 1,073,945							325,402	190,457	558,086
88		Total Market Services Indirect Costs		\$ 1,661,998						403,155	352,670	806,171
89		Total Market Services Salaries	14,448,182							5,255,025	2,588,302	6,504,855
90		Total Market Services Costs		\$17,438,303						6,232,002	3,155,210	8,049,090
91		Market Services Indirect as % of Total		9%						35.74%	18.10%	46.16%
92		1400- Information Services - Direct Costs										
93	1424	Asset Management	\$ 845,319		56.0%	5.0%	39.0%		Direct Assignment	\$ 473,379	\$ 42,266	\$ 329,674
94		Total Costs		\$ 21,742,188	67.3%	6.9%	25.9%	Department	Direct Assignment	\$ 14,627,029	\$ 1,493,935	\$ 5,621,224
95	1441	Outsourced Contracts	\$ 159,466		60.1%	10.7%	29.2%		Allocated based on Department	\$ 95,797	\$ 17,056	\$ 46,614
96		Total Costs		\$ 29,683,478	60.1%	10.7%	29.2%	Calculation	Allocated based on Department	\$ 17,831,873	\$ 3,174,793	\$ 8,676,812
97	1461	Control Systems	\$ 2,186,977		100.0%	0.0%	0.0%		Direct Assignment	\$ 2,186,977	\$ -	\$ -
98		Total Costs		\$ 2,321,654	100.0%	0.0%	0.0%	Department	Direct Assignment	\$ 2,321,654	\$ 0	\$ 0
99	1462	Field Data Acquisition System (FDAS)	\$ 1,805,763		28.6%	11.3%	60.1%		Direct Assignment	\$ 515,566	\$ 204,658	\$ 1,085,560
100		Total Costs		\$ 2,508,556	29.9%	8.2%	61.9%	Department	Direct Assignment	\$ 749,148	\$ 205,422	\$ 1,553,986
101	1467	Settlement Systems Services	\$ 980,615		15.0%	7.0%	78.0%		Direct Assignment	\$ 147,092	\$ 68,643	\$ 764,880
102		Total Costs		\$ 1,064,350	15.0%	7.0%	78.0%	Department	Direct Assignment	\$ 159,653	\$ 74,505	\$ 930,193
103		Total IS Direct Salaries	\$ 5,978,160							\$ 3,418,810	\$ 332,623	\$ 2,226,727
104		Total IS Direct Salaries %								57.2%	5.6%	37.2%
105		Total IS Direct Costs		\$ 57,320,226					Allocation %	\$ 35,689,357	\$ 4,948,655	\$ 16,982,215
106		Total IS Direct Cost %							Allocation %	62.26%	8.63%	29.10%
107		1500- Compliance - Direct Costs										
108	1541	Market Analysis	\$ 1,997,346		25.1%	18.7%	56.2%		Direct Assignment	\$ 501,536	\$ 373,952	\$ 1,121,857
109		Total		\$ 3,053,880	22.6%	19.3%	58.1%	Department	Direct Assignment	\$ 689,824	\$ 589,477	\$ 1,775,579
110	1542	Market Surveillance Committee	\$ -		0.0%	0.0%	0.0%		Direct Assignment	\$ -	\$ -	\$ -
111		Total		\$ 640,750	9.2%	25.0%	65.8%	Department	Direct Assignment	\$ 59,075	\$ 160,168	\$ 421,488
112	1661	Compliance - General	\$ 1,150,095		83.3%	5.6%	11.1%		Direct Assignment	\$ 958,413	\$ 63,894	\$ 127,788
113				\$ 1,456,895	81.8%	5.5%	12.7%	Department	Direct Assignment	\$ 1,191,963	\$ 80,118	\$ 184,814
114	1662	Compliance - Audits	\$ 357,191		83.3%	5.6%	11.1%		Direct Assignment	\$ 297,659	\$ 19,844	\$ 39,688

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COST ALLOCATION MATRIX - 2003 BUDGET

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Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/ Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASREQ/IMO			Control Area Services	Congestion Mgmt.	ASREQ/IMO
115		Total Costs		\$ 416,191	83.7%	4.8%	11.5%	Department	Direct Assignment	\$ 348,359	\$ 19,916	\$ 47,916
116		Total Legal Direct Salaries	\$ 3,504,632							\$ 1,757,608	\$ 457,691	\$ 1,289,333
117		Total Legal Direct Salaries %							Allocation %	50.2%	13.1%	36.8%
118		Total Legal Direct Costs		\$ 5,567,716					Allocation %	\$ 2,288,222	\$ 849,688	\$ 2,429,796
119		Total Legal Direct Cost %								41.1%	15.3%	43.6%
120		Subtotal Salaries Operations, Market Services, Indirect IS, Lei		\$ 50,203,121						\$ 32,283,492	\$ 5,629,996	\$ 12,289,633
121		Salary Percentages								64.3%	11.2%	24.5%
122		Subtotal Costs Operations, Market Services, Indirect IS, Legal		\$ 112,009,046						\$ 70,588,916	\$ 11,661,128	\$ 29,759,003
123		Expense Percentages								63.0%	10.4%	26.6%
124		Total Information Services, Indirect Costs										
125	1411	Chief Information Officer- General	\$ 391,143		62.3%	8.6%	29.1%		Allocated based on Department Direct Costs	\$ 243,538	\$ 33,769	\$ 113,836
126		Total		\$ 212,246	62.3%	8.6%	29.1%	Calculation	Allocated based on Department Direct Costs	\$ 132,151	\$ 18,324	\$ 51,771
127	1422	Corporate & Enterprise Applicatio	\$ 233,320		61.7%	10.0%	28.3%		Allocated based on Supervised Departments costs	\$ 143,920	\$ 23,274	\$ 66,126
128		Total Costs		\$ 248,320	61.7%	10.0%	28.4%	Calculation	Allocated based on Supervised Departments costs	\$ 153,121	\$ 24,773	\$ 70,426
129	1466	Enterprise Applications	\$ 764,123		61.7%	9.4%	28.9%		Allocated based on Direct Operating Costs	\$ 471,606	\$ 71,597	\$ 220,920
130		Total Costs		\$ 816,499	61.7%	9.4%	28.9%	Calculation	Allocated based on Direct Operating Costs	\$ 503,932	\$ 76,504	\$ 236,063
131	1431	End User Support	\$ 491,206		63.0%	10.4%	26.6%		Allocated based on Direct Operating Costs	\$ 309,562	\$ 51,139	\$ 130,506
132		Total Costs		\$ 6,565,001	63.0%	10.4%	26.6%	Calculation	Allocated based on Direct Operating Costs	\$ 4,137,311	\$ 683,474	\$ 1,744,215
133	1432	Computer Operations - General	\$ 403,068		58.1%	9.6%	32.2%		Allocated based on Supervised Departments costs	\$ 234,380	\$ 38,719	\$ 129,969
134		Total Costs		\$ 430,975	60.7%	10.0%	29.3%	Calculation	Allocated based on Supervised Departments costs	\$ 261,613	\$ 43,218	\$ 126,145
135	1433	Network Operations	\$ 1,549,597		63.0%	10.4%	26.6%		Allocated based on Labor Dollar Ratios-Special	\$ 976,567	\$ 161,327	\$ 411,703
136		Total Costs		\$ 1,629,905	63.0%	10.4%	26.6%	Calculation	Allocated based on Labor Dollar Ratios-Special	\$ 1,027,178	\$ 169,687	\$ 433,040
137	1442	Production Support	\$ 2,440,565		56.1%	9.3%	34.6%		Allocated based on Direct Operating Costs	\$ 1,370,348	\$ 226,378	\$ 843,839

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Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/ Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	ASREO/IMO Congestion Mgmt.	ASREO/IMO			Control Area Services	Congestion Mgmt.	ASREO/IMO
138		Total Costs		\$ 2,581,165	56.1%	9.3%	34.6%	Calculation	Allocated based on Direct Operating Costs	\$ 1,449,293	\$239,420	\$892,452
139	1451	Information Security	\$ 1,038,281		63.0%	10.4%	26.6%		Allocated based on Direct Operating Costs	\$ 654,332	\$ 108,094	\$ 275,855
140		Total Costs		\$ 1,509,500	63.0%	10.4%	26.6%	Calculation	Allocated based on Direct Operating Costs	\$ 951,298	\$157,152	\$ 401,050
141	1463	Operations Applications - General	\$ 292,237		73.7%	2.1%	24.2%		Allocated based on Supervised Departments costs	\$ 215,480	\$ 6,135	\$ 70,622
142		Total Costs		\$ 323,539	74.4%	1.9%	23.7%	Calculation	Allocated based on Supervised Departments costs	\$ 240,785	\$6,073	\$ 76,681
143	1471	IT Planning	\$ 628,349		63.0%	10.4%	26.6%		Allocated based on Direct Operating Costs	\$ 395,990	\$ 65,417	\$ 166,942
144		Total Costs		\$ 770,116	63.0%	10.4%	26.6%	Calculation	Allocated based on Direct Operating Costs	\$ 485,333	\$80,176	\$ 204,607
145	1468	Corporate Application Support	\$ 1,186,702		60.6%	10.0%	29.4%		Allocated based on Direct Operating Costs	\$ 719,808	\$ 118,911	\$ 349,883
146				\$ 1,333,287	60.6%	10.0%	29.4%	Calculation	Allocated based on Direct Operating Costs	\$ 807,360	\$133,374	\$392,553
147	1469	Analytical and Reporting	\$ 984,106		63.0%	10.4%	26.6%		Allocated based on Direct Operating Costs	\$ 620,191	\$ 102,454	\$ 261,461
148				\$ 1,055,106	63.0%	10.4%	26.6%	Calculation	Allocated based on Direct Operating Costs	\$ 664,935	\$109,846	\$280,325
149	1481	Markets and Scheduling	\$ 1,267,761		56.1%	9.3%	34.6%		Allocated based on Direct Operating Costs	\$ 711,496	\$ 117,537	\$ 438,728
150		Total Costs		\$ 1,520,628	56.1%	9.3%	34.6%	Calculation	Allocated based on Direct Operating Costs	\$ 853,410	\$140,981	\$526,236
151	Total IS Indirect Salaries		\$ 11,672,458							\$ 7,067,217	\$ 1,124,751	\$ 3,480,490
152	Total IS Indirect Costs			\$ 18,996,287						\$ 11,667,720	\$ 1,863,003	\$ 5,445,564
153	Total IS Operating Salaries		\$ 17,650,618							\$ 10,486,028	\$ 1,457,373	\$ 5,707,217
154	Total IS Operating Costs			\$76,316,513						\$ 47,357,077	\$ 6,831,658	\$ 22,127,778
155	IS Indirect Costs as % of IT Operating Costs			25%								
156	Operating Costs and Salaries Before Corporate Indirect											
157	Total Operating Salaries		\$ 61,875,579						Allocation %	\$ 39,350,709	\$ 6,754,747	\$ 15,770,123
158	Total Operating Salaries %									63.6%	10.9%	25.5%
159	Total Operating Costs			\$131,005,333					Allocation %	\$82,256,636	\$13,544,131	\$35,204,567
160	Total Operating Costs %									62.8%	10.3%	26.9%
161	Total IS Indirect Costs											

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COST ALLOCATION MATRIX - 2003 BUDGET**

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Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASREO/MO			Control Area Services	Congestion Mgmt.	ASREO/MO
182	1321	Accounting	\$ 836,830		47.4%	7.8%	44.9%		Allocated based on Direct Operating Costs	\$ 396,251	\$ 65,242	\$ 375,337
183		Total		\$ 2,168,530	47.4%	7.8%	44.9%	Calculation	Allocated based on Direct Operating Costs	\$ 1,026,831	\$ 169,066	\$ 972,634
184	1331	Financial Planning and Treasury	\$ 714,782		59.7%	10.3%	29.9%		Allocated based on Direct Operating Costs	\$ 427,029	\$ 73,759	\$ 213,994
185		Total		\$ 2,511,009	59.7%	10.3%	29.9%	Calculation	Allocated based on Direct Operating Costs	\$ 1,500,141	\$ 259,113	\$ 751,756
186	1351	Facilities	\$ 641,351		63.6%	10.9%	25.5%		Allocated based on Labor Dollar Ratios	\$ 407,877	\$ 70,014	\$ 163,460
187		Total		\$ 5,812,962	63.6%	10.9%	25.5%	Calculation	Allocated based on Labor Dollar Ratios	\$ 3,696,841	\$ 634,581	\$ 1,481,540
188	1361	Office Administration	\$ 643,601		63.6%	10.9%	25.5%		Allocated based on Labor Dollar Ratios	\$ 409,308	\$ 70,260	\$ 164,033
189		Total		\$ 2,227,171	63.6%	10.9%	25.5%	Calculation	Allocated based on Labor Dollar Ratios	\$ 1,416,403	\$ 243,133	\$ 567,635
190		Total Finance Indirect Costs		\$12,719,672						\$ 7,640,215	\$ 1,305,892	\$ 3,773,564
191		Total Finance Op Salaries b/c CFO	\$ 2,836,564							\$ 1,640,465	\$ 279,275	\$ 916,825
192		Finance Indirect as % of Fin Operating Costs		100%						60.1%	10.3%	29.7%
193	1311	CFO - General	\$ 420,090		58.8%	10.3%	31.0%		Allocated based on Supervised Departments costs	\$ 246,865	\$ 43,154	\$ 130,071
194		Total		\$ 424,204	60.9%	10.7%	28.4%	Calculation	Allocated based on Supervised Departments costs	\$ 258,324	\$ 45,271	\$ 120,609
195		Total Finance Op Salaries	\$ 3,256,654							\$ 1,887,330	\$ 322,428	\$ 1,045,895
196		Total Finance Operating Costs		\$ 13,143,876						\$ 7,898,539	\$ 1,351,163	\$ 3,894,173
197		Finance Indirect as % of Fin Operating Costs		100%								
198	1601	Legal Counsel - General										
199	1631	Legal and Regulatory	\$ 3,330,071		61.7%	10.1%	28.2%		Allocated based on Direct Operating Costs	\$ 2,054,015	\$ 335,491	\$ 940,565
200		Total		\$ 13,118,010	61.7%	10.1%	28.2%	Calculation	Allocated based on Direct Operating Costs	\$ 8,091,295	\$ 1,321,566	\$ 3,705,130
201		Total Legal Indirect Salaries	\$ 3,330,071							\$ 2,054,015	\$ 335,491	\$ 940,565
202		Total Legal Indirect Costs		\$ 13,118,010						\$ 8,091,295	\$ 1,321,566	\$ 3,705,130
203		Total Legal Salaries	\$ 6,834,703							\$ 3,811,622	\$ 793,181	\$ 2,229,898
204		Total Legal Costs		\$18,685,726						\$10,379,516	\$2,171,284	\$6,134,926
205		Indirect as % of Total		70.2%						55.5%	11.6%	32.8%
206	1601	Legal Counsel - General										
207	1611	VP General Counsel - General	\$ 468,583		55.8%	11.6%	32.6%	Calculation	Allocated based on Supervised Departments costs	\$ 261,322	\$ 54,360	\$ 152,880

