

California Independent System Operator 2011 Cost Allocation Model Revenue Requirement and Rate Calculations	
This spreadsheet takes the O&M requirement requirement and functionalizes the debt service requirement, capital project funding, expense recovery budget and the Operating and Capital Reserve credit. It sums these, applies the functional association of Settlements, Metering and Client Relations costs and calculates rates applicable for 2011. The 2011 Rate Structure includes: 80/20 revenue split between ETS-withdrawals (CC4505) and ETS-UE (CC4506) Recovery of excess SMCR revenue based on Functional Association of Charge Types No discount for Forward Scheduling (CC4511) or Inter SC trades (CC4512), but retains discount for Path 15 Facilitator Inter SC trades (CC4513) MU-Forward Energy (CC4537) based on cost of service ETS/MU UIE PIRP rate (CC 4546) to be simple sum of ETS-withdrawals (CC4505) and MU-deviations (CC4536) rates Convergence bidding per MWh charge is made up of 9% of MUFE and 9% of FS SMCR rate (CC4575) remains at \$1000 Forward Energy bill determinant set to 20% of net of withdrawals and injections CRS/ETS TOR rate (CC 4508) based on cost of service	
Sheet Index:	Description
Rev Req Detail	Shows the detailed calculation of revenue requirement as the sum of O&M, Financing Budget, Capital Project Funding, Expense Recovery Budget and the Financial and Capital Operating Reserve
Rev Req Summary	Shows the summary calculation of revenue requirement as the sum of O&M, Financing Budget, Capital Project Funding, Expense Recovery Budget and the Financial and Capital Operating Reserve
As filed Rates	Summarizes revenue requirement calculation, applies functional association of charge types and billing determinants to calculate rates using as filed 2004 GMC method
GMC rate	Summarizes revenue requirement calculation, applies functional association of charge types and billing determinants to calculate rates using as settled 2004 GMC method
Worksheet divider	
Billing determinants	Historical and estimated billing units for 2011
BD Charts	Charts of Historical and forecast billing units
Revenue Forecast	Forecast of GMC revenues
Financing Budget	Functionalization of the debt service costs for bonds
Debt Mapping	Debt Mapping
Expense Recovery Budget	Functionalization of miscellaneous credits and interest
F&C Op Reserve	Functionalization of Operating and Capital Reserve credit
Rates by Charge Code	GMC rates by charge code
Revenue Requirement	Shows the summary calculation of revenue requirement as the sum of O&M, Financing Budget, Capital Project Funding, Expense Recovery Budget and the Financial and Capital Operating Reserve
Comparison-Year to Year	Assesses change in Revenue Requirement from year to year
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California Independent System Operator 2011 Cost Allocation Model									
Detailed Revenue Requirement									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
Operations and Maintenance									
2111	CEO-General	\$ 768,729	\$ 293,971	\$ 8,582	\$ 113,645	\$ 388,819	\$ 116,329	\$ 487,017	\$ 2,177,093
2121	Market Monitoring	\$ 613,153	\$ -	\$ -	\$ 169,695	\$ 1,278,380	\$ 468,455	\$ 208,217	\$ 2,737,900
2122	Market Surveillance Committee (Non-labor costs)	\$ 77,500	\$ -	\$ -	\$ -	\$ 232,500	\$ -	\$ -	\$ 310,000
2211	Planning and Infrastructure Development	\$ 738,797	\$ 648,745	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,387,542
2221	Regional Transmission-North	\$ 1,484,512	\$ 1,089,682	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,574,194
2231	Regional Transmission-South	\$ 1,153,403	\$ 959,173	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,112,576
2241	Grid Assets	\$ 1,350,134	\$ 625,450	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,975,584
2242	Generator Interconnections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2251	Network Applications	\$ -	\$ 1,132,521	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,132,521
2311	CFO General	\$ 1,275,556	\$ 492,073	\$ 14,487	\$ 135,472	\$ 365,689	\$ 174,901	\$ 958,521	\$ 3,416,699
2321	Accounting	\$ 584,331	\$ 226,963	\$ 6,625	\$ 64,391	\$ 200,115	\$ 53,124	\$ 366,833	\$ 1,502,382
2331	Financial Planning and Treasury	\$ 478,096	\$ 185,699	\$ 5,418	\$ 52,672	\$ 163,738	\$ 43,465	\$ 592,784	\$ 1,521,871
2341	Human Resources	\$ 2,377,139	\$ 969,697	\$ 27,523	\$ 175,319	\$ 585,251	\$ 349,184	\$ 1,334,650	\$ 5,818,763
2351	Facilities	\$ 3,393,218	\$ 1,384,182	\$ 39,287	\$ 250,257	\$ 835,410	\$ 498,438	\$ 1,905,129	\$ 8,305,922
2361	Procurement and Vendor Management	\$ 488,593	\$ 189,777	\$ 5,540	\$ 53,842	\$ 167,328	\$ 44,420	\$ 306,731	\$ 1,256,231
2371	Enterprise Risk Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2372	Internal Audit	\$ 285,464	\$ 110,878	\$ 3,237	\$ 31,457	\$ 97,763	\$ 25,953	\$ 179,210	\$ 733,961
2373	Information Security	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2374	Physical Security	\$ 1,058,308	\$ 431,711	\$ 12,253	\$ 78,053	\$ 260,555	\$ 155,457	\$ 594,189	\$ 2,590,526
2411	Information Technology-General	\$ 400,400	\$ 91,563	\$ 3,989	\$ 92,121	\$ 126,134	\$ 53,025	\$ 372,599	\$ 1,139,830
2412	Asset Management (Non-Labor costs only)	\$ 3,893,517	\$ 1,176,048	\$ 40,263	\$ 903,099	\$ 1,535,653	\$ 645,053	\$ 3,825,130	\$ 12,018,763
2441	Software Quality Assurance	\$ 305,974	\$ 39,108	\$ 2,847	\$ 128,831	\$ 83,495	\$ 123,162	\$ 616,720	\$ 1,300,138
2451	IT Support & Operations	\$ 4,519,593	\$ 1,215,381	\$ 47,063	\$ 1,178,022	\$ 1,515,466	\$ 284,074	\$ 3,369,833	\$ 12,129,432
2452	System & Database Administration	\$ 822,900	\$ 105,179	\$ 7,658	\$ 346,482	\$ 224,554	\$ 331,237	\$ 1,658,632	\$ 3,496,642
2453	Data Center & Operations	\$ 1,002,311	\$ 456,989	\$ 12,082	\$ 60,807	\$ 352,413	\$ 40,978	\$ 565,500	\$ 2,491,080
2454	Architecture & Systems Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2462	EMS Information Technology	\$ 2,092,646	\$ 54,403	\$ 17,793	\$ -	\$ 29,648	\$ -	\$ 29,648	\$ 2,224,139