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COST ALLOCATION MATRIX - 2003 BUDGET

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Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation		Source	Allocation/ Assignment Method	Salary & Total Cost Allocated	
					Control Area Services	ASRE/IMO Congestion Mgmt.			Control Area Services	ASRE/IMO Congestion Mgmt.
190		Total		\$ 385,985	57.2%	11.1%	Calculation	Allocated based on Supervised Departments costs	\$ 220,950	\$43,016
190		Total Legal Salaries								
191		Total Legal Costs	\$ 7,303,286	\$19,071,711					4,072,945	847,562
191		Indirect as % of Total		72%					\$10,600,466	\$2,214,300
192		1800 VP Corporate and Strategic Development - Corporate Indirect Costs						Op Cost %	55.6%	11.6%
193	1821	Communications	\$ 452,711		63.6%	10.9%		Allocated based on Direct Operating Costs	\$ 287,908	\$ 49,421
194		Total Costs		\$ 865,811	63.6%	10.9%	Calculation	Allocated based on Direct Operating Costs	\$ 550,626	\$ 94,518
195	1831	Strategic Development	\$ 477,745		63.6%	10.9%		Allocated based on Direct Operating Costs	\$ 303,829	\$ 52,154
196				\$ 693,745	63.6%	10.9%	Calculation	Allocated based on Direct Operating Costs	\$ 441,198	\$ 75,734
197	1851	Project Office	\$ 593,258		62.8%	10.3%		Allocated based on Direct Operating Costs	\$ 366,221	\$ 60,301
198				\$ 657,758	62.8%	10.3%	Calculation	Allocated based on Direct Operating Costs	\$ 412,998	\$ 68,003
199	1861	Regulatory Policy	\$ 585,142		62.8%	10.3%		Allocated based on Direct Operating Costs	\$ 367,403	\$ 60,496
200		Total Costs		\$ 1,430,767	62.8%	10.3%	Calculation	Allocated based on Direct Operating Costs	\$ 898,361	\$ 147,921
201		Total Corporate and Strategic Devt b/f HR	\$ 2,098,856						\$ 1,325,362	\$ 222,371
202		Total Corporate and Strategic Devt b/f HR		\$3,648,081				Op Cost %	2,303,182	386,176
203									63.1%	10.8%
204		1800 VP Corporate and Strategic Development - Based on Corporate Indirect Costs								26.3%
205	1811	VP Corporate and Strategic Deve	\$ 392,226		63.1%	10.6%		Allocated based on Supervised Departments costs	\$ 247,678	\$ 41,556
206		Total Costs		\$ 497,434	63.1%	10.6%	Calculation	Allocated based on Supervised Departments costs	\$ 314,050	\$ 52,657
207		Total Corporate and Strategic Devt b/f HR	\$ 2,491,082						\$ 1,573,040	\$ 263,927
208		Total Corporate and Strategic Devt b/f HR		\$4,145,515					\$ 2,617,233	\$ 438,833
209		Cost Allocation Percentage							63.1%	10.6%
210		1241 MD02								26.3%
211	1241	MD02	\$ 882,609		32.0%	33.0%		Direct Assignment	\$ 282,435	\$ 291,261
212		Total Costs		\$ 909,609	32.0%	33.0%	Calculation	Direct Assignment	\$ 291,075	\$ 300,171
213	MD02		\$ 882,609						\$ 282,435	\$ 291,261
214				\$ 909,609					\$ 291,075	\$ 300,171
215		Cost Allocation Percentage							32.0%	33.0%
216										35.0%

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COST ALLOCATION MATRIX - 2003 BUDGET**

Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Allocation/ Assignment Method	Salary & Total Cost Allocated		
					Control Area Services	Congestion Mgmt.	ASREO/MO			Control Area Services	Congestion Mgmt.	ASREO/MO
217		Total Costs and Salaries before HR/CEO										
218		Total Costs and Salaries before HR/CEO										
219		Total Salaries before HR/CEO	\$ 72,304,578							\$ 45,408,851	\$ 8,022,234	\$ 18,873,493
220		Total Salaries before HR/CEO %								62.8%	11.1%	26.1%
221		Total Costs before HR/CEO		\$ 162,708,328						\$ 101,375,727	\$ 16,998,900	\$ 44,333,701
222		Total Costs before HR/CEO %								62.3%	10.4%	27.2%
223		1100/1200 CEO / Human Resources - Corporate Indirects										
224	1111	CEO - General	\$ 744,874	\$						\$ 467,797	\$ 82,644	\$ 194,433
225	Total			\$ 730,899	62.8%	11.1%	26.1%	Calculation	Allocated based on Labor Dollar Ratios	\$ 459,021	\$ 81,094	\$ 190,765
226	1841	Human Resources	\$ 1,166,617	\$						\$ 732,681	\$ 129,437	\$ 304,519
227	Total			\$ 4,794,842	62.8%	11.1%	26.1%	Calculation	Allocated based on Labor Dollar Ratios	\$ 3,011,265	\$ 531,990	\$ 1,251,586
228	1651	Board of Governors		\$						\$ -	\$ -	\$ -
229	Total			\$ 163,100	62.8%	11.1%	26.1%	Calculation	Allocated based on Labor Dollar Ratios	\$ 102,430	\$ 18,096	\$ 42,574
230	Total CEO/HR Salaries		\$ 1,911,491	\$						\$ 1,200,458	\$ 212,081	\$ 498,952
231	Total CEO/HR Costs		\$ 74,216,089	\$ 5,688,841						\$ 3,572,716	\$ 631,180	\$ 1,484,945
232	Total Salaries Prior to Salary Adjustments		\$ 74,216,089							\$ 46,609,309	\$ 8,234,315	\$ 19,372,445
233	Total Salaries Prior to Salary Adjustments %									62.8%	11.1%	26.1%
234	Total Costs Prior to Salary Adjustments			168,397,169						\$ 104,948,444	\$ 17,630,080	\$ 45,818,646
235	Total Costs Prior to Salary Adjustments & Other Costs									62.3%	10.5%	27.2%
236	All	Salary Adjustments, next year	\$ 3,341,960	\$3,341,960						2,098,824	370,792	872,344
237	Total Other Costs		\$ 3,341,960	\$3,341,960				Calculation	As distributed to various departments	\$2,098,824	\$370,792	\$872,344
238	Gross Operating Costs											
239	Total Operating Salaries		\$ 77,558,029							\$ 48,708,133	\$ 8,605,107	\$ 20,244,789
240	Total Operating Salaries %									62.8%	11.1%	26.1%
241	Gross Operating Costs			\$171,739,128						\$107,047,287	\$18,000,872	\$46,680,990
242	Gross Operating Costs %									62.3%	10.5%	27.2%
243	Other Revenues											
244	All	Interest Revenues		(\$1,252,400)	62.3%	10.4%	27.2%	Calculation	Operating Costs	\$ (780,310)	\$ (130,844)	\$ (341,246)
245	All	SC Application and Training Fees		(\$120,000)	62.3%	10.4%	27.2%	Calculation	Operating Costs	\$ (74,766)	\$ (12,537)	\$ (32,697)
246	All	WSCC Security Coordination		(\$1,255,891)	100.0%	0.0%	0.0%	Finance	Direct Assignment	\$ (1,255,891)	\$0	\$0
247	Total Other Revenue			(\$2,628,291)						\$ (2,110,967)	\$ (143,381)	\$ (373,943)
248	Total Other Revenue %									80.3%	5.5%	14.2%
249	Net Operating Costs											
250	Total Salaries		\$ 77,558,029							48,708,133	8,605,107	20,244,789
251	Total Salaries %									62.8%	11.1%	26.1%
252	Net Operating Costs			\$169,110,838						\$104,936,300	\$17,857,491	\$46,317,047
253	Net Operating Costs %									62.1%	10.6%	27.4%
254	Infrastructure - Direct Assigned Items											
255	EMS			\$16,470,000	100.0%	0.0%	0.0%	Contract/ Functional Anal.	Direct Assignment	\$16,470,000	\$0	\$0
256	SI			\$27,102,000	39.0%	20.0%	41.0%	Contract/ Functional Anal.	Direct Assignment	\$10,569,780	\$5,420,400	\$11,111,820
257	SA			\$31,681,000	35.0%	25.0%	40.0%	Contract/ Functional Anal.	Direct Assignment	\$11,088,350	\$7,920,250	\$12,672,400

Appendix C2

CAISO/Fin 11/6/02

CALIFORNIA ISO

COST ALLOCATION MATRIX - 2003 BUDGET

Appendix C2

Line #	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Control Area Services	Allocation Congestion Mgmt.	ASREO/MO	Source	Allocation/Assignment Method	Control Area Services	Congestion Mgmt.	ASREO/MO
302		2000 Spending: Other Systems/Vehicles		\$1,240,714	12.7%	0.7%	86.6%	Contract/Functional Anal.	Direct Assignment	\$157,198	\$8,561	\$1,074,955
303		2001 Spending: Other Systems		\$4,439,568	62.1%	10.6%	27.4%	Calculation	Operating Costs	\$2,754,831	\$468,802	\$1,215,934
304		2000 Spending: Facilities/Furniture/Office Equipment		\$1,473,241	62.8%	11.1%	26.1%	Calculation	Labor Dollar Ratios	\$925,227	\$163,457	\$384,557
305		Total Other Software and Enhancements		\$13,374,000						\$6,396,470	\$3,016,434	\$3,961,096
306		Total 1998 Bonds										
307		Total 1998 Bonds		\$301,400,000					Allocation %	\$149,900,871	\$37,479,709	\$114,019,420
308		Total 1998 Bonds %								48.7%	12.4%	37.8%
309		Total 2000 Bonds										
310		Land & Building Costs		\$9,300,000	62.8%	11.1%	26.1%	Calculation	Labor Dollar Ratios	\$5,840,603	\$1,031,840	\$2,427,557
311		2000 Spending SA/S/IBBS		\$15,233,506	49.3%	0.5%	50.1%	Contract/Functional Anal.	Direct Assignment	\$7,514,689	\$82,261	\$7,636,557
312		2000 Spending: EMS/CIM/FDA		\$1,435,154	83.1%	1.9%	15.0%	Contract/Functional Anal.	Direct Assignment	\$1,191,895	\$27,842	\$215,417
313		2000 Spending: Other Systems		\$4,000,555	62.1%	10.6%	27.4%	Calculation	Operating Costs	\$2,482,416	\$422,444	\$1,095,695
314		2001 Spending: EMS		\$5,286,679	100.0%	0.0%	0.0%	Contract/Functional Anal.	Direct Assignment	\$5,286,679	\$0	\$0
315		2001 Spending: SA/S/IBBS		\$844,106	40.1%	0.0%	59.9%	Contract/Functional Anal.	Direct Assignment	\$338,824	\$0	\$505,282
316		Total 2000 Bonds		\$36,100,000					Allocation %	\$22,655,106	\$1,564,387	\$11,880,507
317		Total 2000 Bonds %								62.8%	4.3%	32.9%
318		Total 1998 and 2000 Bonds		\$337,500,000					Allocation %	\$172,555,977	\$39,044,097	\$125,899,927
319		Total 1998 and 2000 Bonds %								51.1%	11.6%	37.3%
320		Total Debt Service Cost		\$54,746,238	51.1%	11.6%	37.3%	Calculation	1998 & 2000 bonds	\$27,990,490	\$6,333,385	\$20,422,362
321		Total Debt Service Cost %							Allocation %	\$27,990,490	\$6,333,385	\$20,422,362
322		Debt Service - Existing Debt (1998 and 2000 Bonds): Including F		\$54,746,238						51.1%	11.6%	37.3%
323		Total Debt Service Cost		\$54,746,238								
324		Total Debt Service Cost		\$54,746,238								
325		Total Debt Service Cost		\$54,746,238								
326		Total Debt Service Cost		\$54,746,238								
327		2003 Budget: Operating Systems		\$3,193,000	60.4%	7.9%	31.7%	Contract/Functional Anal.	Direct Assignment	\$1,928,253	\$253,205	\$1,011,542
328		2003 Budget: Furniture/Facilities/Office Equipment		\$445,000	62.8%	11.1%	26.1%	Calculation	Labor Dollar Ratios	\$279,470	\$49,373	\$116,157
329		2003 Budget: Corporate Systems		\$3,320,000	62.1%	10.6%	27.4%	Calculation	Operating Costs	\$2,060,119	\$350,580	\$909,301
330		2003 Budget: MD02		\$15,042,000	32.0%	33.0%	35.0%	Contract/Functional Anal.	Direct Assignment	\$4,813,440	\$4,963,860	\$5,264,700
331		Total Cash Funded Cap Ex		\$22,000,000					Allocation %	\$9,081,282	\$5,617,018	\$7,301,700
332		Total Cash Funded Cap Ex %								41.3%	25.5%	33.2%
333		Total Cash Funded Cap Ex		\$22,000,000								
334		Gross O&M Costs	\$ 77,558,028	\$171,739,129	62.1%	10.6%	27.4%			\$107,047,287	\$18,000,872	\$46,690,990
335		Other Costs and Income		(\$2,628,291)	80.3%	5.5%	14.2%			\$ (2,110,967)	\$ (143,381)	\$ (373,943)
336		Net O&M Costs		\$169,110,838	62.3%	10.5%	27.2%			\$104,936,300	\$17,857,491	\$46,317,047
337		Debt Service		\$54,746,238	51.1%	11.6%	37.3%			\$27,990,490	\$6,333,385	\$20,422,362
338		Cash Funded Cap Ex		\$22,000,000	41.3%	25.5%	33.2%			\$9,081,282	\$5,617,018	\$7,301,700
339		Total Cost of Service: Prior to Op. Reserve		\$245,857,076						\$142,009,072	\$29,807,894	\$74,041,110
340		Total Cost of Service %							Allocation % results before Revenue Credit or Deficiency	57.8%	12.1%	30.1%
341		(Revenue Credit)/Shortfall		\$ (8,256,705)	50.3%	29.2%	20.6%			\$ (4,151,203)	\$ (2,407,373)	\$ (1,698,128)
342		Total Cost of Service		\$237,600,371					Net Allocation %	\$137,856,669	\$27,400,521	\$72,342,982
343		Total Cost of Service %								58.0%	11.5%	30.4%

**CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
TELECOMMUNICATIONS - Total Salaries Method**

Line #	ISO Dept #	FRATING COSTS	Amount Labor	Amount Total Costs	Functional Allocation		Source	Assignment Method	Control Area Services	Salary Cost Allocated	ASREO/MO
					Control Area Services	Congestion Mgmt.				Congestion Mgmt.	
1	1500	Operations - Direct Salaries									
2	1521	Grid Planning	\$ 2,041,338		100.0%	0.0%	Department	Direct Assignment	2,041,338	-	-
3	1542	Outage Coordination	\$ 1,580,356		100.0%	0.0%	Department	Direct Assignment	1,580,356	-	-
4	1543	Loads and Resources	\$ 943,936		100.0%	0.0%	Department	Direct Assignment	943,936	-	-
5	1544	Real-Time Scheduling	\$ 2,576,768		75.0%	15.0%	Department	Direct Assignment	1,934,076	386,815	257,877
6	1545	Grid Operations - General	\$ 6,844,825		79.4%	10.3%	Department	Direct Assignment	5,435,343	704,741	704,741
7	1546	Security Coordination	\$ 1,207,891		100.0%	0.0%	Department	Direct Assignment	1,207,891	-	-
8	1554	Special Projects Engineering	\$ 601,931		81.3%	0.0%	Department	Direct Assignment	489,855	-	112,276
9	1555	Operations Support Group	\$ 974,683		60.3%	22.0%	Department	Direct Assignment	588,100	172,551	172,551
10	1558	Transmission Maintenance	\$ 1,141,103		97.4%	0.0%	Department	Direct Assignment	1,111,005	214,032	30,098
11	1561	Operations Engineering South	\$ 1,034,681		100.0%	0.0%	Department	Direct Assignment	1,034,681	-	-
12	1562	Operations Engineering North	\$ 1,168,863		100.0%	0.0%	Department	Direct Assignment	1,168,863	-	-
13	1563	Coordinated Operations	\$ 584,551		60.0%	10.0%	Department	Direct Assignment	350,731	58,455	175,365
14	1565	Pre-Scheduling and Support	\$ 1,660,786		73.3%	15.0%	Department	Direct Assignment	1,217,556	248,314	194,895
15	1566	Regional Coordination - General	\$ 423,012		77.3%	0.0%	Department	Direct Assignment	327,193	-	95,819
16	1549	Operations Training	\$ 1,919,288		62.1%	24.8%	Department	Direct Assignment	1,191,988	472,917	254,453
17	1559	Operations Application Support	\$ 447,958		78.5%	10.7%	Department	Direct Assignment	351,831	48,063	48,063
18		Total Operations Direct Salary Cost Only	\$ 25,153,929						20,974,453	2,133,338	2,046,138
19		Total Operations Direct Salary %						Allocation %	83.4%	8.5%	8.1%
20	1500	Operations - Indirect Salaries									
21	1511	VP Grid Operations - General	\$ 365,202		74.3%	12.9%	Calculation	Allocated based on Department Direct Costs	271,368	47,208	46,628
22	1547	Engineering and Maintenance - General	\$ 289,222		94.6%	1.2%	Calculation	Allocated based on Supervised Department costs	273,558	3,469	12,194
23	1548	OSAT	\$ 182,432		72.8%	9.4%	Calculation	Allocated based on Supervised Department costs	132,775	17,083	32,575
24	1564	Operations Scheduling - General	\$ 281,382		81.3%	10.9%	Calculation	Allocated based on Supervised Department costs	228,768	30,705	21,889
25		Total Operations Indirect Salaries	\$ 1,118,218						\$ 908,468	\$ 98,464	\$ 113,286
26		Total Operations Salaries	\$ 26,272,147						\$ 21,880,922	\$ 2,231,802	\$ 2,159,424
27	1700	VP Market Services Salaries									
28	1722	Application Support	\$ 414,256		19.0%	7.0%	Department	Direct Assignment	78,709	28,998	306,549
29	1723	Tariff and Contract Implementation	\$ 667,205		90.0%	0.0%	Department	Direct Assignment	600,485	-	66,721
30	1724	BBS - PSS	\$ 942,333		17.0%	7.8%	Department	Direct Assignment	159,879	73,833	708,621
31	1725	BBS - FSS	\$ 1,037,777		15.6%	7.3%	Department	Direct Assignment	161,664	75,294	800,819
32	1731	Contracts and Special Projects	\$ 1,153,955		74.4%	2.4%	Department	Direct Assignment	859,049	27,855	267,251
33	1741	Client Relations	\$ 2,054,540		40.7%	9.3%	Department	Direct Assignment	836,710	190,286	1,027,544
34	1752	Manager of Markets	\$ 2,156,353		29.0%	30.0%	Department	Direct Assignment	625,342	646,906	884,105
35	1753	Market Engineering	\$ 1,680,883		32.8%	27.6%	Department	Direct Assignment	550,812	464,413	665,658
36	1755	Business Solutions	\$ 739,166		36.0%	10.0%	Department	Direct Assignment	266,100	73,917	399,150
37	1756	Market Quality - General	\$ 1,940,408		37.0%	33.0%	Department	Direct Assignment	717,951	640,335	582,122
38	1757	Market Integration	\$ 587,381		25.0%	30.0%	Department	Direct Assignment	146,840	176,208	264,312
39		Total Market Services Direct Salaries	\$ 13,374,237					Allocation %	5,003,540	2,397,845	5,972,853
40		Total Market Services Direct Salaries %							37.9%	17.9%	44.7%
41	1700	Market Services - Indirect Salaries									
42	1711	VP Market Services - General	\$ 394,287		37.4%	17.9%	Calculation	Allocated based on Department Direct Costs	147,510	70,891	176,086
43	1721	Billing and Settlements-General	\$ 347,911		32.7%	5.8%	Calculation	Allocated based on Supervised Department costs	113,722	20,242	213,948
44	1751	Market Operations - General	\$ 331,747		20.0%	30.0%	Calculation	Allocated based on Supervised Department costs	66,349	99,524	165,874
45		Total Market Services Indirect Salaries	\$ 1,073,945						\$ 327,581	\$ 190,457	\$ 555,907
46		Total Market Services Salaries	\$ 14,448,182						\$ 5,331,121	\$ 2,588,302	\$ 6,528,760
47	1400	Information Services - Direct Salaries									
48	1424	Asset Management	\$ 845,319		56.0%	5.0%	Department	Direct Assignment	473,379	42,266	329,674
49	1441	Outsourced Contracts	\$ 159,466	Excluded			Calculation	Allocated based on Labor Dollar Ratio-Special	-	-	-
50	1461	Control Systems	\$ 2,186,977		100.0%	0.0%	Department	Direct Assignment	2,186,977	-	-

**CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
TELECOMMUNICATIONS - Total Salaries Method**

1462	Field Data Acquisition System (FDAS)	\$ 1,805,793			28.6%	11.3%	60.1%	Department	Direct Assignment	515,566	204,658	1,085,560
1467	Settlement Systems Services	\$ 980,615			15.0%	7.0%	78.0%	Department	Direct Assignment	147,092	68,643	764,880
	Total IS Direct Salaries	\$ 5,818,694							Allocation %	\$ 3,323,014	\$ 315,567	\$ 2,180,114
	Total IS Direct Salaries %									57.1%	5.4%	37.5%
1468	Legal - Direct Salaries											
1469	Market Analysis	\$ 1,997,346			25.1%	18.7%	56.2%	Department	Direct Assignment	501,536	373,952	1,121,857
1470	Market Surveillance Committee	\$ 1,150,095			0.0%	0.0%	0.0%	Department	Direct Assignment	958,413	63,894	127,788
1471	Compliance - General	\$ 357,191			83.3%	5.6%	11.1%	Department	Direct Assignment	297,659	19,844	39,688
1472	Compliance - Audits	\$ 3,504,632			83.3%	5.6%	11.1%	Department	Direct Assignment	1,757,608	457,691	1,289,333
	Total Legal Direct Salaries	\$ 3,504,632							Allocation %	50.2%	13.1%	36.8%
	Total Legal Direct Salaries %											
1473	Subtotal IS, Market Services, Operations	\$ 50,043,655								\$ 32,292,664	\$ 5,593,361	\$ 12,157,630
	Percentage Subtotal IS, MS, Op									64.5%	11.2%	24.3%
1474	VP Information Services Indirect Salaries											
1475	Chief Information Officer - General	\$ 391,143			57.1%	5.4%	37.5%	Calculation	Allocated based on Department Direct Costs	223,379	21,213	146,551
1476	Corporate & Enterprise Applications - General	\$ 233,320			61.7%	10.0%	28.3%	Calculation	Allocated based on Supervised Departments costs	143,920	23,274	66,126
1477	End User Support	\$ 491,206			64.5%	11.2%	24.3%	Calculation	Allocated based on Direct Operating Costs	316,970	54,902	119,334
1478	Computer Operations - General	\$ 403,068			58.1%	9.6%	32.2%	Calculation	Allocated based on Supervised Departments costs	234,380	38,719	129,969
1479	Network Operations	\$ 1,549,597			64.5%	11.2%	24.3%	Calculation	Allocated based on Labor Dollar Rates-Special	999,939	173,198	376,460
1480	Production Support	\$ 2,440,565			57.1%	9.9%	33.0%	Calculation	Allocated based on Direct Operating Costs	1,393,251	241,323	805,992
1481	Information Security	\$ 1,036,281			64.5%	11.2%	24.3%	Calculation	Allocated based on Direct Operating Costs	669,992	116,048	252,240
1482	Operations Applications - General	\$ 292,237			57.1%	6.3%	36.7%	Calculation	Allocated based on Supervised Departments costs	166,748	18,301	107,189
1483	Enterprise Applications	\$ 764,123			63.1%	10.1%	26.9%	Calculation	Allocated based on Direct Operating Costs	481,979	76,865	205,279
1484	Corporate Application Support	\$ 1,188,702			61.7%	10.7%	27.6%	Calculation	Allocated based on Direct Operating Costs	733,383	127,028	328,291
1485	Analytical and Reporting	\$ 984,106			64.5%	11.2%	24.3%	Calculation	Allocated based on Direct Operating Costs	635,034	109,993	239,079
1486	IT Planning	\$ 628,349			64.5%	11.2%	24.3%	Calculation	Allocated based on Direct Operating Costs	405,467	70,230	152,651
1487	Markets and Scheduling	\$ 1,267,761			64.5%	11.2%	24.3%	Calculation	Allocated based on Direct Operating Costs	818,073	141,697	307,990
1488	Total IS Indirect Salaries	\$ 11,672,458							Allocation %	7,222,515	1,212,791	3,237,151
	Total IS Operating Salaries %	\$ 17,491,152								61.9%	10.4%	27.7%
1489	Operating Costs and Salaries Before Corporate Indirect	\$ 61,716,113										
1490	Total Operating Salaries								Allocation %	\$ 39,515,179	\$ 6,806,153	\$ 15,394,782
	Total Operating Salaries %									64.0%	11.0%	24.9%
1491	Finance - Corporate Indirect Salaries											
1492	CFO - General	\$ 420,090			58.8%	10.3%	31.0%	Calculation	Allocated based on Supervised Departments costs	246,865	43,154	130,071
1493	Accounting	\$ 836,830			46.0%	7.9%	46.1%	Calculation	Allocated based on Direct Operating Costs	384,606	66,245	385,979
1494	Financial Planning and Treasury	\$ 714,782			64.0%	11.0%	24.9%	Calculation	Allocated based on Direct Operating Costs	457,656	78,827	178,299
1495	Facilities	\$ 641,351			64.0%	11.0%	24.9%	Calculation	Allocated based on Labor Dollar Rates	410,840	70,729	159,982
1496	Office Administration	\$ 643,601			64.0%	11.0%	24.9%	Calculation	Allocated based on Labor Dollar Rates	412,081	70,977	160,543
	Total Finance Indirect Salaries b/f CFO									\$ 1,664,982	\$ 286,779	\$ 884,803
	Total Finance Indirect Salaries %									58.7%	10.1%	31.2%
1497	Total Finance Operating Salaries	\$ 3,256,654								\$ 1,911,848	\$ 329,933	\$ 1,014,874
1498	Legal: Chief Counsel - Corporate Indirect Salaries											
1499	VP General Counsel - General	\$ 468,583			55.8%	11.6%	32.6%	Calculation	Allocated based on Supervised Departments costs	261,322	\$ 54,380	\$ 152,880
1500	Legal and Regulatory	\$ 3,330,071			64.0%	11.0%	24.9%	Calculation	Allocated based on Direct Operating Costs	2,132,156	\$ 367,246	\$ 830,670
	Total Legal Indirect Salaries b/f GC	\$ 3,330,071								\$ 2,132,156	\$ 367,246	\$ 830,670
	Total Legal Indirect Salaries %	\$ 6,834,703								\$ 3,889,764	\$ 824,936	\$ 2,120,003
	Legal Percentages b/f GC									56.9%	12.1%	31.0%
	Total Legal Salaries	\$ 7,303,286								\$ 4,151,086	\$ 879,316	\$ 2,272,894