2463	Operations Information Technology	\$ 1,303,853	\$ 389,862	\$ 13,605	\$ 567,102	\$ 1,099,984	\$ -	\$ 773,502	\$ 4,147,908
2464	Corporate Systems	\$ 1,528,679	\$ 484,300	\$ 15,184	\$ 57,494	\$ 480,727	\$ 90,166	\$ 2,044,476	\$ 4,701,025
2511	Operations-General	\$ 1,306,928	\$ 464,542	\$ 21,183	\$ 37,338	\$ 426,868	\$ 58,661	\$ 493,929	\$ 2,809,449
2521	Grid Operations	\$ 1,375,314	\$ 483,438	\$ 28,559	\$ -	\$ 119,655	\$ -	\$ -	\$ 2,006,967
2522	Real-Time Operations	\$ 9,551,257	\$ 4,652,060	\$ 187,780	\$ -	\$ 1,270,296	\$ -	\$ -	\$ 15,661,392
2523	Scheduling	\$ 1,303,553	\$ 651,767	\$ 27,301	\$ -	\$ -	\$ -	\$ -	\$ 1,982,621
2524	Outage Management	\$ 2,013,700	\$ 7,862	\$ 89,293	\$ -	\$ 31,471	\$ -	\$ -	\$ 2,142,327
2531	Alhambra Grid Operations	\$ 2,982,496	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,982,496
2541	Market Services	\$ 41,285	\$ -	\$ -	\$ 38,546	\$ 339,329	\$ 60,569	\$ 287,367	\$ 767,097
2542	Market Operations	\$ 96,497	\$ -	\$ -	\$ 245,635	\$ 1,052,790	\$ 385,968	\$ 96,497	\$ 1,877,386
2543	Billing and Settlements	\$ 441,974	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,075,528	\$ 3,517,502
2544	Settlement Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2545	Market Information	\$ -	\$ -	\$ -	\$ -	\$ 2,426,030	\$ -	\$ -	\$ 2,426,030
2551	Operations Support	\$ 307,663	\$ 156,230	\$ -	\$ -	\$ 14,033	\$ -	\$ 317,584	\$ 795,510
2552	Operations Data and Compliance	\$ 890,621	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,242,654	\$ 2,133,275
2553	Operations Procedures and Training	\$ 1,379,342	\$ 802,263	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,181,605
2554	Model & Contract Implementation	\$ 612,157	\$ -	\$ -	\$ -	\$ 151,093	\$ -	\$ 959,407	\$ 1,722,657
2555	Information Engineering & Analysis	\$ 302,820	\$ 1,596,999	\$ -	\$ -	\$ -	\$ -	\$ 1,542,846	\$ 3,442,665
2561	Reliability Coordination	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2611	General Counsel-General	\$ 2,877,641	\$ 1,117,718	\$ 32,628	\$ 317,107	\$ 985,504	\$ 261,617	\$ 1,806,535	\$ 7,398,750
2621	Asst General Counsel-Corporate	\$ 680,382	\$ 264,270	\$ 7,715	\$ 74,976	\$ 233,010	\$ 61,856	\$ 427,132	\$ 1,749,340
2631	Asst General Counsel-Regulatory	\$ 580,335	\$ 225,410	\$ 6,580	\$ 63,951	\$ 198,747	\$ 52,760	\$ 364,324	\$ 1,492,108
2641	Asst General Counsel Tariff & Compliance	\$ 604,115	\$ 234,647	\$ 6,850	\$ 66,572	\$ 206,891	\$ 54,922	\$ 379,253	\$ 1,553,251
2651	Asst Corporate Secretary	\$ 245,842	\$ 95,489	\$ 2,787	\$ 27,091	\$ 84,193	\$ 22,350	\$ 154,336	\$ 632,089
2711	Market Development-Program Mgmt-General	\$ 50,234	\$ 100,462	\$ -	\$ 50,234	\$ 425,126	\$ -	\$ 50,234	\$ 676,292
2721	Market and Product Development	\$ 166,018	\$ 332,014	\$ -	\$ 166,018	\$ 1,404,988	\$ -	\$ 166,018	\$ 2,235,057
2722	Tariff and Regulatory/Policy Development	\$ -	\$ 88,486	\$ -	\$ 176,972	\$ 681,617	\$ -	\$ -	\$ 947,076
2723	Infrastructure Policy & Contracts	\$ 616,742	\$ 604,195	\$ -	\$ -	\$ -	\$ -	\$ 137,048	\$ 1,357,985
2731	Program Office	\$ 2,416,555	\$ 938,626	\$ 27,400	\$ 266,297	\$ 827,596	\$ 219,698	\$ 1,517,073	\$ 6,213,245
2741	MRTU Program	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2811	External Affairs-General	\$ 131,532	\$ 51,088	\$ 1,490	\$ 14,494	\$ 45,045	\$ 11,963	\$ 765,136	\$ 1,020,749
2821	Communications & Public Relations	\$ 489,331	\$ 190,063	\$ 5,548	\$ 53,923	\$ 167,581	\$ 44,487	\$ 307,194	\$ 1,258,127
2822	Information Products & Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 849,422	\$ 849,422
2831	State/Federal Affairs	\$ 563,199	\$ 218,755	\$ 6,386	\$ 62,063	\$ 192,878	\$ 51,203	\$ 353,567	\$ 1,448,049
2841	Customer Services and Industry Affairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,064,890	\$ 4,064,890
Total Operations and Maintenance									
		\$ 64,024,341	\$ 26,029,740	\$ 734,937	\$ 6,119,980	\$ 21,308,363	\$ 4,783,476	\$ 39,547,293	\$ 162,548,130
Financing and Capital Project Budgets									
	1998/2000 Bond Financed Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2004 Bond Financed Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	2007 Bond Financed Capital	\$ 2,141,982	\$ 620,156	\$ 22,393	\$ 3,210,973	\$ 1,428,900	\$ 3,177,490	\$ 5,487,395	\$ 16,089,290
	2008 Bond Financed Capital	\$ 4,466,883	\$ 1,842,172	\$ 50,911	\$ 2,548,229	\$ 2,332,984	\$ 2,393,708	\$ 6,053,323	\$ 19,688,210
	2009 Bond Financed Capital	\$ 2,011,120	\$ 895,446	\$ 24,082	\$ 1,232,704	\$ 1,292,195	\$ 699,244	\$ 1,776,459	\$ 7,931,250
	Cash Funded Capital	\$ 6,846,366	\$ 3,048,327	\$ 81,982	\$ 4,196,441	\$ 4,398,961	\$ 2,380,405	\$ 6,047,519	\$ 27,000,000

California Independent System Operator 2011 Cost Allocation Model									
Detailed Revenue Requirement									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
Total Financing and Capital Project Budgets		\$ 15,466,351	\$ 6,406,102	\$ 179,368	\$ 11,188,347	\$ 9,453,040	\$ 8,650,847	\$ 19,364,695	\$ 70,708,750
Revenue Requirement before application of credits (debits)		\$ 79,490,692	\$ 32,435,841	\$ 914,304	\$ 17,308,327	\$ 30,761,403	\$ 13,434,323	\$ 58,911,989	\$ 233,256,880
		34.1%	13.9%	0.4%	7.4%	13.2%	5.8%	25.3%	100.0%
Credits									
Expense Recovery Budget		\$ (4,807,952)	\$ (939,638)	\$ (10,191)	\$ (192,927)	\$ (342,882)	\$ (149,746)	\$ (1,156,663)	\$ (7,600,000)
Operating and Capital Reserves		\$ (6,520,332)	\$ (7,495,798)	\$ (114,386)	\$ (2,555,508)	\$ (7,549,806)	\$ (1,694,842)	\$ (4,638,281)	\$ (30,568,955)
Total Credits		\$ (11,328,284)	\$ (8,435,436)	\$ (124,578)	\$ (2,748,436)	\$ (7,892,688)	\$ (1,844,588)	\$ (5,794,944)	\$ (38,168,955)
Total Revenue Requirement		\$ 68,162,408	\$ 24,000,405	\$ 789,727	\$ 14,559,891	\$ 22,868,715	\$ 11,589,735	\$ 53,117,044	\$ 195,087,926
Percent of Total		34.9%	12.3%	0.4%	7.5%	11.7%	5.9%	27.2%	100.0%
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Notes									
1. Translation of 2011 cost centers to the 2007/2008 cost centers shown here is developed in "Appendix B 2011 O&M Functionalization".									