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**CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
TELECOMMUNICATIONS: Specific Salaries Method**

Line#	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Assignment Method	Salary Cost Allocated		
					Control Area	Congestion	ASRE/IMO			Control Area	Congestion	ASRE/IMO
					Services	Mgmt.	O			Services	Mgmt.	
1	1500	Operations - Direct Salaries										
2	1521	Grid Planning	\$ 2,041,338		100.0%	0.0%	0.0%	Department	Direct Assignment	2,041,338	-	-
3	1542	Outage Coordination	\$ 1,580,356		100.0%	0.0%	0.0%	Department	Direct Assignment	1,580,356	-	-
4	1543	Loads and Resources	\$ 943,936		100.0%	0.0%	0.0%	Department	Direct Assignment	943,936	-	-
5	1544	Real-Time Scheduling	\$ 2,578,768		75.0%	15.0%	10.0%	Department	Direct Assignment	1,934,076	386,815	257,877
6	1545	Grid Operations - General	\$ 8,844,825		79.4%	10.3%	10.3%	Department	Direct Assignment	5,435,343	704,741	704,741
7	1546	Security Coordination	\$ 1,207,891		100.0%	0.0%	0.0%	Department	Direct Assignment	1,207,891	-	-
8	1554	Special Projects Engineering	\$ 601,931		81.3%	0.0%	18.7%	Department	Direct Assignment	489,655	-	112,276
9	1555	Operations Support Group	\$ 974,663		60.3%	22.0%	17.7%	Department	Direct Assignment	588,100	214,032	172,551
10	1558	Transmission Maintenance	\$ 1,141,103		97.4%	0.0%	2.6%	Department	Direct Assignment	1,111,005	-	30,098
11	1561	Operations Engineering South	\$ 1,034,681		100.0%	0.0%	0.0%	Department	Direct Assignment	1,034,681	-	-
12	1562	Operations Engineering North	\$ 1,168,863		100.0%	0.0%	0.0%	Department	Direct Assignment	1,168,863	-	-
13	1563	Coordinated Operations	\$ 584,551		60.0%	10.0%	30.0%	Department	Direct Assignment	350,731	58,455	175,365
14	1565	Pre-Scheduling and Support	\$ 423,012		73.3%	15.0%	11.7%	Department	Direct Assignment	1,217,556	248,314	194,895
15	1566	Regional Coordination - General	\$ 1,919,268		77.3%	0.0%	22.7%	Department	Direct Assignment	327,193	-	95,819
16	1549	Operations Training	\$ 447,958		62.1%	24.6%	13.3%	Department	Direct Assignment	1,191,898	472,917	254,453
17	1559	Operations Application Support	\$ 25,153,929		78.5%	10.7%	10.7%	Department	Direct Assignment	351,831	48,063	48,063
18		Total Operations Direct Salary Cost Only								20,974,453	2,133,338	2,046,138
19		Total Operations Direct Salary %								83.4%	8.5%	8.1%
20	1600	Operations - Indirect Salaries										
21	1511	VP Grid Operations - General	\$ 365,202		74.3%	12.9%	12.8%	Calculation	Allocated based on Department Direct Costs	\$ 271,368	\$ 47,206	\$ 46,628
22	1547	Engineering and Maintenance - General	\$ 289,222		94.6%	1.2%	4.2%	Calculation	Allocated based on Supervised Department costs	\$ 273,558	\$ 3,469	\$ 12,194
23	1548	OSAT	\$ 182,432		72.8%	9.4%	17.9%	Calculation	Allocated based on Supervised Department costs	\$ 132,775	\$ 17,093	\$ 32,575
24	1564	Operations Scheduling - General	\$ 281,362		81.3%	10.9%	7.8%	Calculation	Allocated based on Supervised Department costs	\$ 228,768	\$ 30,705	\$ 21,889
25		Total Operations Indirect Salaries	\$ 1,118,218							\$ 906,468	\$ 98,464	\$ 113,286
26		Total Operations Indirect Salaries %	\$ 26,272,147							\$ 21,880,922	\$ 2,231,802	\$ 2,159,424
27	1700	VP Market Services Salaries										
28	1722	Application Support	\$ 414,256		19.0%	7.0%	74.0%	Department	Direct Assignment	78,709	28,998	306,549
29	1723	Tariff and Contract Implementation	\$ 667,205		90.0%	0.0%	10.0%	Department	Direct Assignment	600,485	-	66,721
30	1724	BBS - PSS	\$ 942,333		17.0%	7.8%	75.2%	Department	Direct Assignment	159,879	73,833	708,621
31	1725	BBS - FSS	\$ 1,037,777		15.6%	7.3%	77.2%	Department	Direct Assignment	161,664	75,294	800,819
32	1731	Contracts and Special Projects	\$ 1,153,955		74.4%	2.4%	23.2%	Department	Direct Assignment	859,049	27,655	267,251
33	1741	Client Relations	\$ 2,054,540		40.7%	9.3%	50.0%	Department	Direct Assignment	836,710	190,286	1,027,544
34	1752	Manager of Markets	\$ 2,156,353		29.0%	30.0%	41.0%	Department	Direct Assignment	625,342	646,906	884,105
35	1753	Market Engineering	\$ 1,680,883		32.8%	27.6%	39.6%	Department	Direct Assignment	550,812	464,413	665,658
36	1755	Business Solutions	\$ 739,166		36.0%	10.0%	54.0%	Department	Direct Assignment	266,100	73,917	399,150
37	1756	Market Quality - General	\$ 1,940,408		37.0%	33.0%	30.0%	Department	Direct Assignment	717,951	640,335	582,122
38	1757	Market Integration	\$ 587,361		25.0%	30.0%	45.0%	Department	Direct Assignment	146,840	176,208	264,312
39		Total Market Services Direct Salaries	\$ 13,374,237							5,003,540	2,397,845	5,972,853
40		Total Market Services Direct Salaries %								37.4%	17.9%	44.7%
41	1760	Market Services - Indirect Salaries										
42	1711	VP Market Services - General	\$ 394,287	Excluded	37.4%	17.9%	44.7%	Calculation	Allocated based on Department Direct Costs	147,510	70,691	176,086
43	1721	Billing and Settlements-General	\$ 347,911		32.7%	5.8%	61.5%	Calculation	Allocated based on Supervised Department costs	113,722	20,242	213,948
44	1751	Market Operations - General	\$ 331,747		20.0%	30.0%	50.0%	Calculation	Allocated based on Supervised Department costs	66,349	99,524	165,874
45		Total Market Services Indirect Salaries	\$ 675,658							\$ 180,071	\$ 119,766	\$ 379,821
46		Total Market Services Indirect Salaries %	\$ 14,053,895							\$ 5,183,611	\$ 2,517,611	\$ 6,352,674
47	1800	Information Services - Direct Salaries										
48	1424	Asset Management	\$ 845,319	Excluded	56.0%	5.0%	39.0%	Calculation	Direct Assignment	473,379	42,266	329,674
49	1441	Outsourced Contracts	\$ 159,466	Excluded	64.9%	11.2%	23.9%	Calculation	Allocated based on Labor Dollar Ratio-Special	103,487	17,907	38,072
50	1461	Control Systems	\$ 2,186,977		100.0%	0.0%	0.0%	Department	Direct Assignment	2,186,977	-	-
51	1462	Field Data Acquisition System (FDAS)	\$ 1,805,783		28.6%	11.3%	60.1%	Department	Direct Assignment	515,566	204,658	1,085,560
52	1467	Settlement Systems Services	\$ 980,615		15.0%	7.0%	78.0%	Department	Direct Assignment	147,092	68,643	764,880
53												
54		Total IS Direct Salaries	\$ 4,973,375							\$ 2,849,635	\$ 273,301	\$ 1,850,439
55		Total IS Direct Salaries %								57%	5%	37%
56	1800	Capital Direct Salaries										

**CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
TELECOMMUNICATIONS: Specific Salaries Method**

Line#	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Assignment Method	Salary Cost Allocated	
					Control Area Services	Concession Mgmt.	ASREO/M O			Control Area Services	Concession Mgmt.
57	1841	Market Analysis	\$ 1,997,346		25.1%	18.7%	56.2%	Department	Direct Assignment	501,536	373,952
58	1842	Market Surveillance Committee	\$ -		0.0%	0.0%	0.0%	Department	Direct Assignment	-	-
59	1861	Compliance - General	\$ 1,150,095		83.3%	5.6%	11.1%	Department	Direct Assignment	958,413	63,894
60	1862	Compliance - Audits	\$ 357,191		83.3%	5.6%	11.1%	Department	Direct Assignment	297,659	19,844
61		Total Legal Direct Salaries	\$ 3,504,632							1,757,608	457,691
62		Total Legal Indirect Salaries %							Allocation %	50.2%	13.1%
63		Subtotal IS, Market Services, Operations	48,804,049							31,671,775	5,480,404
64		Percentage Subtotal IS, MS, Op								64.9%	11.2%
65		Subtotal IS, Market Services, Operations									
66	1411	Chief Information Officer- General	\$ 391,143		57.3%	5.5%	37.2%	Calculation	Allocated based on Department Direct Costs	224,116	21,494
67	1422	Corporate & Enterprise Applications - General	\$ 233,320	Excluded	57.3%	5.5%	37.2%	Calculation	Allocated based on Supervised Departments costs	133,687	12,822
68	1431	End User Support	\$ 491,206		64.9%	11.2%	23.9%	Calculation	Allocated based on Direct Operating Costs	318,772	55,160
69	1432	Computer Operations - General	\$ 403,068		64.9%	11.2%	23.9%	Calculation	Allocated based on Supervised Departments costs	261,574	45,262
70	1433	Network Operations	\$ 1,549,597		64.9%	11.2%	23.9%	Calculation	Allocated based on Labor Dollar Rates - Special	1,005,623	174,011
71	1442	Production Support	\$ 2,440,565		57.4%	9.9%	32.7%	Calculation	Allocated based on Direct Operating Costs	1,401,170	242,455
72	1451	Information Security	\$ 1,038,281		64.9%	11.2%	23.9%	Calculation	Allocated based on Direct Operating Costs	673,801	116,593
73	1463	Operations Applications - General	\$ 292,237		57.1%	6.3%	36.7%	Calculation	Allocated based on Supervised Departments costs	166,748	18,301
74	1466	Enterprise Applications	\$ 764,123		63.4%	10.1%	26.5%	Calculation	Allocated based on Direct Operating Costs	484,501	77,226
75	1468	Corporate Application Support	\$ 1,188,702		62.0%	10.7%	27.2%	Calculation	Allocated based on Direct Operating Costs	737,552	127,624
76	1469	Analytical and Reporting	\$ 984,106		64.9%	11.2%	23.9%	Calculation	Allocated based on Direct Operating Costs	638,643	110,509
77	1471	IT Planning	\$ 828,349	Excluded	64.9%	11.2%	23.9%	Calculation	Allocated based on Direct Operating Costs	407,772	70,560
78	1481	Markets and Scheduling	\$ 1,267,761		64.9%	11.2%	23.9%	Calculation	Allocated based on Direct Operating Costs	822,724	142,362
79		Total IS Indirect Salaries	\$ 10,810,789							\$ 6,735,225	\$ 1,130,986
80		Total IS Operating Salaries	\$ 15,784,164						Allocation %	62.3%	10.5%
81		Operating Costs and Salaries Before Corporate Indirect									
82		Total Operating Salaries	\$ 59,614,838						Allocation %	\$ 38,407,000	\$ 6,611,400
83		Total Operating Salaries %								64.4%	11.1%
84	1300	Finance - Corporate Indirect Salaries									
85	1311	CFO - General	\$ 420,090	Excluded	58.3%	6.1%	35.6%	Calculation	Allocated based on Supervised Departments costs	244,712	25,647
86	1321	Accounting	\$ 836,830	Excluded	46.2%	8.0%	45.8%	Calculation	Allocated based on Direct Operating Costs	386,996	66,618
87	1331	Financial Planning and Treasury	\$ 714,782	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Direct Operating Costs	460,500	79,271
88	1351	Facilities	\$ 641,351	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Labor Dollar Rates	413,192	71,127
89	1361	Office Administration	\$ 643,601	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Labor Dollar Rates	414,641	71,377
90		Total Finance Indirect Salaries									
91		Total Finance Operating Salaries									
92	1600	Legal - Chief Counsel - Corporate Indirect Salaries									
93	1611	VP General Counsel - General	\$ 468,583	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Supervised Departments costs	301,886	51,967
94	1631	Legal and Regulatory	\$ 3,330,071	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Direct Operating Costs	2,145,406	369,311
95		Total Legal Indirect Salaries									
96		Total Legal Salaries	\$ 3,504,632							\$ 1,757,608	\$ 457,691
97		Subtotal VP Corporate and Strategic Development - Corporate Indirect Salaries									
98	1811	VP Corporate and Strategic Development - General	\$ 392,226	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Supervised Departments costs	252,693	43,499
99	1821	Communications	\$ 452,711	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Direct Operating Costs	291,680	50,207
100	1831	Strategic Development	\$ 477,745	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Direct Operating Costs	307,788	52,983
101	1851	Project Office	\$ 583,258	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Direct Operating Costs	375,765	64,684
102	1861	Regulatory Policy	\$ 585,142	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Direct Operating Costs	376,979	64,893
103		Total Corporate and Strategic Dept b/f HR									
		Total Costs and Salaries before HR/CEO									

**CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
TELECOMMUNICATIONS: Specific Salaries Method**

Line#	ISO Dept #	OPERATING COSTS	Amount Labor	Amount Total Costs	Allocation			Source	Assignment Method	Salary Cost Allocated	
					Control Area Services	Congestion Mgmt.	ASREO/M O			Control Area Services	Congestion Mgmt.
103	1241	MD02									
104	1241	MD02	\$ 882,809					Department	Direct Assignment	282,435	291,261
105	1241	MD02	60,497,447							38,689,435	6,902,661
106		Total Salaries before HR/CEO %								64.0%	11.4%
107		Total Salaries before HR/CEO %									24.6%
108	1111	CEO - General	\$ 744,874	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Labor Dollar Ratio	479,887	82,608
109	1841	Human Resources	\$ 1,166,617	Excluded	64.4%	11.1%	24.5%	Calculation	Allocated based on Labor Dollar Ratio	751,596	129,380
110	1651	Board of Governors	\$ -	Excluded	0.0%	0.0%	0.0%			-	-
111		Total CEO/HR Salaries									
112		Other Costs									
113	All	Salary Adjustments, FY2002							Operating Costs	\$0	\$0
114		Total Operating Salaries	\$ 60,497,447							\$ 38,689,435	\$ 6,902,661
115		Total Operating Salaries %								64.0%	11.4%
116		Total Operating Salaries %									24.6%
117		Other Revenue									
118		Net Operating Costs - 2002									
119		Total Salaries	\$ 60,497,447							38,689,435.1	6,902,661.3
120		Total Salaries %								64.0%	11.4%
121		Excluded Salaries									
122	IS	Market Services	\$1,866,454								
123	Finance	Finance	\$394,287								
124	Legal	Legal	\$3,256,854								
125	Legal	Legal	\$3,798,854								
126	Strategic Planning & Communications	Strategic Planning & Communications	\$2,481,082								
127	HR/CEO	HR/CEO	\$1,911,491								
128		Total Excluded Salaries	\$13,718,622								
129		Total Salaries (Included plus excluded)	\$74,216,069								
130	1241	Outsourced Contracts									
131	1241	Outsourced Contracts (Telecommunications)									
132		Direct Allocation	\$1,781,009		0.0%	0.0%	100.0%	Estimate of cost for Connected Entities		\$0	\$0
133		Total Salary Allocation - excluded	\$3,562,017		63.4%	11.3%	25.4%	Estimate of cost for voice services		\$2,257,833	\$400,926
		Specific Salary Allocations - above	\$24,340,452		64.0%	11.4%	24.6%	Remaining cost		\$15,566,249	\$2,777,206
		Total Vendor Management Costs	\$29,683,478							\$17,824,082	\$3,178,132
		Allocation Ratio								60.0%	10.7%

Percentages of Total Cost for Direct, Total, Specific

Direct

6.0%

CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
WORKSHEET FOR ALLOCATION OF COSTS OF CERTAIN SUPERVISORY DEPARTMENTS

Appendix C5

OPERATING EXPENSES

Operating Expenses - Cost Center 1311 CFO General

	Total	CAS	CONG	ASREOMO
1321		47%	8%	45%
\$	2,168,530	\$ 1,026,831	\$ 169,066	\$ 972,634
1331		60%	10%	30%
\$	2,511,009	\$ 1,500,141	\$ 259,113	\$ 751,756
1351		64%	11%	25%
\$	5,812,962	\$ 3,696,841	\$ 634,581	\$ 1,481,540
1361		64%	11%	25%
\$	2,227,171	\$ 1,416,403	\$ 243,133	\$ 567,635
Total	\$ 12,719,672	\$ 7,640,215	\$ 1,285,992	\$ 3,773,465
		60%	10%	30%
1311	\$ 424,204	\$ 255,819	\$ 44,832	\$ 119,439

SALARIES

Cost Center 1311 Salaries

	Total	CAS	CONG	ASREOMO
1321		47%	8%	45%
\$	836,830	\$ 396,251	\$ 65,242	\$ 375,337
1331		60%	10%	30%
\$	714,782	\$ 427,029	\$ 73,759	\$ 213,994
1351		64%	11%	25%
\$	641,351	\$ 407,877	\$ 70,014	\$ 163,460
1361		64%	11%	25%
\$	643,601	\$ 409,308	\$ 70,260	\$ 164,033
Total	\$ 2,836,564	\$ 1,640,465	\$ 279,275	\$ 916,824
		58%	10%	32%
1311	\$ 420,090	\$ 246,865	\$ 43,154	\$ 130,071

OPERATING EXPENSES

Operating Expenses - Cost Center 1432 -Computer Operations - General

	Total	CAS	CONG	ASREOMO
1431		63%	10%	27%
\$	6,565,001	\$ 4,137,311	\$ 683,474	\$ 1,744,215
1442		56%	9%	35%
\$	2,581,165	\$ 1,449,293	\$ 239,420	\$ 892,452
1451		63%	10%	27%
\$	1,509,500	\$ 951,298	\$ 157,152	\$ 401,050
1481		56%	9%	35%
\$	1,520,628	\$ 853,410	\$ 140,981	\$ 526,236
Total	\$ 12,176,294	\$ 7,391,312	\$ 1,221,027	\$ 3,563,954
		61%	10%	29%
1432	\$ 430,975	\$ 244,672	\$ 40,419	\$ 117,976

SALARIES

Cost Center 1432 Salaries

	Total	CAS	CONG	ASREOMO
1431		63%	10%	27%
\$	491,206	\$ 309,562	\$ 51,139	\$ 130,506
1442		56%	9%	35%
\$	2,440,565	\$ 1,370,348	\$ 226,378	\$ 843,839
1451		63%	10%	27%
\$	1,038,281	\$ 654,332	\$ 108,094	\$ 275,855
1481		56%	9%	35%
\$	1,267,761	\$ 711,496	\$ 117,537	\$ 438,728
Total	\$ 5,237,813	\$ 3,045,737	\$ 503,148	\$ 1,688,927
		58%	10%	32%
1432	\$ 403,068	\$ 234,380	\$ 38,719	\$ 129,969

OPERATING EXPENSES

Operating Expenses - Cost Center 1422 Corporate and Enterprise Apps General

	Total	CAS	CONG	ASREOMO
1466		62%	9%	29%
\$	816,499	\$ 503,932	\$ 76,504	\$ 236,063
1468		61%	10%	29%
\$	1,333,287	\$ 807,360	\$ 133,374	\$ 392,553
1469		63%	10%	27%
\$	1,055,106	\$ 664,935	\$ 109,846	\$ 280,325
Total	\$ 3,204,892	\$ 1,976,227	\$ 319,724	\$ 908,941

SALARIES

Cost Center 1422 Salaries

	Total	CAS	CONG	ASREOMO
1466		62%	9%	29%
\$	764,123	\$ 471,606	\$ 71,597	\$ 220,920
1468		61%	10%	29%
\$	1,188,702	\$ 719,808	\$ 118,911	\$ 349,983
1469		63%	10%	27%
\$	984,106	\$ 620,191	\$ 102,454	\$ 261,461
Total	\$ 2,936,931	\$ 1,811,605	\$ 292,962	\$ 832,964

**CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET**

Appendix C5

WORKSHEET FOR ALLOCATION OF COSTS OF CERTAIN SUPERVISORY DEPARTMENTS

		62%	10%	28%
1422	\$ 248,320	61.96%	9.99%	28.36%
		\$ 143,872	\$ 23,276	\$ 66,172

		62%	10%	28%
1422	\$ 233,320	61.68%	9.98%	28.34%
		\$ 143,920	\$ 23,274	\$ 66,126

Operating Expenses - Cost Center 1463 Operations Applications - General

	Total	CAS	CONG	ASREO/MO
1461	\$ 2,321,654	100%	0%	0%
		\$ 2,321,654	\$ -	\$ -
1462	\$ 2,508,566	30%	8%	62%
		\$ 749,148	\$ 205,422	\$ 1,553,986
1467	\$ 1,064,350	15%	7%	78%
		\$ 159,653	\$ 74,505	\$ 830,193
1481	\$ 1,520,628	56%	9%	35%
		\$ 853,410	\$ 140,981	\$ 526,236
Total	\$ 7,415,138	\$ 4,063,484	\$ 420,908	\$ 2,930,746
		55%	6%	39%
1463	\$ 823,539	\$ 217,489	\$ 5,486	\$ 69,262
		26%	0%	8%

Cost Center 1463 Salaries

	Total	CAS	CONG	ASREO/MO
1461	\$ 2,186,977	100%	0%	0%
		\$ 2,186,977	\$ -	\$ -
1462	\$ 1,805,783	29%	11%	60%
		\$ 515,566	\$ 204,658	\$ 1,085,560
1467	\$ 980,615	15%	7%	78%
		\$ 147,092	\$ 68,643	\$ 764,880
1481	\$ 1,267,761	56%	9%	35%
		\$ 711,496	\$ 117,537	\$ 438,728
Total	\$ 6,241,136	\$ 1,581,191	\$ 390,838	\$ 2,289,168
		25%	6%	37%
1463	\$ 292,237	\$ 73,733	\$ 2,103	\$ 24,172
		25%	0%	8%

Cost Center 1547

1543	\$ 1,006,436	100%	0%	0%
		\$ 1,006,436	\$ -	\$ -
1561	\$ 1,240,187	100%	0%	0%
		\$ 1,240,187	\$ -	\$ -
1562	\$ 1,226,703	100%	0%	0%
		\$ 1,226,703	\$ -	\$ -
1558	\$ 1,804,953	98%	0%	2%
		\$ 1,773,365	\$ -	\$ 31,588
1563	\$ 677,951	60%	10%	30%
		\$ 406,771	\$ 67,795	\$ 203,385
Total	\$ 5,955,229	\$ 4,821,462	\$ 77,188	\$ 24,979
		81%	1%	0%
1547	\$ 1,154,222	\$ 1,095,560	\$ 13,138	\$ 45,534
		94%	1%	4%

Cost Center 1547

1543	\$ 943,936	100%	0%	0%
		\$ 943,936	\$ -	\$ -
1561	\$ 1,034,681	100%	0%	0%
		\$ 1,034,681	\$ -	\$ -
1562	\$ 1,168,863	100%	0%	0%
		\$ 1,168,863	\$ -	\$ -
1558	\$ 1,141,103	97%	0%	3%
		\$ 1,111,005	\$ -	\$ 30,098
1563	\$ 584,551	60%	10%	30%
		\$ 350,731	\$ 58,455	\$ 175,365
Total	\$ 4,873,134	\$ 4,609,216	\$ 39,459	\$ 205,459
		95%	1%	4%
1547	\$ 289,222	\$ 273,558	\$ 3,469	\$ 12,194
		95%	1%	4%

CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
 WORKSHEET FOR ALLOCATION OF COSTS OF CERTAIN SUPERVISORY DEPARTMENTS

Appendix C5

Cost Center 1548

1549	\$ 3,064,253	\$ 62%	\$ 1,890,463	\$ 24%	\$ 737,849	\$ 14%	\$ 435,942
1555	\$ 1,025,163	\$ 61%	\$ 620,880	\$ 21%	\$ 220,082	\$ 18%	\$ 184,201
1559	\$ 458,472	\$ 79%	\$ 361,629	\$ 10%	\$ 48,126	\$ 11%	\$ 48,717
Total	\$ 4,547,888	\$ 2,572,972	\$ 1,006,057	\$ 84%	\$ 222,657	\$ 15%	\$ 168,860
1548	\$ 267,932	\$ 75.00%	\$ 205,245	\$ 18,101	\$ 44,585		

Cost Center 1564

1544	\$ 2,680,968	\$ 75%	\$ 2,010,726	\$ 15%	\$ 402,145	\$ 10%	\$ 268,097
1542	\$ 1,780,930	\$ 100%	\$ 1,780,930	\$ 0%	\$ -	\$ 0%	\$ -
1565	\$ 1,697,365	\$ 74%	\$ 1,254,021	\$ 15%	\$ 248,406	\$ 11%	\$ 194,938
Total	\$ 6,159,263	\$ 5,045,679	\$ 650,552	\$ 463,034			
1564	\$ 322,862	\$ 81.92%	\$ 264,489	\$ 34,101	\$ 24,272		

Cost Center 1611 General Counsel General

1631	\$ 13,118,010	\$ 62%	\$ 8,091,295	\$ 10%	\$ 1,321,586	\$ 28%	\$ 3,705,130
1641	\$ 3,053,880	\$ 23%	\$ 688,824	\$ 19%	\$ 589,477	\$ 58%	\$ 1,775,579
1651	\$ 163,100	\$ 63%	\$ 102,430	\$ 11%	\$ 18,096	\$ 26%	\$ 42,574
1661	\$ 1,456,895	\$ 82%	\$ 1,191,963	\$ 5%	\$ 80,118	\$ 13%	\$ 184,814
1662	\$ 416,191	\$ 84%	\$ 348,359	\$ 5%	\$ 19,916	\$ 12%	\$ 47,916
Total	\$ 18,204,076	\$ 14,422,612	\$ 1,029,195	\$ 57%	\$ 111,635	\$ 32%	\$ 357,912
1564	\$ 322,862	\$ 57.26%	\$ 184,816	\$ 35,981	\$ 102,064		