California Independent System Operator 2011 Cost Allocation Model									
Summary of Revenue Requirement									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
Operations and Maintenance									
2100	CEO	\$ 1,459,382	\$ 293,971	\$ 8,582	\$ 283,341	\$ 1,899,700	\$ 584,784	\$ 695,235	\$ 5,224,993
2200	Planning and Infrastructure	\$ 4,726,846	\$ 3,323,050	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,049,896
2300	CFO & Corporate Services	\$ 7,278,102	\$ 2,910,404	\$ 83,610	\$ 634,687	\$ 1,992,836	\$ 969,805	\$ 4,724,187	\$ 18,593,631
2340	Human Resources	\$ 2,377,139	\$ 969,697	\$ 27,523	\$ 175,319	\$ 585,251	\$ 349,184	\$ 1,334,650	\$ 5,818,763
2400	IT	\$ 18,286,429	\$ 4,951,457	\$ 187,885	\$ 3,600,255	\$ 6,275,670	\$ 1,787,394	\$ 14,773,113	\$ 49,862,202
2500	Operations	\$ 22,605,607	\$ 9,947,684	\$ 354,116	\$ 321,518	\$ 5,831,565	\$ 505,199	\$ 8,015,811	\$ 47,581,499
2600	Legal	\$ 5,273,779	\$ 2,048,413	\$ 59,797	\$ 581,154	\$ 1,806,107	\$ 479,459	\$ 3,310,790	\$ 13,559,500
2700	Market & Product Development	\$ 832,995	\$ 1,125,157	\$ -	\$ 393,225	\$ 2,511,731	\$ -	\$ 353,301	\$ 5,216,410
2800	External Affairs	\$ 1,184,062	\$ 459,906	\$ 13,424	\$ 130,480	\$ 405,504	\$ 107,652	\$ 6,340,208	\$ 8,641,237
Total Operations and Maintenance		\$ 64,024,341	\$ 26,029,740	\$ 734,937	\$ 6,119,980	\$ 21,308,363	\$ 4,783,476	\$ 39,547,293	\$ 162,548,130
Percent Allocations		39.4%	16.0%	0.5%	3.8%	13.1%	2.9%	24.3%	100.0%
Total Financing Budget - 2000 Debt									
Total Financing Budget - 2004 Debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Financing Budget - 2007 Debt		\$ 2,141,982	\$ 620,156	\$ 22,393	\$ 3,210,973	\$ 1,428,900	\$ 3,177,490	\$ 5,487,395	\$ 16,089,290
Total Financing Budget - 2008 Debt		\$ 4,466,883	\$ 1,842,172	\$ 50,911	\$ 2,548,229	\$ 2,332,984	\$ 2,393,708	\$ 6,053,323	\$ 19,688,210
Total Financing Budget - 2009 Debt		\$ 2,011,120	\$ 895,446	\$ 24,082	\$ 1,232,704	\$ 1,292,195	\$ 699,244	\$ 1,776,459	\$ 7,931,250
Total Financing Budget - Cash funded		\$ 6,846,366	\$ 3,048,327	\$ 81,982	\$ 4,196,441	\$ 4,398,961	\$ 2,380,405	\$ 6,047,519	\$ 27,000,000
Percent Allocations		21.9%	9.1%	0.3%	15.8%	13.4%	12.2%	27.4%	100.0%
Total Expense Recovery Budget									
Percent Allocations		63.3%	12.4%	0.1%	2.5%	4.5%	2.0%	15.2%	100.0%
Total Operating and Capital Reserves Credit									
Percent Allocations		21.3%	24.5%	0.4%	8.4%	24.7%	5.5%	15.2%	100.0%
Total Revenue Requirement									
Percent Allocations		34.9%	12.3%	0.4%	7.5%	11.7%	5.9%	27.2%	100.0%
Notes:									
Divisions represent organizational structure as of late 2007, and this organizational structure is maintained for rate purposes, as allocation factors by cost center are specified in Appendix F of MRTU Tariff.									
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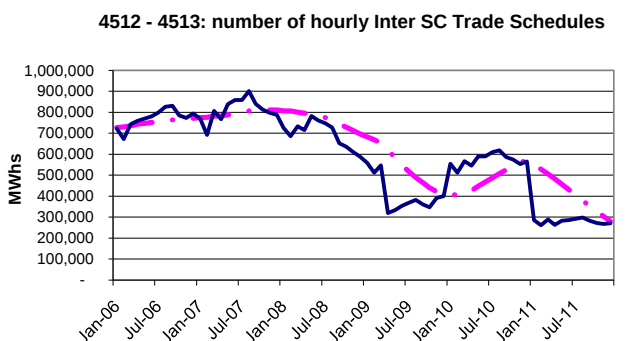
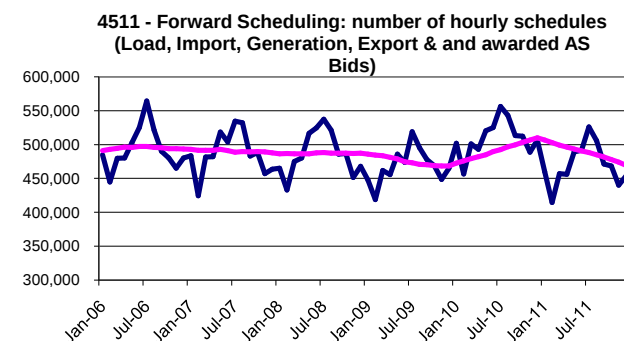
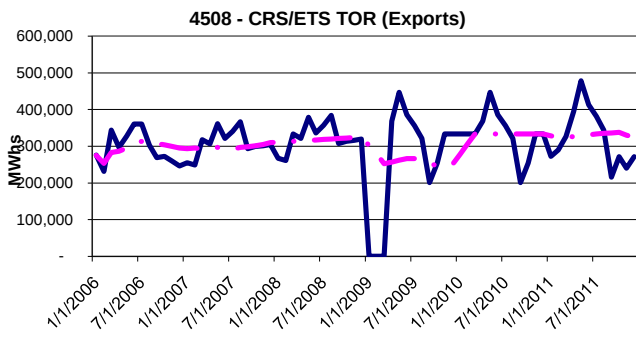
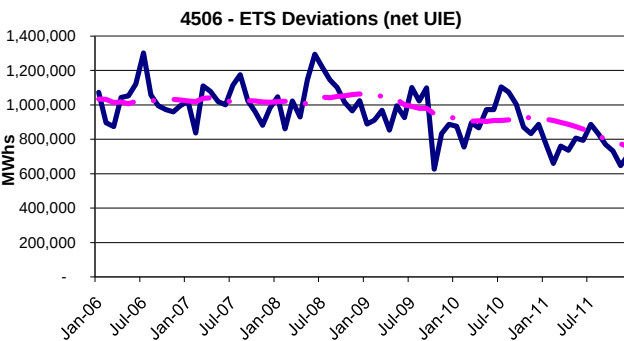
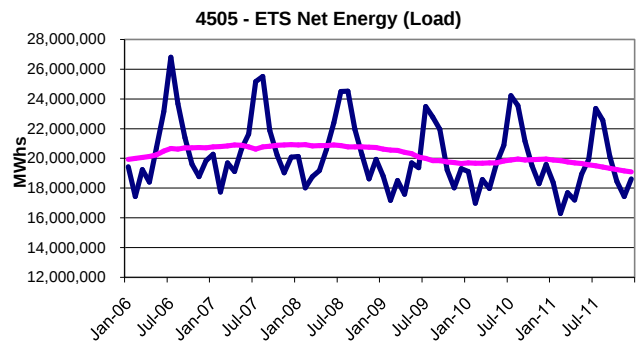
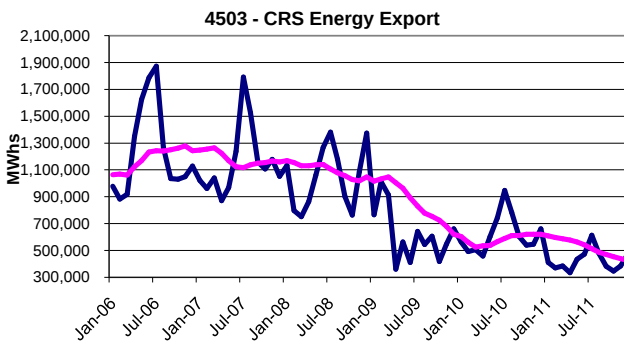
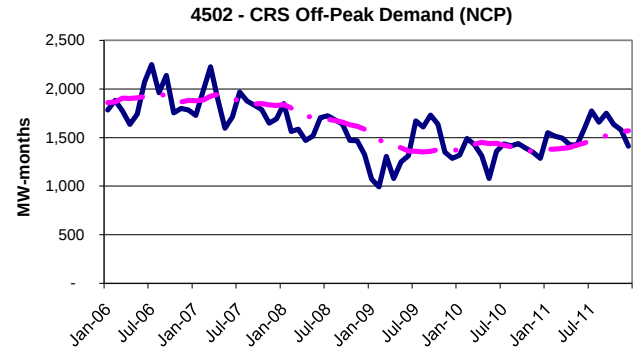
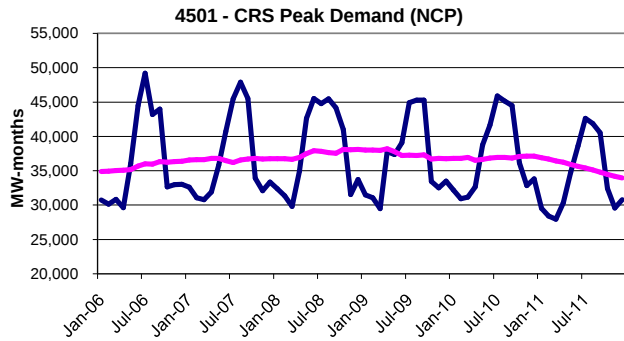
California Independent System Operator 2011 Cost Allocation Model								
Summary of Revenue Requirement and Rates (Assuming previous pre-MRTU rate structure and prior to GMC settlement adjustments)								
		Core Reliability	Energy Transmission - Net Energy	Energy Transmission - Deviations	Forward Scheduling	Market Usage	Settlements, Metering and Client Relations	Total
Revenue Requirement (as filed)		\$ 68,162,408	\$ 19,832,106	\$ 4,958,026	\$ 14,559,891	\$ 34,458,450	\$ 53,117,044	\$ 195,087,926
		34.9%	10.2%	2.5%	7.5%	17.7%	27.2%	
Functional Association of SMCR		\$ -	\$ 27,027,992	\$ 6,756,998	\$ 359,076	\$ 17,100,978	\$ (51,245,044)	\$ -
	Percent of SMCR	0.0%	52.7%	13.2%	0.7%	33.4%		
Adjusted Revenue Requirement		\$ 68,162,408	\$ 46,860,097	\$ 11,715,024	\$ 14,918,968	\$ 51,559,428	\$ 1,872,000	\$ 195,087,926
		34.9%	24.0%	6.0%	7.6%	26.4%	1.0%	100.0%
Billing Determinants		543,154	228,945,222	9,132,519	9,003,837	402,260,239	1,872	
	Units	MW-months	MWh	MWh	Schedules	MWh	customer-months	
Rate		\$ 125.494	\$ 0.205	\$ 1.283	\$ 1.657	\$ 0.128	\$ 1,000.00	
Notes								
1. The as-filed October 2003 rate structure and rates form the basis for the rate structure and rates under the subsequent GMC Settlement.								
This information is used in the subsequent calculation of GMC rates under the next worksheet "GMC Rate"								
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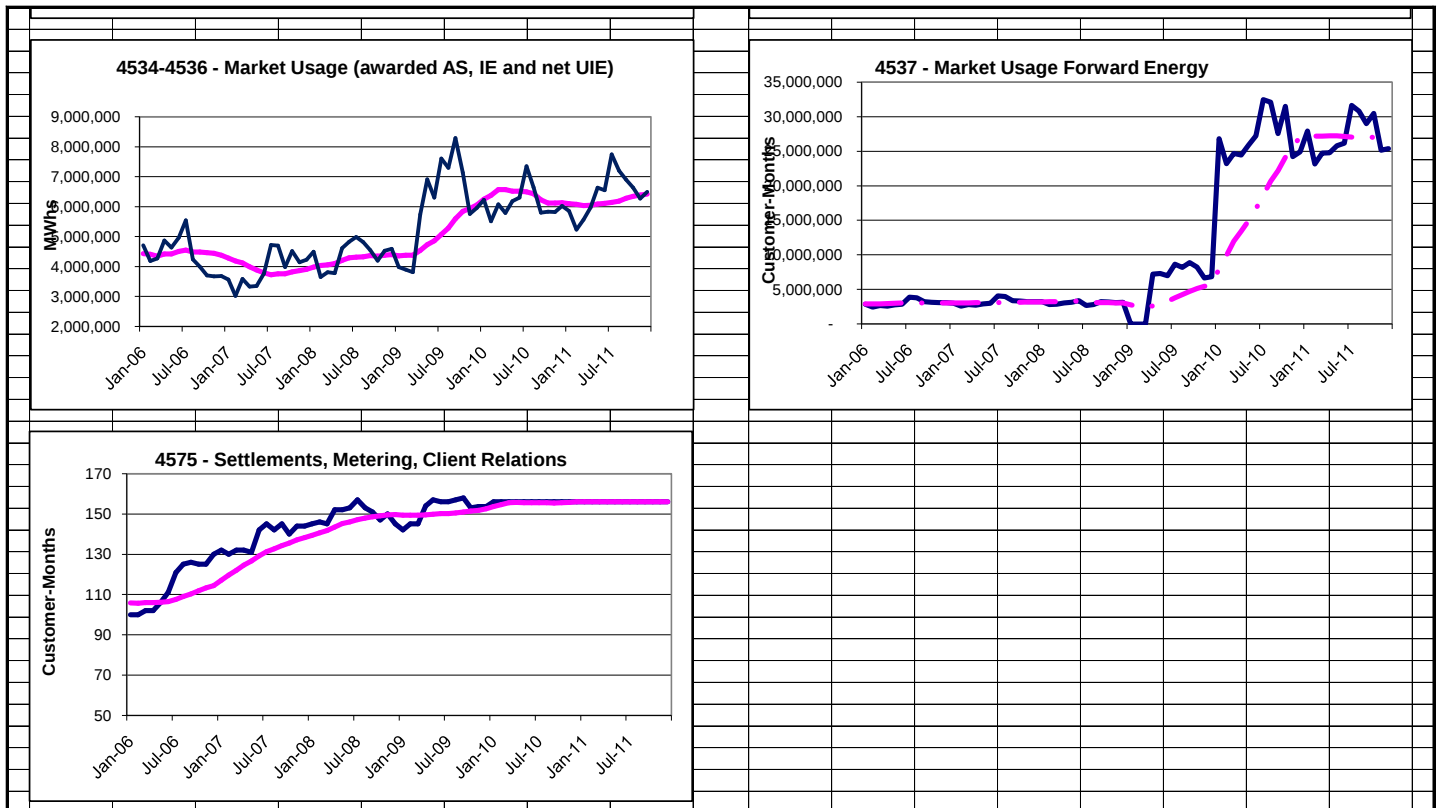
California Independent System Operator 2011 Cost Allocation Model												
Development of 2011 GMC Rates (with application of Settlement related cost reallocations)												
	CRS - Peak	CRS - Off Peak	CRS Export Rate	ETS-NE	ETS-UE	CRS/ETS TOR	FS	MU	MU-FE	SMCR	CB	Total
Revenue Requirement	\$ 68,162,408	\$ -	\$ -	\$ 19,042,379	\$ 4,958,026	\$ 789,727	\$ 14,559,891	\$ 22,868,715	\$ 11,589,735	\$ 53,117,044	\$ -	\$ 195,087,926
Reassigned SMCR	\$ -	\$ -	\$ -	\$ 26,912,056	\$ 6,756,998	\$ 115,936	\$ 359,076	\$ 11,349,245	\$ 5,751,733	\$ (51,245,044)	\$ -	\$ 0
Reassigned CB	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,342,707)	\$ -	\$ (1,560,732)	\$ -	\$ 2,903,439	\$ -
Adjusted Revenue Requirement	\$ 68,162,408	\$ -	\$ -	\$ 45,954,435	\$ 11,715,024	\$ 905,663	\$ 13,576,261	\$ 34,217,960	\$ 15,780,736	\$ 1,872,000	\$ 2,903,439	\$ 195,087,926
Reassignment of revenues per 2004 GMC Settlement												
CRS discount (35%)	\$ (23,856,843)	\$ -	\$ -	\$ 23,856,843	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FS discount (20%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CRS split to off peak and export	\$ (9,949,780)	\$ 1,046,967	\$ 8,902,813	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FS split to inter SC trade	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Settlement reassignments	\$ (33,806,623)	\$ 1,046,967	\$ 8,902,813	\$ 23,856,843	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0
Revenue Requirement	\$ 34,355,785	\$ 1,046,967	\$ 8,902,813	\$ 69,811,277	\$ 11,715,024	\$ 905,663	\$ 13,576,261	\$ 34,217,960	\$ 15,780,736	\$ 1,872,000	\$ 2,903,439	\$ 195,087,926
Billing units	407,354	18,809	5,087,792	228,945,222	9,132,519	3,899,961	9,003,837	77,073,396	325,186,844	1,872	44,975,274	
	MW-months	MW-months	MWh	MWh	MWh	MWh	Schedules	MWh		Customer months	MWh	
Estimated 2011 Rates	\$ 84.3390	\$ 55.6640	\$ 1.7498	\$ 0.3049	\$ 1.2828	\$ 0.2322	\$ 1.5078	\$ 0.4440	\$ 0.0485	\$ 1.000	\$ 0.0646	
Total Settlement Reassignments and Reassigned SMCR (Used in Operating & Capital Reserve Calculation)	\$ (33,806,623)	\$ 1,046,967	\$ 8,902,813	\$ 50,768,898	\$ 6,756,998	\$ 115,936	\$ 359,076	\$ 11,349,245	\$ 5,751,733	\$ (51,245,044)	\$ -	

California Independent System Operator 2011 Cost Allocation Model						
Development of 2011 GMC Rates (with application of Settlement related cost reallocation)						
Development of Peak/Off Peak CRS Rates						
		CRS Peak		CRS off peak		
		Load	Export	Load	Export	
NCP	543,154	407,354	83,369	18,809	33,622	
Escalation	-	-	-	-	-	
Subtotal	543,154	407,354	83,369	18,809	33,622	
Additional Discounts @65%	-	0	-	0	-	Application of targeted CRS discount
Escalated Total	543,154	407,354	83,369	18,809	33,622	
Revenue collected	\$ 44,305,565	\$ 33,228,223	\$ 6,800,488	\$ 1,534,242	\$ 2,742,611	
Off Peak discount @	31.76%	\$ 1,127,562	\$ 230,767	\$ (487,275)	\$ (871,053)	Application of off peak CRS discount
Revenue after off peak discount	\$ 44,305,565	\$ 34,355,785	\$ 7,031,255	\$ 1,046,967	\$ 1,871,558	
Remaining revenue req	\$ 44,305,565	\$ 34,355,785	\$ 7,031,255	\$ 1,046,967	\$ 1,871,558	
Remaining NCP		407,354	83,369	18,809	33,622	
CRS NCP load rate		\$ 84.339		\$ 55.664		
CRS off peak discount				34.00%		
Development of CRS Volumetric Export Rate						
	Total (MWh)	Load (MWh)	Export (MWh)			
Billing Units	228,945,222	221,505,483	7,439,739			
Escalation	-	-	-			
Subtotal	228,945,222	221,505,483	7,439,739			
Less Discounted volume @65%	-	-	-	Application of targeted ETS discount		
Escalated Total	228,945,222	221,505,483	7,439,739			
Export revenue (from above)			\$ 8,902,813	CRS demand revenue requirement, sum of peak and off peak CRS		
Remaining revenue req			\$ 8,902,813			
CRS volumetric export rate before revenue adjustment			\$ 1.1967			
Notes:						