Cost Center 1548

1549	\$ 1,919,268	\$ 62%	\$ 1,191,888	\$ 25%	\$ 472,917	\$ 13%	\$ 254,453
1555	\$ 974,683	\$ 61%	\$ 590,307	\$ 21%	\$ 209,245	\$ 18%	\$ 175,131
1559	\$ 447,958	\$ 79%	\$ 353,336	\$ 10%	\$ 47,022	\$ 11%	\$ 47,600
Total	\$ 3,341,909	\$ 2,135,531	\$ 729,184	\$ 84%	\$ 222,657	\$ 14%	\$ 177,184
1548	\$ 182,432	\$ 72.78%	\$ 132,775	\$ 9,36%	\$ 17,083	\$ 17.86%	\$ 32,575

Cost Center 1564

1544	\$ 2,578,768	\$ 75%	\$ 1,934,076	\$ 15%	\$ 386,815	\$ 10%	\$ 257,877
1542	\$ 1,580,356	\$ 100%	\$ 1,580,356	\$ 0%	\$ -	\$ 0%	\$ -
1565	\$ 1,660,765	\$ 73%	\$ 1,217,556	\$ 15%	\$ 248,314	\$ 12%	\$ 194,895
Total	\$ 5,819,889	\$ 4,731,988	\$ 635,125	\$ 81%	\$ 635,125	\$ 8%	\$ 432,771
1564	\$ 281,362	\$ 81.31%	\$ 228,768	\$ 10.91%	\$ 30,705	\$ 7.78%	\$ 21,889

Cost Center 1611

1631	\$ 3,330,071	\$ 62%	\$ 2,054,015	\$ 10%	\$ 335,491	\$ 28%	\$ 940,565
1641	\$ 1,997,346	\$ 25%	\$ 501,536	\$ 19%	\$ 373,952	\$ 56%	\$ 1,121,857
1651	\$ -	\$ 0%	\$ -	\$ 0%	\$ -	\$ 0%	\$ -
1661	\$ 1,150,095	\$ 83%	\$ 958,413	\$ 6%	\$ 63,894	\$ 11%	\$ 127,788
1662	\$ 357,191	\$ 83%	\$ 297,659	\$ 6%	\$ 19,844	\$ 11%	\$ 39,688
Total	\$ 6,834,703	\$ 3,811,623	\$ 793,184	\$ 56%	\$ 793,184	\$ 33%	\$ 2,226,969
1564	\$ 281,362	\$ 55.77%	\$ 156,912	\$ 11.61%	\$ 32,653	\$ 32.63%	\$ 91,798

CALIFORNIA ISO
COST ALLOCATION MATRIX - 2003 BUDGET
 WORKSHEET FOR ALLOCATION OF COSTS OF CERTAIN SUPERVISORY DEPARTMENTS

Appendix C5

Cost Center 1721

1722	\$ 510,466	\$ 96,796	19%	\$ 35,712	7%	\$ 377,957	74%
1723	\$ 896,883	\$ 807,195	90%	\$ -	0%	\$ 89,688	10%
1724	\$ 1,148,361	\$ 193,228	17%	\$ 88,510	8%	\$ 866,623	75%
1725	\$ 1,280,321	\$ 200,292	16%	\$ 94,667	7%	\$ 985,362	77%
Total	\$ 3,836,031	\$ 1,297,510	34%	\$ 218,890	6%	\$ 2,319,631	60%
1721	\$ 353,911	\$ 119,708	34%	\$ 20,195	6%	\$ 214,008	60%

Cost Center 1751

1752	\$ 2,355,353	\$ 677,679	29%	\$ 706,606	30%	\$ 971,068	41%
1753	\$ 2,061,799	\$ 653,659	32%	\$ 578,688	28%	\$ 829,452	40%
1755	\$ 942,745	\$ 237,599	25%	\$ 98,675	10%	\$ 606,471	64%
1757	\$ 835,895	\$ 210,108	25%	\$ 250,769	30%	\$ 375,019	45%
Total	\$ 6,195,792	\$ 1,778,045	29%	\$ 1,526,737	26%	\$ 2,782,970	45%
1751	\$ 959,968	\$ 269,904	28%	\$ 287,990	30%	\$ 479,964	50%

Cost Center 1811 VP Corporate and Strategic Development

1821	\$ 865,811	\$ 550,626	64%	\$ 94,518	11%	\$ 220,668	25%
1831	\$ 693,745	\$ 441,198	64%	\$ 75,734	11%	\$ 176,814	25%
1841	1841 excluded due to circularity - depends on allocation of these cost centers						
1851	\$ 657,758	\$ 412,998	63%	\$ 68,003	10%	\$ 176,757	27%
1861	\$ 1,430,767	\$ 898,361	63%	\$ 147,921	10%	\$ 384,485	27%
Total	\$ 3,448,081	\$ 2,283,183	66%	\$ 386,176	11%	\$ 957,723	28%
1811	\$ 497,434	\$ 314,050	63%	\$ 52,657	11%	\$ 130,727	26%

Cost Center 1721

1722	\$ 414,256	\$ 78,709	19%	\$ 28,998	7%	\$ 305,549	74%
1723	\$ 667,205	\$ 600,485	90%	\$ -	0%	\$ 66,721	10%
1724	\$ 942,333	\$ 159,879	17%	\$ 73,833	8%	\$ 708,621	75%
1725	\$ 1,037,777	\$ 161,664	16%	\$ 75,294	7%	\$ 800,819	77%
Total	\$ 3,061,571	\$ 1,000,738	33%	\$ 228,125	6%	\$ 1,832,718	60%
1721	\$ 347,911	\$ 113,722	32.69%	\$ 20,242	5.82%	\$ 213,948	61.49%

Cost Center 1751

1752	\$ 2,156,353	\$ 625,342	29%	\$ 646,906	30%	\$ 884,105	41%
1753	\$ 1,680,883	\$ 550,812	33%	\$ 464,413	28%	\$ 665,658	40%
1755	\$ 739,166	\$ 192,183	26%	\$ 73,917	10%	\$ 473,066	64%
1757	\$ 587,361	\$ 146,840	25%	\$ 176,208	30%	\$ 264,312	45%
Total	\$ 5,163,703	\$ 1,515,377	29%	\$ 1,361,444	26%	\$ 2,282,912	44%
1751	\$ 331,747	\$ 66,349	20.00%	\$ 99,524	30.00%	\$ 165,874	50.00%

Cost Center 1811

1821	\$ 452,711	\$ 287,908	64%	\$ 49,421	11%	\$ 115,382	25%
1831	\$ 477,745	\$ 303,829	64%	\$ 52,154	11%	\$ 121,762	25%
1851	\$ 583,258	\$ 366,221	63%	\$ 60,301	10%	\$ 156,737	27%
1861	\$ 585,142	\$ 367,403	63%	\$ 60,496	10%	\$ 157,243	27%
Total	\$ 2,098,856	\$ 1,325,362	63%	\$ 222,371	11%	\$ 557,128	26%
1811	\$ 392,226	\$ 247,678	63.15%	\$ 41,556	10.59%	\$ 102,992	26.26%

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ISO Budget Process Documents



Memorandum

To: ISO Board of Governors
From: William J. Regan, Jr., Chief Financial Officer
Philip Leiber, Director of Financial Planning and Treasurer
CC: ISO Board Assistants, ISO Officers
Date: October 16, 2002
Re: ***FY2003 Budget and GMC Approval***

This memorandum requires Board action.

The proposed 2003 budget is hereby submitted to the Board of Governors for their approval, and is detailed in **Attachment 1**. The budget was developed from July through September, and has been discussed with the Board and stakeholders over the past month. On September 13, 2002, the ISO posted its proposed FY2003 Budget and Grid Management Charge on its web-site, and reviewed the budget proposal in an open session with the Board of Governors on September 19. On October 7, a revised budget proposal was posted on the web-site in advance of a stakeholder meeting to discuss the budget held on October 8. At that meeting ISO management presented the budget and responded to questions from stakeholders. In addition, a board teleconference call to receive comments from stakeholders on the budget was held on October 11. Written comments were also requested to be submitted by October 14.

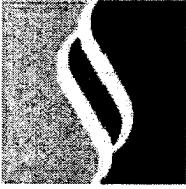
No changes have been made to the proposed O&M budget since its initial public release in September. The capital budget has been reduced from \$26 million to \$22 million by accelerating two projects into year 2002 which are to be completed with the already approved capital budget level. The overall revenue requirement to be collected through the GMC increased \$7 million from the initial September posting due to: (1) reduced funds available in the Financial Operating Reserve to apply to the 2003 revenue requirement, due to reduced Amendment 33 fines, (2) offset in part by other factors, including the reduction in the capital budget.

The 2003 GMC rates are set based on 2003 costs (as set forth in the budget information attached), and forecasts of billing determinant volumes. Billing determinant volumes in 2003 for two of the three GMC categories are subject to considerable uncertainty due to potential effects of MD02. If, after our rates for 2003 are established, volumes for 2003 are forecast to differ by more than 5% from the levels assumed here, the ISO tariff provides that GMC rates may be reset on a quarterly basis in 2003.

The 2002 GMC settlement to be filed on October 17 provides that a FERC Section 205 filing would be unnecessary if certain conditions were met, including revenue requirement limits. This budget proposal meets these conditions, and accordingly, an informational filing is planned for November 1, 2002.

Management recommends the following motion:

MOVED, that the Board approve the FY2003 Budget and Grid Management Charges consistent with the attached report, and authorizes Management to make such filings as may be necessary with FERC to implement such GMC rates for FY2003.



CALIFORNIA ISO

PROPOSED FY2003 BUDGETS

Date: October 16, 2002

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OVERVIEW

- This Proposed FY2003⁽¹⁾ Budget Report is published in accordance with Section 8 and Schedule 1 Part D of the ISO tariff.
- The Proposed FY2003 Budget was discussed with stakeholders at a Budget Workshop on October 8, 2002, and a Board teleconference on October 11. Written comments from stakeholders were requested by October 14, 2002.
- Proposed total budgeted spending by the ISO changes from 2002 to 2003 as follows:

	2002 (per GMC Settlement)	2003
O&M Budget	\$171,798	\$171,739
Capital Budget	\$22,000	\$ 22,000
Total Spending	\$193,798	\$193,739

- The Revenue Requirement includes funding for the Capital budget entirely through GMC collections rather than through bond proceeds, which has been an assumption in previous years. Offsetting this increase are proceeds from the Operating & Capital Reserve account anticipated to be available at 12/31/2002.
- **Changes to the GMC service categories are likely necessary in 2003 due to the effect of the major energy market structure redesign known as MD02. Any changes to GMC categories will be made in MD02 related filings.**

(1) The CAISO fiscal year (FY) is the calendar year.

(2) '000 Omitted except for \$/MWh.



EXECUTIVE SUMMARY

Budget Process and Operating & Maintenance Budget

- On September 19, 2002, Management presented the proposed FY2003 Budgets to the Board of Governors, in an open session. As in past years, a budget approach highlighting changes in service levels and the effect on costs was used.
 - ⇒ Management developed a base budget which represented a continuation of service at the level budgeted for FY2002, and a recommended budget which included various programs added in 2002, but not in the original budget, and additional requirements for 2003.
- The FY2002 Operating & Maintenance Budget of \$177,465 was adjusted to \$171,798, first through a lower targeted spending plan presented to the ISO Governing Board in November 2001, and later formally through the 2002 GMC Settlement (expected to be filed with FERC on October 17, 2002).
- The proposed FY2003 Operating & Maintenance Budget of \$171,739 represents a reduction of \$59 from the reduced 2002 O&M budget.

'000 Omitted except for \$/MWh.



EXECUTIVE SUMMARY

Other Elements of the Overall Revenue Requirement

- The proposed FY2003 Financing Budget of \$76,746 represents an increase of \$8,415 or 12% over the FY2002 Financing Budget of \$68,331. The increase is due to the direct collection of funds for capital expenditures, as a bond offering is not possible with the ISO's current credit rating, and sufficient improvement in that credit rating cannot be anticipated during 2003. Interest expense and debt service for the 2002 bond offering that was in the revenue requirement in 2002 is eliminated as the bond offering was not executed.
- The proposed FY2003 Operations & Maintenance Expense Recovery Budget (non-GMC revenues & cost recoveries) is \$2,628, compared to the FY2002 amount of \$2,537.
- The proposed FY2003 Capital Expenditure Budget is \$22,000, equal to the FY2002 Capital Budget. Approximately 70% of the capital budget is related to MD02. Funding is directly from the GMC revenue requirement, versus partially funded through anticipated bond offerings in previous years.
- A Revenue Credit is available to offset 2003 costs due in part to the availability of Amendment 33 fines & penalties. The size of the Revenue Credit is reduced by approximately \$23 million due to an anticipated change in the mitigated market clearing price expected to be adopted in the FERC refund proceeding.
- The FY2003 Revenue Requirement is \$237,600, a reduction of \$(1,600) from the FY2002 Revenue Requirement per the 2002 GMC Settlement of \$239,200.

'000 Omitted except for \$/MWh.

EXECUTIVE SUMMARY

Unbundling and Rates

- Effective January 1, 2001, the Grid Management Charge was unbundled, to consist of three separate charges:

⇒ Control Area Services	Billed per MWh of Gross Control Area Load & Exports
⇒ Congestion Management	Billed per MWh of Net Interzonal Scheduled Load
⇒ ASREO/Market Operations	Billed per MWh of A/S & RT Energy (both users and suppliers)
- The rates for each service are calculated by summing the costs associated with that service, and dividing by the forecast billing determinant volume, as follows:

O&M Budget + Direct Funded Capital Budget + Finance Budget (Debt Service and Coverage Requirement) +
Expense Recovery Budget + Operating & Capital Reserve Revenue Credit or Deficiency
Billing Determinant Volume
- The unit charges for each service category vary due to (1) changes in anticipated billing determinant volumes (2) changes in cost allocation (the proportion of total ISO costs assigned to each category) and (3) changes in overall costs in 2003 and (4) the effect of the Operating & Capital Reserve for each category, which is affected by the financial results of 2002 and earlier years.