1. Calculations in highlight above are show development of rates agreed to under GMC Settlement.						
2. Adjustments are made to the billing determinant forecast to implement the discounts or accommodations agreed to in the Settlement						

**Worksheets on Billing Determinants, Revenue Forecast,
Financing Budget, Capital Project Funding, Expense Recovery
Budget, Operating and Capital Reserve and Revenue
Requirement follow**

**California Independent System Operator
2011 Cost Allocation Model
Billing Determinant Charts**





California Independent System Operator
2011 Cost Allocation Model
Billing Determinant Forecast

Charge Code	4501	4502	4503	4505	4506	4508	4511	4512	4513	4534	4535	4536	4537	4546	4575	4533
Name	CRS Demand Peak	CRS Demand Off-Peak	CRS Energy Export	ETS - NE	ETS - UE	CRS/ETS TOR Energy	Forward Scheduling	Forward Scheduling ISC Trades	Forward Energy PGAB ISC Trades	Market Usage AS	Market Usage Instructed Energy	Market Usage Net Uninstructed Deviations	MU Forward Energy	ETS MU PIRP Deviations	SMCR	CB
Billing Unit	Mwh Peak NCP	MWh Off Peak NCP	MWh Export NCP	MWh Metered Demand	MWh Net UE	MWh TOR	# of Schedules (no inter sc trades)	# of Inter SC Schedules	# of PGAB ISC Trades	MWh AS	Mwh IE	Mwh UIE	Mwh FE	Mwh PIRP	# of SC's	MWh
Jan-02	30,931	429	1,085,519	18,731,165	1,266,091		556,535	389,149	4,021	2,107,658					67	
Feb-02	28,431	2,100	1,074,148	16,663,862	908,643		516,542	393,303	4,036	1,921,642					70	
Mar-02	27,985	1,683	1,041,903	18,292,650	963,418		554,411	456,430	4,547	2,211,198					71	
Apr-02	28,717	1,803	845,986	17,688,468	1,144,779		547,690	436,142	5,110	1,973,320					69	
May-02	33,554	1,777	1,050,390	18,946,907	1,300,906		573,674	476,787	5,565	2,028,422					70	
Jun-02	36,125	1,796	1,785,151	20,497,600	1,511,511		583,642	460,206	6,211	2,021,222					72	
Jul-02	39,706	1,858	2,322,675	23,116,528	1,656,841		616,133	498,305	5,458	1,971,913					75	
Aug-02	37,358	2,092	1,893,621	22,308,108	1,604,789		601,226	511,145	4,541	1,749,304					73	
Sep-02	39,316	1,888	1,359,705	20,950,266	1,664,232		593,438	483,347	5,028	1,548,881					72	
Oct-02	32,826	2,110	1,080,714	18,998,001	1,296,238		589,206	499,949	4,656	1,343,509					69	
Nov-02	31,836	1,987	1,177,896	18,273,931	1,646,151		569,343	461,136	4,711	1,340,008					78	
Dec-02	31,020	1,879	1,402,566	19,345,546	1,583,960		581,859	456,366	4,928	1,503,773					86	
Jan-03	28,273	2,428	1,305,064	18,539,259	1,217,053		582,136	449,196	5,171	1,495,246					80	
Feb-03	27,990	2,110	1,067,824	16,298,954	1,336,049		536,747	414,834	5,011	1,296,307					79	
Mar-03	29,082	2,736	1,072,488	18,620,731	1,709,652		597,365	473,755	5,375	1,549,933					80	
Apr-03	28,399	2,090	822,969	17,492,949	1,335,996		568,112	448,759	6,090	1,611,903					91	
May-03	36,927	1,847	1,288,649	19,138,327	1,626,439		575,173	481,917	7,015	1,740,090					91	
Jun-03	37,466	1,953	1,723,745	20,138,382	1,428,150		571,128	477,264	6,592	2,006,642					81	
Jul-03	41,630	1,841	2,126,342	24,040,877	1,777,830		608,053	509,384	4,993	2,455,459					76	
Aug-03	42,468	1,935	1,806,159	23,687,585	1,744,328		607,681	505,821	3,675	2,376,974					78	
Sep-03	42,306	1,922	1,581,963	21,769,964	1,506,659		585,768	470,133	3,527	2,192,955					79	
Oct-03	35,182	1,766	1,383,219	20,146,450	1,430,294		595,642	480,132	3,654	2,122,005					77	
Nov-03	28,788	1,870	1,164,991	18,115,115	1,167,014		573,244	448,113	3,881	1,759,328					76	
Dec-03	31,177	2,049	1,483,807	19,733,855	1,342,013		601,928	497,383	4,194	1,916,294					76	
Jan-04	29,542	2,192	839,854	18,845,248	1,168,900		471,787	787,441	8,995	1,843,654					82	
Feb-04	29,254	2,580	878,693	17,457,874	1,089,084		446,496	706,749	8,386	1,923,569					80	
Mar-04	31,402	2,188	829,831	18,696,846	1,314,536		484,466	738,672	8,945	1,982,430					80	
Apr-04	36,752	1,794	674,389	17,893,781	1,295,945		460,542	695,186	9,333	1,861,842					81	
May-04	40,090	19	883,921	19,651,973	1,470,898		480,996	759,206	9,584	2,064,736					83	
Jun-04	37,425	1,658	950,942	20,262,774	1,479,858		484,720	762,219	9,178	2,139,990					88	
Jul-04	42,382	1,831	1,279,469	23,132,025	1,746,039		503,823	796,852	9,693	2,554,762					89	
Aug-04	43,067	1,883	1,358,381	23,222,557	1,844,417		507,590	798,566	10,023	2,545,094					93	
Sep-04	44,332	1,909	1,004,494	21,732,889	1,863,055		486,394	772,714	9,233	2,290,338					92	
Oct-04	33,625	1,958	877,377	19,295,866	1,205,115		480,536	759,901	8,815	1,990,376					90	
Nov-04	31,816	1,825	711,944	18,349,615	1,013,323		462,698	696,182	8,416	1,824,683					89	
Dec-04	32,390	1,807	761,715	19,764,366	1,050,815		492,938	713,976	9,168	1,850,737					90	
Jan-05	31,802	2,026	1,086,175	19,498,707	1,116,543		495,415	703,746	6,383	1,970,740	1,579,199	1,376,795	2,883,172		99	
Feb-05	29,577	1,841	826,970	16,687,514	903,310		420,270	620,704	5,180	1,750,668	1,590,403	1,087,749	2,445,372		101	
Mar-05	29,562	1,261	1,019,347	18,272,752	1,104,550		463,058	693,123	4,730	1,979,959	1,839,853	1,228,882	2,492,714		100	
Apr-05	29,102	1,698	609,698	17,621,123	1,007,241		458,999	642,337	4,056	1,740,079	1,072,746	1,215,747	2,272,450		102	
May-05	35,266	1,660	1,058,825	19,546,667	1,173,252		504,013	720,895	6,202	1,889,321	1,393,594	1,338,456	2,345,677		104	
Jun-05	38,156	1,901	1,034,697	19,990,570	958,961		512,223	727,200	6,268	1,896,486	1,013,320	1,020,074	2,312,079		106	
Jul-05	45,247	2,053	1,739,204	24,814,557	1,178,444		561,533	772,036	5,907	2,221,849	1,563,558	1,261,150	3,802,757		109	
Aug-05	43,843	1,915	1,308,267	24,042,880	1,150,493		541,162	785,559	5,479	2,143,120	1,547,331	1,253,555	3,901,073		107	
Sep-05	39,369	2,216	928,939	20,307,530	930,203		496,621	744,621	5,665	1,898,823	1,068,690	1,027,370	3,128,436		110	
Oct-05	33,722	2,264	878,103	19,657,940	989,183		493,830	723,282	6,613	1,766,836	1,133,132	1,092,710	3,121,343		106	
Nov-05	31,627	2,118	854,455	18,521,370	904,600		468,069	736,899	6,175	1,742,189	1,214,214	1,008,592	3,273,951		109	
Dec-05	32,481	1,601	1,538,709	20,150,445	1,037,073		486,784	776,204	8,647	1,889,998	1,503,176	1,109,657	3,025,044		116	
Jan-06	30,762	1,784	977,907	19,439,075	1,073,126	275,728	485,218	713,964	8,928	2,033,219	1,520,141	1,153,532	2,870,001		100	
Feb-06	30,121	1,881	881,121	17,427,427	896,407	231,156	445,103	664,538	8,988	1,769,900	1,460,615	955,537	2,475,976		100	
Mar-06	30,816	1,773	917,205	19,230,562	873,745	343,935	479,614	734,182	9,400	1,802,012	1,543,451	923,453	2,682,817		102	
Apr-06	29,619	1,634	1,349,160	18,405,443	1,043,390	297,421	480,070	752,160	8,004	1,627,528	2,152,964	1,092,596	2,590,316		102	
May-06	36,060	1,739	1,622,380	20,710,541	1,052,763	327,218	502,764	761,201	9,447	2,006,698	1,535,548	1,089,555	2,767,451		106	
Jun-06	44,472	2,072	1,785,486	23,128,774	1,121,986	360,752	524,938	771,768	9,562	1,980,298	1,774,618	1,205,113	2,881,373		111	
Jul-06	49,171	2,251	1,870,490	26,788,497	1,302,000	360,402	564,553	791,256	8,391	2,207,223	1,962,814	1,373,885	3,887,033		121	
Aug-06	43,160	1,960	1,267,917	23,669,216	1,058,907	303,326	521,398	819,786	7,869	1,971,742	1,194,555	1,076,758	3,785,246		125	
Sep-06	43,963	2,139	1,035,530	21,383,115	995,166	268,807	490,424	827,024	4,437	1,945,751	1,030,854	1,021,791	3,231,396		126	
Oct-06	32,631	1,755	1,030,769	19,610,185	971,943	272,262	480,418	781,003	4,756	1,818,451	930,406	958,422	3,171,535		125	
Nov-06	32,958	1,800	1,048,345	18,768,972	959,474	259,093	465,055	769,386	4,575	1,585,579	1,116,574	969,693	3,082,721		125	
Dec-06	33,040	1,783	1,126,995	19,841,086	996,272	246,626	480,075	792,782	3,059	1,528,962	1,118,651	1,036,601	3,116,207		130	
Jan-07	32,590	1,727	1,020,871	20,263,900	1,020,666	254,742	483,588	764,528	4,120	1,561,679	977,944	1,026,917	3,005,593		132	
Feb-07	31,090	1,980	961,094	17,732,252	836,940	249,022	424,747	689,878	3,301	1,386,380	810,514	828,316	2,592,952		130	
Mar-07	30,775	2,228	1,040,516	19,697,325	1,110,212	318,269	481,665	803,038	3,799	1,418,341	1,063,433	1,104,569	2,809,566		132	
Apr-07	31,887	1,888	871,457	19,111,250	1,078,379	306,879	481,951	764,832	3,480	1,369,477	924,422	1,042,168	2,712,694		132	
May-07	35,797	1,596	968,754	20,644,796	1,019,155	361,614	518,384	835,968	3,567	1,438,237	887,883	1,025,668	2,898,199		131	

Jun-07	40,703	1,710	1,236,435	21,624,752	1,000,396	321,106	504,002	855,908	3,643	1,732,372	1,036,613	1,004,500	3,017,502	142	
Jul-07	45,462	1,969	1,790,212	25,156,830	1,114,123	340,658	534,730	855,678	3,675	2,094,921	1,474,947	1,153,476	4,070,675	145	
Aug-07	47,865	1,875	1,526,053	25,497,393	1,176,120	366,923	532,405	898,422	3,708	2,244,924	1,209,583	1,247,062	3,964,078	142	
Sep-07	45,502	1,834	1,158,789	21,873,338	1,023,418	293,502	483,263	836,666	4,062	1,940,350	986,192	1,050,688	3,384,062	145	
Oct-07	33,916	1,788	1,105,478	20,202,883	960,280	299,225	488,483	809,354	4,392	1,767,654	1,719,674	1,029,010	3,321,373	140	
Nov-07	32,096	1,648	1,178,418	19,018,843	881,139	301,471	457,387	793,820	3,937	1,897,102	1,345,636	894,821	3,228,363	144	
Dec-07	33,344	1,691	1,052,606	20,088,832	982,344	305,003	463,644	786,814	2,654	1,967,848	1,278,304	986,797	3,263,431	144	
Jan-08	32,352	1,848	1,133,105	20,123,790	1,047,279	267,073	465,340	723,016	3,818	2,065,395	1,347,485	1,079,885	3,247,265	145	
Feb-08	31,337	1,563	795,364	18,009,590	860,533	261,076	433,243	682,922	3,493	1,769,101	993,284	893,468	2,836,372	146	
Mar-08	29,789	1,587	752,244	18,771,583	1,023,139	333,675	475,303	730,308	3,458	1,852,452	966,586	994,634	2,867,404	145	
Apr-08	34,947	1,471	863,639	19,169,393	930,502	321,734	480,209	712,308	3,343	1,902,305	922,763	957,049	3,049,267	152	
May-08	42,633	1,517	1,057,679	20,594,603	1,147,585	379,119	516,518	780,572	2,330	1,895,511	1,547,423	1,172,200	3,144,145	152	
Jun-08	45,507	1,705	1,266,262	22,375,596	1,294,814	336,650	524,759	759,166	1,872	1,933,788	1,554,504	1,335,701	3,396,243	153	
Jul-08	44,745	1,723	1,380,297	24,497,872	1,220,336	357,148	537,393	746,654	1,834	2,247,061	1,483,692	1,258,657	2,698,027	157	
Aug-08	45,455	1,683	1,177,099	24,506,139	1,145,277	384,685	521,366	725,473	2,096	2,195,009	1,449,028	1,174,138	2,834,363	153	
Sep-08	44,163	1,638	901,985	21,937,213	1,101,238	307,710	485,874	650,900	1,954	2,057,920	1,365,487	1,127,013	3,249,331	151	
Oct-08	41,005	1,470	763,730	20,229,707	1,016,049	313,709	486,986	634,521	2,171	1,922,259	1,198,801	1,072,093	3,189,137	147	
Nov-08	31,531	1,467	1,085,141	18,606,432	965,285	316,065	451,660	609,397	3,216	1,794,483	1,703,770	1,026,227	3,099,830	150	
Dec-08	33,724	1,325	1,374,376	19,938,544	1,025,071	319,767	468,245	585,674	4,109	2,040,567	1,454,702	1,092,280	3,133,503	145	
Jan-09	31,472	1,073	766,135	18,818,738	888,753	-	447,788	556,428	3,575	1,823,400	1,159,261	994,950	-	142	
Feb-09	31,048	993	1,011,552	17,168,113	911,478	-	418,932	510,205	3,552	1,742,698	1,210,712	947,250	-	145	
Mar-09	29,479	1,306	912,193	18,518,139	969,179	-	462,064	546,037	2,502	1,845,489	998,175	963,083	-	145	
Apr-09	37,799	1,078	360,396	17,588,617	852,929	368,713	455,665	320,248	-	2,191,182	2,685,327	852,929	7,206,864	16,287	154
May-09	37,343	1,251	562,006	19,681,548	995,501	447,331	486,023	335,138	-	2,485,897	3,426,685	995,501	7,311,904	28,978	157
Jun-09	39,101	1,312	410,122	19,378,640	925,825	385,715	473,709	353,866	-	2,417,595	2,958,588	925,825	6,981,820	12,438	156
Jul-09	44,910	1,672	642,749	23,479,681	1,101,855	356,644	519,247	369,498	-	2,838,829	3,666,214	1,101,855	8,644,158	4,998	156
Aug-09	45,279	1,610	542,883	22,768,551	1,022,737	321,397	495,212	383,754	-	2,891,952	3,378,163	1,022,737	8,218,294	6,083	157
Sep-09	45,279	1,729	606,419	21,950,708	1,099,549	201,323	477,752	362,310	-	3,466,115	3,725,733	1,099,549	8,906,980	4,484	158
Oct-09	33,455	1,638	416,687	19,211,670	626,248	254,435	469,157	347,831	-	3,135,227	3,370,091	626,248	8,258,976	4,181	153
Nov-09	32,508	1,349	546,769	18,022,055	833,604	333,651	448,752	393,249	-	2,211,572	2,706,894	838,261	6,691,950	11,064	154
Dec-09	33,469	1,287	661,828	19,302,030	886,755	333,651	465,416	401,459	-	2,351,340	2,694,134	908,343	6,876,397	11,064	154
Jan-10	32,178	1,319	563,980	19,108,831	874,823	333,651	501,800	556,393	-	2,494,244	2,729,320	996,868	26,819,977	11,064	156
Feb-10	30,921	1,491	491,043	16,969,451	755,517	333,651	456,883	512,419	-	2,253,925	2,442,564	809,397	23,216,737	11,064	156
Mar-10	31,160	1,427	505,302	18,564,423	895,792	333,651	501,214	568,485	-	2,440,600	2,723,562	913,975	24,691,068	16,287	156