FY2002/ FY2003 OPERATING & MAINTENANCE BUDGET COMPARISONS

<i>2002 is per GMC Settlement</i>	FY2002 Operating Budget as revised	FY2003 Proposed Budget	Amount Change	% Change
Salaries and Benefits	\$ 76,578	\$ 77,922	\$ 1,344	2%
Bldg, Lease & Facility Costs	16,844	18,097	1,253	7%
Insurance	1,024	1,445	421	41%
Third Party Vendor Contracts	42,022	43,800	1,778	4%
Professional & Consulting Services	10,966	9,918	(1,048)	-10%
Audit, Legal & Regulatory	11,746	10,589	(1,156)	-10%
Training and Travel	6,340	5,695	(646)	-10%
Miscellaneous	6,278	4,273	(2,005)	-32%
Total O&M Budget	\$ 171,798	\$ 171,739	-\$59	0%

Notes:
Exhibit A details the O&M budget by ISO division.

*'000 Omitted except for \$/MWh.



STAFFING CHANGES IN THE FY2003 O&M BUDGET

CAISO Division	FY2002 Operating Budget as revised	Transfers during FY2002: Grid Planning	FY2002 Approved Staffing	Transfers & Additions during FY2002: MD02 & Other	FY2003 Base Budget	FY2003 New Rqmts. (Inc. Programs)	FY2003 Reductions	FY2003 Proposed Budget
CEO/MD02/Grid Plng.	2.0	15.0	17.0	6.0	23.0	-	-	23.0
CFO	35.5	-	35.5	-	35.5	-	(1.0)	34.5
CIO	139.5	-	139.5	(0.5)	139.0	5.0	-	144.0
VP Grid Ops	206.0	(15.0)	191.0	-	191.0	-	(4.0)	187.0
General Counsel	53.0	-	53.0	-	53.0	1.0	-	54.0
Market Services	126.0	-	126.0	(4.0)	122.0	3.0	(2.0)	123.0
VP Corp & Strat Dev	28.5	-	28.5	0.5	29.0	1.0	-	30.0
Total FTE	590.5	-	590.5	2.0	592.5	10.0	(7.0)	595.5

Notes:

- Salaries & Benefits cost increase for FY2003 for all staff is shown in Appendix A in the Other/2100 column, in the Salaries & Benefits line item. This cost is isolated to allow for comparison of staff costs by Division exclusive of salary & benefit rate changes for FY2003. The amount budgeted provides for a total of 4.4% increase in overall compensation costs, including staff salary adjustments, equity adjustments, and spot bonuses.



FY2002/ FY2003 FINANCING AND CASH FUNDED CAPEX BUDGET COMPARISONS

	FY2002 Budget	FY2003 Proposed Budget	Amount Change	% Change
Principal Reserve Funding-Current Debt	\$ 33,800	\$ 35,300	\$ 1,500	4%
Interest Reserve Funding-Current Debt	10,711	8,497	(2,214)	-21%
Operating Reserve Funding-Current Debt (1)	11,128	10,949	(179)	-2%
Total Debt Service: New Debt	3,513	-	(3,513)	-100%
Operating Reserve Funding-New Debt	878	-	(878)	-100%
Cash Funded Capital Expenditures (2)	8,301	22,000	13,699	165%
Total Financing & Cash Funded CapEx Budget	\$68,331	\$76,746	\$8,415	12%

Notes:

- (1) Operating & Capital Reserve Account funding is at 25% of scheduled debt service payments.
 (2) Cash Funded Capital Expenditures: collections for necessary capital expenditures. In 2003, the ISO is not anticipating an ability to issue bonds. See components of proposed capital budget later in this report.

'000 Omitted except for \$/MWh.

FY2002/ FY2003 EXPENSE RECOVERY BUDGET COMPARISONS

	FY2002 Budget	FY2003 Proposed Budget	Amount Change	% Change
Interest Earned on Operating Funds (1)	\$ 1,350	\$ 1,252	\$ (98)	-7%
SC Application & Training Fees	15	120	105	700%
Other-2002 GMC Settlement Related	(73)		73	-100%
WSCC Security Coordinator Fees	1,245	1,256	11	1%
Total O&M Expense Recovery Budget	\$2,537	\$2,628	\$91	4%

Notes:

(1) For 2003, based on a 3% return on ISO cash balances, versus a budgeted return of 3.5% in 2002.

'000 Omitted except for \$/MWh.

**FY2002/ FY2003 REVENUE CREDIT/RESERVE DEFICIENCY CALCULATION**

	FY2002 Budget	FY2003 Proposed Budget
Forecast Operating Reserve Balance, year-end 2001 and 2002	\$ 24,620	\$ 34,018
Operating & Capital Reserve Requirement (15% of Operating Budget) (See Note)	26,228	25,761
Revenue Credit or (Deficiency from prior year)	(1,608)	8,257

Notes:

- From the inception of the ISO's operations, funds collected above and beyond those needed to cover budgeted operating expenses have been used to fund the Operating & Capital Reserve Account ("Operating Reserve"). These funds are collected every year at the rate of 25% of budgeted debt service (consisting of principal and interest payments.) The Operating Reserve is targeted to build to a level equal to 15% of overall budgeted operating expenses (excluding debt service). The Operating Reserve is calculated separately by unbundled service category. See Exhibit B for Reserve Calculation.

*000 Omitted except for \$/MWh.

FY2002/FY2003 REVENUE REQUIREMENT COMPARISONS

<i>2002 is per GMC Settlement</i>	FY2002 Budget as revised	FY2003 Proposed Budget	Amount Change	% Change
Total O&M Budget	\$ 171,798	\$ 171,739	(59)	0%
Total Finance and Cash Funded CapEx Budget	\$ 68,331	\$ 76,746	8,415	12%
Total Expense Recovery Budget	\$ (2,537)	\$ (2,628)	(91)	4%
Available (Revenue Credit) or Deficiency (See Note)	\$ 1,608	\$ (8,257)	(9,865)	
Revenue Requirement	\$ 239,200	\$ 237,600	\$ (1,600)	-1%

Notes:

- 2002 Revenue Requirement is as adjusted from the 2002 GMC Settlement. Originally filed Revenue Requirement was \$244,794.

'000 Omitted except for \$/MWh.



FY2002/FY2003 PRELIMINARY UNBUNDLED GRID MANAGEMENT CHARGE COMPARISONS

2002 figures are based on the 2002 GMC Settlement Agreement	FY2002	FY2003 Proposed	Amount Change	% Change
Revenue Requirement prior to Oper. Reserve	\$ 237,592	\$ 245,857	\$ 8,265	3%
Control Area Services ("CAS")	128,329	142,073		
Congestion Management ("CONG")	26,071	29,759		
ASREO/ Market Operations ("MO")	83,192	74,025		
Revenue Requirement after Oper. Reserve	\$ 239,200	\$ 237,600	(1,600)	-1%
Control Area Services ("CAS")	138,586	137,857	(729)	-1%
Congestion Management ("CONG")	27,787	27,401	(387)	-1%
ASREO/ Market Operations ("MO")	72,827	72,343	(484)	-1%
Billing Determinant Forecast '000 MWh (See note 1)				
Control Area Services ("CAS")	246,487	242,386	(4,101)	-1.7%
Congestion Management ("CONG")	88,993	85,562	(3,431)	-3.9%
ASREO/ Market Operations ("MO")	63,148	55,809	(7,339)	-11.6%
Rates (See note 1)				
Control Area Services ("CAS")	\$ 0.562	\$ 0.569	\$ 0.007	1%
Congestion Management ("CONG")	\$ 0.312	\$ 0.320	\$ 0.008	3%
ASREO/ Market Operations ("MO")	\$ 1.153	\$ 1.296	\$ 0.143	12%
Allocation Factors (After Operating Reserve):				
Control Area Services ("CAS")	57.9%	58.0%	0.08%	
Congestion Management ("CONG")	11.6%	11.5%	-0.08%	
ASREO/ Market Operations ("MO")	30.4%	30.4%	0.00%	

Notes:

1. Rates actually in effect for 2002 differed from those shown above. Pre-July 2002 rates billed were prior to the 2002 GMC Settlement. Post July rates had the benefit of additional Amendment 33 fines used to further reduce the respective revenue requirements in 2002. The above 2002 rates are pro-forma, based on the information above.
2. 2003 Rates per the ISO's FERC filing could differ slightly due to rounding. The informational filing is currently being developed.

*000 Omitted except for \$/MWh.

FIN/PRL 10/15/2002

PROPOSED FY2003 BUDGET



FY2002/FY2003 CAPITAL EXPENDITURE BUDGET COMPARISONS

	FY2002 Budget	Proposed FY2003 Budget (1)
MD02		\$ 15,230
All Others	22,000	6,770
Total Capital Budget (2)	\$ 22,000	\$ 22,000

Notes:

- (1) Costs are estimated spending levels, based on a list of high priority projects. Actual projects completed during 2003 could differ. Categorization of spending has been masked to prevent release of commercially sensitive information. Funding in 2003 is to be entirely from GMC revenues, compared with \$8.3 million to be funded from GMC revenues in 2002 and the remainder from a planned bond offering.
- (2) Approval of the proposed capital budget does not represent authority to expend dollars on individual projects. Actual spending proposals are subjected to additional review by the ISO internal "Project Steering Committee" during 2003, and individual projects >\$1 million require Board approval.
- (3) Network Transition Costs: During 2003, a new parallel data communications network will need to be built and tested for use on 1/1/2004 when the current MCI communications contract expires. Some cash outlay in 2003 may be necessary, however an attempt will be made to negotiate a contract which minimizes 2003 outlays. Separate funding for such a payment has not been incorporated in the 2003 capital budget or revenue requirement at this time. In 2004 when only the new network is in place, significant cost savings of \$10-15 million annually are anticipated.

'000 Omitted except for \$/MWh.

EXHIBIT A: FY2002/FY2003 ISO DEPARTMENTAL O&M BUDGETS



FY2003 O&M Budget & Revenue Requirement
\$ in 000's

FY2003 Proposed Budget

1. Salaries and Benefits	\$ 3,428	84%	\$ 3,181	24%	\$ 17,338	23%	\$ 24,026	82%	\$ 7,158	37%	\$ 14,262	82%	\$ 5,187	58%	3,342	5%	\$ 77,922	33%
2. Bldg. Lease & Facility Costs	-	0%	5,442	41%	12,656	17%	-	0%	-	0%	-	0%	-	0%	-	0%	18,097	8%
3. Insurance	-	0%	1,445	11%	-	0%	-	0%	-	0%	-	0%	-	0%	-	0%	1,445	1%
4. Third Party Vendor Contracts	-	0%	115	1%	41,937	55%	472	2%	160	1%	1,027	6%	89	1%	-	0%	43,800	18%
5. Prof & Consulting Services	400	10%	444	3%	789	1%	2,469	8%	1,889	10%	1,471	8%	2,456	27%	-	0%	9,918	4%
6. Audit, Legal & Regulatory	-	0%	1,157	9%	-	0%	-	0%	9,358	49%	-	0%	75	1%	-	0%	10,589	4%
7. Training, Travel, Professional Dues	206	5%	200	2%	1,345	2%	2,168	7%	378	2%	585	3%	813	9%	-	0%	5,695	2%
8. Miscellaneous	32	1%	1,160	9%	2,251	3%	125	0%	293	2%	91	1%	321	4%	-	0%	4,273	2%
Subtotal	4,066	100%	13,144	100%	76,317	100%	29,259	100%	19,235	100%	17,436	100%	8,940	100%	3,342	5%	\$ 171,739	72%
Other: Debt Service-Existing																	18%	
Operating Reserve-Existing																	5%	
Debt Service-2003 Debt																	0%	
Operating Reserve-2003 Debt																	0%	
Cash Funded Capital Expenditures																	0%	
Expense Recovery																	9%	
Revenue Credit from Operating Reserve																	-1%	
Total	\$ 4,066	100%	\$ 13,144	100%	\$ 76,317	100%	\$ 29,259	100%	\$ 19,235	100%	\$ 17,436	100%	\$ 8,940	100%	\$ 69,203	100%	\$ 237,600	100%
Leadcount	230		345		1440		1870		540		1230		300				595.5	

For Each Line Item, What Percentage Does Each Division Contribute to the Total for that Line Item?