Apr-10	32,650	1,313	457,128	17,971,857	866,701	368,713	492,948	546,654	-	2,305,209	2,552,285	926,019	24,473,929	28,978	156
May-10	38,736	1,077	600,483	19,643,923	972,301	447,331	520,441	591,452	-	2,491,465	2,698,971	994,450	25,890,822	12,438	156
Jun-10	41,642	1,357	740,721	20,883,311	972,818	385,715	525,244	591,107	-	2,615,014	2,706,321	981,446	27,233,733	4,998	156
Jul-10	45,881	1,435	947,124	24,202,883	1,105,533	356,644	556,544	610,316	-	3,004,552	3,262,751	1,085,016	32,483,729	6,083	156
Aug-10	45,119	1,415	782,727	23,552,010	1,075,529	321,397	543,306	619,478	-	2,904,035	2,717,108	1,021,458	32,100,696	4,484	156
Sep-10	44,484	1,437	603,573	21,156,434	1,004,704	201,323	513,390	587,628	-	2,646,335	2,239,508	908,671	27,578,355	4,181	156
Oct-10	36,144	1,391	539,061	19,489,747	870,337	254,435	512,443	575,685	-	2,428,158	2,506,560	892,628	31,516,231	11,064	156
Nov-10	32,833	1,349	546,769	18,292,386	833,604	333,651	488,679	554,415	-	2,277,919	2,706,894	838,261	24,256,498	11,064	156
Dec-10	33,804	1,287	661,828	19,591,560	886,755	333,651	506,826	565,991	-	2,421,881	2,694,134	908,343	24,925,068	11,064	156
Jan-11	29,513	1,551	411,417	18,373,365	770,988	272,676	460,227	287,169	-	2,969,088	2,084,726	803,193	27,923,281	1,168	156
Feb-11	28,435	1,514	369,477	16,291,742	660,472	290,287	414,723	262,826	-	2,643,840	1,920,551	672,026	23,179,875	239	156
Mar-11	27,925	1,495	383,130	17,689,335	761,169	326,287	457,198	290,902	-	2,794,425	2,030,097	743,659	24,734,746	588	156
Apr-11	30,325	1,424	334,664	17,203,618	735,943	394,571	456,267	264,787	-	2,773,170	2,456,515	735,939	24,798,431	5,507	156
May-11	34,733	1,423	434,979	18,941,343	807,226	478,702	489,333	284,853	-	3,051,126	2,783,569	801,667	25,804,968	9,798	156
Jun-11	38,602	1,595	473,227	19,937,322	794,301	412,765	491,643	287,685	-	3,128,027	2,639,979	783,104	26,168,367	4,206	156
Jul-11	42,611	1,772	612,723	23,351,825	886,402	381,655	526,068	293,261	-	3,645,991	3,214,220	876,914	31,647,930	1,690	156
Aug-11	41,877	1,657	480,587	22,553,860	832,074	343,990	505,563	299,721	-	3,594,553	2,779,438	823,551	30,827,150	1,797	156
Sep-11	40,531	1,751	382,317	20,117,623	770,155	215,441	471,170	283,837	-	3,551,676	2,588,765	758,351	29,022,655	1,516	156
Oct-11	32,426	1,636	346,254	18,432,921	731,668	271,315	468,354	273,424	-	3,259,963	2,646,860	727,125	30,499,270	1,411	156
Nov-11	29,578	1,579	384,418	17,437,036	646,432	240,466	439,938	268,616	-	3,118,630	2,507,550	642,287	25,164,718	560	156
Dec-11	30,798	1,413	474,599	18,615,232	706,451	271,806	453,915	272,357	-	3,345,675	2,449,095	698,813	25,415,453	757	156

California Independent System Operator 2011 Cost Allocation Model 2011 Revenue Requirement Forecast by Month													
	Core Reliability Services Peak	Core Reliability Services Off Peak	Core Reliability Services Energy Export	Energy Transmission Services: Energy	Energy Transmission Services: Deviations	CRS/ETS TOR	Forward Scheduling	Inter SC Trades	Market Usage	Market Usage Forward Energy	Settlements, Metering & Client Relations	Convergence Bidding	
Date	NCP by Mo	NCP by Mo	MWh	Control Area Metered Load	Monthly Net UE		Total Sch Count	Total Sch Count	MWh	MWh	Cust Mo	MWh	
Jan-11	29,513	1,551	411,417	18,373,365	772,156	272,676	460,227	287,169	5,858,175	27,923,281	156	-	
Feb-11	28,435	1,514	369,477	16,291,742	660,711	290,287	414,723	262,826	5,236,655	23,179,875	156	3,507,060	
Mar-11	27,925	1,495	383,130	17,689,335	761,756	326,287	457,198	290,902	5,568,768	24,734,746	156	3,742,308	
Apr-11	30,325	1,424	334,664	17,203,618	741,450	394,571	456,267	264,787	5,971,131	24,798,431	156	3,751,944	
May-11	34,733	1,423	434,979	18,941,343	817,025	478,702	489,333	284,853	6,646,161	25,804,968	156	3,904,231	
Jun-11	38,602	1,595	473,227	19,937,322	798,507	412,765	491,643	287,685	6,555,316	26,168,367	156	3,959,212	
Jul-11	42,611	1,772	612,723	23,351,825	888,092	381,655	526,068	293,261	7,738,815	31,647,930	156	4,788,257	
Aug-11	41,877	1,657	480,587	22,553,860	833,871	343,990	505,563	299,721	7,199,339	30,827,150	156	4,664,075	
Sep-11	40,531	1,751	382,317	20,117,623	771,671	215,441	471,170	283,837	6,900,309	29,022,655	156	4,391,059	
Oct-11	32,426	1,636	346,254	18,432,921	733,079	271,315	468,354	273,424	6,635,359	30,499,270	156	4,614,467	
Nov-11	29,578	1,579	384,418	17,437,036	646,992	240,466	439,938	268,616	6,269,028	25,164,718	156	3,807,362	
Dec-11	30,798	1,413	474,599	18,615,232	707,208	271,806	453,915	272,357	6,494,340	25,415,453	156	3,845,298	
Total	407,354	18,809	5,087,792	228,945,222	9,132,519	3,899,961	5,634,400	3,369,438	77,073,396	325,186,844	1,872	44,975,274	
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California Independent System Operator 2011 Cost Allocation Model								
	Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
1998-2000 Bonds	29.9%	8.6%	0.3%	11.9%	16.6%	1.2%	31.5%	100.0%
2004 Bonds	16.1%	5.2%	0.2%	17.7%	10.9%	14.1%	35.7%	100.0%
2007 Bonds	13.3%	3.9%	0.1%	20.0%	8.9%	19.7%	34.1%	100.0%
2008 Bonds	22.7%	9.4%	0.3%	12.9%	11.8%	12.2%	30.7%	100.0%
2009 Bonds	40.9%	16.7%	0.5%	3.0%	10.1%	6.0%	22.9%	100.0%
2010 Cash Financed	25.4%	11.3%	0.3%	15.5%	16.3%	8.8%	22.4%	100.0%
1998-2000 Bonds Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2004 Bond Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2007 Bond Debt Service	\$ 2,141,982	\$ 620,156	\$ 22,393	\$ 3,210,973	\$ 1,428,900	\$ 3,177,490	\$ 5,487,395	\$ 16,089,290
2008 Bond Debt Service	\$ 4,466,883	\$ 1,842,172	\$ 50,911	\$ 2,548,229	\$ 2,332,984	\$ 2,393,708	\$ 6,053,323	\$ 19,688,210
2009 Bond Debt Service	\$ 2,011,120	\$ 895,446	\$ 24,082	\$ 1,232,704	\$ 1,292,195	\$ 699,244	\$ 1,776,459	\$ 7,931,250
2010 Cash Financed	\$ 6,846,366	\$ 3,048,327	\$ 81,982	\$ 4,196,441	\$ 4,398,961	\$ 2,380,405	\$ 6,047,519	\$ 27,000,000
Capital and Debt Service	\$ 15,466,351	\$ 6,406,102	\$ 179,368	\$ 11,188,347	\$ 9,453,040	\$ 8,650,847	\$ 19,364,695	\$ 70,708,750
	21.9%	9.1%	0.3%	15.8%	13.4%	12.2%	27.4%	100%
Notes:								
See "Debt Mapping worksheet" to determine mapping of debt service costs related to the 2008 bond offering that refinanced previous debt and provided new money for 2008-2011 capital expenditures.								