FY2003 Proposed Budget

Analysis	Princ. MD02					Services		
1. Salaries and Benefits	4.4%	4.1%	22.3%	30.8%	9.2%	18.3%	6.7%	4.3%
2. Bldg. Lease & Facility Costs	0.0%	30.1%	69.9%	0.0%	0.0%	0.0%	0.0%	0.0%
3. Insurance	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
4. Third Party Vendor Contracts	0.0%	0.3%	95.7%	1.1%	0.4%	2.3%	0.2%	0.0%
5. Prof & Consulting Services	4.0%	4.5%	8.0%	24.9%	19.0%	14.8%	24.8%	0.0%
6. Audit, Legal & Regulatory	0.0%	10.9%	0.0%	0.0%	88.4%	0.0%	0.7%	0.0%
7. Training, Travel, Professional Dues	3.8%	3.5%	23.6%	38.1%	6.5%	10.3%	14.3%	0.0%
8. Miscellaneous	0.7%	27.2%	52.7%	2.9%	6.9%	2.1%	7.5%	0.0%
Subtotal	2.4%	7.7%	44.4%	17.0%	11.2%	10.2%	5.2%	1.9%
Other: Debt Service-Existing								
Operating Reserve-Existing								
Debt Service-2003 Debt								
Operating Reserve-2003 Debt								
Cash Funded Capital Expenditures								
Expense Recovery								
Revenue Credit from Operating Reserve								
Total	4%	6%	24%	31%	9%	21%	5%	100%
Headcount								



CALIFORNIA ISO

2003 vs 2002 O&M Budget and Revenue Requirement Comparison

\$ In 000's

FY2002 Targeted Spending Level

	CEO/GRD Prog	FIN	IT	GRS	GC	Market Services	C&SD	Other	Total
1. Salaries and Benefits	\$ 2,884	\$ 3,422	\$ 17,134	\$ 25,641	\$ 7,086	\$ 14,526	\$ 5,885		\$ 76,518
2. Bldg, Lease & Facility Costs	-	5,140	11,704	-	-	-	-		16,844
3. Insurance	-	1,024	40,347	486	-	930	-		42,022
4. Third Party Vendor Contracts	700	105	1,258	2,701	127	1,893	27		10,966
5. Prof & Consulting Services	-	333	-	-	1,616	-	2,466		11,746
6. Audit, Legal & Regulatory	-	1,320	-	-	10,351	-	75		6,340
7. Training, Travel, Professional Dues	194	190	1,736	2,383	457	734	646		6,278
8. Miscellaneous	(223)	1,089	4,516	167	290	56	384		171,798
Subtotal	3,555	12,622	76,694	31,378	19,926	18,140	9,483	44,511	44,511
Other: Debt Service-Existing								11,128	11,128
Operating Reserve-Existing								3,513	3,513
Debt Service-2002 Debt								878	878
Operating Reserve-2002 Debt								8,301	8,301
Cash Funded Capital Expenditures								(2,537)	(2,537)
Expense Recovery								1,608	1,608
Revenue Credit from Operating Reserve									
Total	\$ 3,555	\$ 12,622	\$ 76,694	\$ 31,378	\$ 19,926	\$ 18,140	\$ 9,483	\$ 67,401	\$ 239,200
Headcount	17	35.5	139.5	191	53	126	28.5		590.5

FY2003 Proposed Budget vs. 2002 Budget

	CEO/GRD Prog	FIN	IT	GRS	GC	Market Services	C&SD	Other	Total
1. Salaries and Benefits	\$ 544	\$ (241)	\$ 204	\$ (1,615)	\$ 72	\$ (264)	\$ (698)	\$ 3,342	\$ 1,344
2. Bldg, Lease & Facility Costs	-	302	952	-	-	-	-	-	1,253
3. Insurance	-	421	-	-	-	-	-	-	421
4. Third Party Vendor Contracts	-	10	1,590	(14)	33	97	61	-	1,778
5. Prof & Consulting Services	(300)	112	(469)	(232)	273	(422)	(10)	-	(1,048)
6. Audit, Legal & Regulatory	-	(163)	-	-	(993)	(149)	-	-	(1,156)
7. Training, Travel, Professional Dues	12	10	(391)	(216)	(79)	35	167	-	(646)
8. Miscellaneous	255	71	(2,264)	(42)	3	61	(64)	-	(2,005)
Subtotal	511	521	(378)	(2,118)	(691)	(704)	(543)	3,342	(59)
Other: Debt Service-Existing								(714)	(714)
Operating Reserve-Existing								(179)	(179)
Debt Service-2002 Debt								(3,513)	(3,513)
Operating Reserve-2002 Debt								13,689	13,689
Cash Funded Capital Expenditures								(91)	(91)
Expense Recovery								(9,865)	(9,865)
Revenue Credit from Operating Reserve									
Total	\$ 511	\$ 521	\$ (378)	\$ (2,118)	\$ (691)	\$ (704)	\$ (543)	\$ 1,802	\$ (1,600)
Headcount	6.0	(1.0)	4.5	(4.0)	1.0	(3.0)	1.5		5.0

EXHIBIT B: OPERATING RESERVE CALCULATION

Calculation of Operating & Capital Reserve Account Balance as of 12/2001

	Per 11/2/2001 Filing				Actual				Difference	General Notes	Allocation Notes	CAS	CONG	Market Ops/ ASREQ	Total
	CAS	CONG	Market Ops/ ASREQ	Total	CAS	CONG	Market Ops/ ASREQ	Total							
1 Beginning Reserve Balance, 1/1/2001	9,806	1,839	8,784	20,429	9,806	1,839	8,784	20,429		Per 2001 Section 35 Filing.		48.0%	9.0%	41.0%	100.0%
2 Calculation of Contribution to Reserve from Operations															
3 Revenue:															
4 GMC Rates: 2001 Revenue	100,095	16,771	101,226	218,091	100,231	16,936	101,038	218,205		114 2001 Collections, updated from 11/2/2001 filing.		45.9%	7.8%	46.3%	100.0%
5 Other (Interest Income, WSCC reimbursement)	2,240	199	1,201	3,640	2,103	225	1,075	3,403		(237) Updated from 11/2/2001 filing.	Security coordinator fees assigned to CAS, remainder (mainly interest) spread proportionately.	61.8%	6.6%	31.6%	100.0%
6 Expenses:															
7 O&M	(83,956)	(12,109)	(67,736)	(163,800)	(81,308)	(11,727)	(65,599)	(158,633)		5,167 Updated based on actual 2001 results. (Per supporting schedules for audited F/S)	Per 2001 cost allocation matrix, O&M costs.	51.3%	7.4%	41.4%	100.0%
8 Debt Service	(18,619)	(5,509)	(21,783)	(45,911)	(19,025)	(5,630)	(22,258)	(46,913)		(1,002) No 2001 bonds were issued. Budgeted Debt service was \$50,513 (\$32,233 principal plus \$17,785 interest) less \$8,494 on 2001 bonds, plus variance of interest expense of \$2,895.	Variance spread proportionately. Allocation based on filed 2001 debt service allocation factors.	40.6%	12.0%	47.4%	100.0%
9 Contribution to Operating Reserve	(240)	(648)	12,908	12,020	2,402	(195)	14,256	16,062							
10 Other Reserve Uses															
11 Use of Reserve for CapEx	(7,248)	(513)	(5,068)	(12,829)	(9,572)	(678)	(6,692)	(16,942)		(4,113) Total 2001 spending of \$25,800. Of this amount, \$8,858 is funded from 2000 bond proceeds, balance from Reserve.	Allocation per 11/2/2001 filing, Exh. 9, page 8 of 10	56.5%	4.0%	39.5%	100.0%
12 Amendment 33 Fines (per original filing)	2,400	450	2,150	5,000	2,400	450	2,150	5,000		- Actual fines provided toward 2002 rates per 11/2/2001 filing.	Allocated based on proportion of forecasted GMC collections in 2001.	48.0%	9.0%	43.0%	100.0%
13 Amendment 33 Fines (additional collections)					18,317	3,434	16,409	38,161		38,161 Additional fines recognized in Operating Reserve post-11/2/2001 filing (based on assessment as of April 2002.)	Same as above.	48.0%	9.0%	43.0%	100.0%
14 Net Increase in Operating Reserve	(5,088)	(712)	9,991	4,191	13,147	3,011	26,123	42,281	38,090						
15 Ending Reserve Balance	4,718	1,127	18,775	24,620	22,953	4,850	34,907	62,710	38,090						
16 Less: Reserve Requirement (15% of 2002 Budget, Li	14,962	2,848	8,418	26,228											
17 FY2002 Operating Budget	99,747	18,985	56,123	174,855											
18 Equals: Revenue Credit Available	(10,244)	(1,720)	10,356	(1,608)											



Calculation of Available Revenue Credit for 2003

Budget

Actual/Forecast

	CAS	CONG	Market Ops/ ASREQ	Total	CAS	CONG	Market Ops/ ASREQ	Total	Difference	General Notes	Allocation Notes	CAS	CONG	Market Ops/ ASREQ	Total
1 Beginning Reserve Balance, 1/1/2002	\$ 23,764	\$ 5,090	\$ 35,856	\$ 64,709	\$ 22,953	\$ 4,850	\$ 34,907	\$ 62,710							
2 Calculation of Contribution to Reserve from Operations															
3 Revenue:	141,815	27,791	75,188	244,794	132,866	29,105	62,364	224,334	(20,460)	Per pending 2002 GMC settlement, revenue requirements per category are: CAS: \$138,586, CONG: \$27,787, ASREQ: \$72,827, or total of \$239,200. Based on "black box" settlement rates, total collections were to be: CAS: \$136,254, CONG: \$27,787, ASREQ: \$ 63,375, or total of \$227,417. Actual collections differ due to changes in volumes.	Actual 2002 forecasted collections.	59.2%	13.0%	27.8%	100.0%
4 GMC Rates: 2002 Calendar Year Revenue															
5 Other	1,983	146	480	2,610	2,473	311	1,024	3,808	1,198	Interest exceeds budget due to higher balances held, offset by lower interest rates.	Security coordinator fees assigned to CAS. Remainder (mainly interest) spread proportionately.	64.9%	8.2%	26.9%	100.0%
6 Expenses:															
7 O&M	(101,781)	(19,129)	(56,555)	(177,465)	(95,742)	(18,014)	(53,209)	(166,965)	10,500	Actual expenses assumed to be \$5.0 million under \$171.8 million spending target, and \$10.7 million under original 11/2/2001 filed budget.	Allocation: Per 11/2/2001 filing (CAM: Exh. ISO04, page 149 of 161. Line 227)	57.3%	10.8%	31.9%	100.0%
8 Debt Service	(21,012)	(5,152)	(21,859)	(48,023)	(20,092)	(4,481)	(19,938)	(44,510)	3,513	Actual debt service does not include \$20 million planned 2002 offering. Principal & Interest on 2002 bond offering would have been \$3,513. Principal & Interest on existing debt service is \$44,510.	Allocation: Actual 2002: budget less non-issued 2002 debt as allocated in CAM.	45.1%	10.1%	44.8%	100.0%
8a Cash Funded CapEx	(5,559)	(645)	(2,096)	(8,301)	(5,559)	(645)	(2,096)	(8,301)	-	Additional use of reserve for CapEx is shown below.	Allocation per 11/2/2001 filing, cash funded CapEx. Exh. ISO-4, page 152 of 161.	67.0%	7.8%	25.3%	100.0%
9 Contribution to Operating Reserve	15,446	3,011	(4,842)	13,615	13,946	6,275	(11,855)	8,367							
10 Other Reserve Uses															
11 Use of Reserve for CapEx (above budgeted Cash Funded CapEx)					(3,389)	(2,617)	(7,494)	(13,699)	(13,699)	Use of reserve is based on current forecast of total 2002 CapEx Spending of \$22,000.	Allocation to GMC categories is per 11/2/2001 filing. Exh. ISO-4, page 152 of 161.	26.2%	19.1%	54.7%	100.0%
12 Amendment 33 Fines (adjustment based on new MMCP)					(11,136)	(2,088)	(9,976)	(23,200)	(23,200)	Reduced fines, due to lower MMCP in FERC refund proceeding.	Allocation same as above, 2001 schedule.	48.0%	9.0%	43.0%	100.0%
12a Reallocation of Fines per 2002 GMC Settlement					(4,000)	(1,200)	5,200	-	-	Reallocation per terms of 2002 GMC Settlement	Up to \$9 million reallocated per 2002 GMC settlement.				
13 Interest on Refunds from 2002 GMC Settlement					(46)	(29)	(85)	(160)	(160)	Anticipated interest payable on 2002 GMC settlement.	Apportioned according to relative share of refunds.	29.0%	18.0%	53.0%	100.0%
14 Net Increase in Operating Reserve	15,446	3,011	(4,842)	13,615	(4,826)	342	(24,209)	(28,693)	(42,308)						
15 Ending Reserve Balance	39,210	8,101	31,014	78,325	18,127	5,192	10,698	34,018	(42,308)						
16 Less: Reserve Requirement (15% of 2003 Budget)	16,022	2,642	7,097	25,761	13,911	2,834	9,016	25,761	-						
17 FY2003 Operating Budget	106,812	17,613	47,314	171,739	92,739	18,891	60,109	171,739	-						
18 Equals: Revenue Credit Available	\$ 23,188	\$ 5,459	\$ 23,917	\$ 52,564	\$ 4,217	\$ 2,358	\$ 1,682	\$ 8,257	\$(42,308)						

Board of Governors

Approval of 2003 Budget and GMC

MOVED, that the Board approve the FY2003 Budget and Grid Management Charges consistent with the attached report, and authorizes Management to make such filings as may be necessary with FERC to implement such GMC rates for FY2003.

Moved: Flinney Second: Florio

Board Action: Passed		Vote Count: 3-0-0
Finney	Y	
Florio	Y	
Guardino	X	
Kahn	Y	

Additional Budget Development Documents

Additional budget documents utilized during the development of the ISO's 2003 budget are publicly available on the internet at the following URL addresses:

September 12, 2002 Budget Memorandum

<http://www.caiso.com/docs/09003a6080/1a/32/09003a60801a32ec.pdf>

Attachment to September 12, 2002 Budget Memorandum

<http://www.caiso.com/docs/09003a6080/1a/32/09003a60801a32eb.pdf>

Attachment to September 12, 2002 Budget Memorandum

<http://www.caiso.com/docs/09003a6080/1a/32/09003a60801a32ea.pdf>

September 19, 2002: FY2003 Proposed Budget Presentation-Part I

<http://www.caiso.com/docs/09003a6080/1a/5f/09003a60801a5f86.pdf>

September 19, 2002: FY2003 Proposed Budget Presentation-Part II

<http://www.caiso.com/docs/09003a6080/1a/5f/09003a60801a5f87.pdf>

Budget Workshop/ MIF Meeting Presentation Documents:

<http://www.caiso.com/docs/09003a6080/1a/df/09003a60801adf1d.pdf>


<http://www.caiso.com/docs/09003a6080/1a/df/09003a60801adf21.pdf>

Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that I have this day served this document on the California Energy Commission, the California Electricity Oversight Board, and the California Public Utilities Commission, upon all parties with effective Scheduling Coordinator Service Agreements under the ISO Tariff, and upon all parties listed on the official service list maintained by the Secretary in Docket Nos. ER02-250-000, *et al.*

Dated at Washington, DC, this 8th day of November, 2002.


Theodore J. Paradise
(202) 424-7500