California Independent System Operator 2011 Cost Allocation Model									
		Principal	Interest	Total Debt Service	Percent of Total				
2008 Bonds, Total Debt Service for 2011		31,412,500	4,365,000	35,777,500	100%				
(Budgeted at 125% of debt service)									
Comprised of: (see allocation below)									
Refinancing 2000 Bonds		-	-	-	0%				
2004 Bond Offering		-	-	-	0%				
2007 Bond Offering		14,126,331	1,962,959	16,089,290	45%				
2008 Bond Offering (new money portion)		17,286,169	2,402,041	19,688,210	55%				
2009 Bonds, Total Debt Service for 2011		4,318,750	3,612,500	7,931,250					
(Budgeted at 125% of debt service)									
Notes:									
In June 2008, the ISO issued new bonds to provide funding for capital expenditures and to refinance/retire all previously outstanding debt.									
As a result, the 2010 revenue requirement will contain debt service related to only the new bonds, but in this cost allocation model, amounts must be attributed to "old" and "new" money.									
It therefore becomes necessary to allocate the annual debt service payments to "new" and "old" money so that cost allocations can be made to the GMC service categories based on ISO system allocations.									
Year debt service is collected in GMC		2008	2009	2010	2011	2012	2013		
Year debt service is due		2009	2010	2011	2012	2013	2014	Total	
Principal Payments of Bonds issued in June 2008 for new money and to refinance existing debt									
2008 Bonds		31,000,000	39,100,000	42,250,000	25,130,000	36,025,000	23,465,000	196,970,000	
Schedule of Principal Payments from previously outstanding bonds									
2004 Bonds		28,900,000	46,200,000					75,100,000	
2007 Bonds			5,500,000	19,000,000	15,300,000	20,200,000		60,000,000	
Total previous bonds		28,900,000	51,700,000	19,000,000	15,300,000	20,200,000	-	135,100,000	69%
Ratio of each series to total previously outstanding bonds									Ratio of Total Old Debt to Total June Issuance
2004 Bonds			89%	0%	0%	0%			
2007 Bonds			11%	100%	100%	100%			
Allocation is by year, with old money portion the lesser of previous old money amount, or total new debt service									
New Money Portion		2,100,000	-	23,250,000	9,830,000	15,825,000	23,465,000	74,470,000	
Old Money Portion		28,900,000	39,100,000	19,000,000	15,300,000	20,200,000	-	122,500,000	
Ratios: New Money Portion		7%	0%	55%	39%	44%	100%	38%	
Old Money Portion		93%	100%	45%	61%	56%	0%	62%	

California Independent System Operator 2011 Cost Allocation Model									
Summary of Operating and Capital Reserves									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
	Operating and Capital Reserves Credit	\$ 6,573,545	\$ 7,556,972	\$ -	\$ 2,555,508	\$ 9,244,648	\$ -	\$ 4,638,281	\$ 30,568,955
	Allocation to new charges	\$ (53,213)	\$ (61,174)	\$ 114,386		\$ (1,694,842)	\$ 1,694,842		\$ -
	Total	\$ 6,520,332	\$ 7,495,798	\$ 114,386	\$ 2,555,508	\$ 7,549,806	\$ 1,694,842	\$ 4,638,281	\$ 30,568,955
	Notes: Mapping of Reserve Credit Amounts from Operating & Capital Reserve Worksheet to these Service Categories:								
	CRS--->CRS								
	ETS--->ETS								
	Forward Scheduling--->Forward Scheduling								
	Congestion Management & Market Usage-->Market Usage								
	Settlements, Metering and Client Relations-->Settlements, Metering and Client Relations								
	In "Allocation to new charges", 20% of the Market Usage Operating and Capital Reserves credit is allocated to Market Usage Forward Energy.								
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California Independent System Operator 2011 Cost Allocation Model										
Summary of Expense Recovery Budget										
		Budget	Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
Expense Recovery Budget										
	SC Application and Training Fees	\$ (500,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (500,000)	\$ (500,000)
	WECC Reimbursement/NERC Reimbursement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	COI Path Operator Fee	\$ (2,000,000)	\$ (1,421,909)	\$ (578,091)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,000,000)
	Large Generator Interconnection Project	\$ (2,500,000)	\$ (2,500,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (2,500,000)
	Interest Earnings	\$ (2,600,000)	\$ (886,044)	\$ (361,546)	\$ (10,191)	\$ (192,927)	\$ (342,882)	\$ (149,746)	\$ (656,663)	\$ (2,600,000)
	Total Expense Recovery Budget	\$ (7,600,000)	\$ (4,807,952)	\$ (939,638)	\$ (10,191)	\$ (192,927)	\$ (342,882)	\$ (149,746)	\$ (1,156,663)	\$ (7,600,000)
	Percent		63%	12%	0%	3%	5%	2%	15%	100%
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California Independent System Operator 2011 Cost Allocation Model Rates by Charge Code					
Function	Charge	CC #	Amount	Billing Unit	
CRS	CRS Peak	4501	\$ 84.3390	MW-months	
	CRS Off-Peak	4502	\$ 55.6640	MW-months	
	CRS-Export Energy	4503	\$ 1.7498	MWh	
ETS	ETS-NE	4505	\$ 0.3049	MWh	
	ETS-UE	4506	\$ 1.2828	MWh	
CRS/ETS	CRS/ETS-TOR	4508	\$ 0.2322	MWh	
FS	Non-IS Trades	4511	\$ 1.5078	Schedules	
	IS Trades	4512	\$ 1.5078	IS Trade	
	PGAB	4513	\$ 1.1399	PGAB IS Trade	
MU	AS	4534	\$ 0.4440	MWh	
	IE	4535	\$ 0.4440	MWh	
	UE	4536	\$ 0.4440	MWh	
	Forward Energy	4537	\$ 0.0485	MWh	
CB	CB fee	4520	\$ 0.0050	per bid segment	
	CB	4533	\$ 0.0646	MWh	
ETS/MU	PIRP	4546	\$ 1.7267	MWh	
SMCR	SMCR	4575	\$ 1,000	Customer months	
The revised CAISO GMC Rate Proposal includes: 80/20 revenue split between ETS-withdrawals (CC4505) and ETS-UE (CC4506) Recovery of excess SMCR revenue based on Functional Association of Charge Types No discount for Forward Scheduling (CC4511) or Inter SC trades (CC4512), but retain discount for Path 15 Facilitator Inter SC trades (CC4513) MU-Forward Energy (CC4537) based on cost of service less 9% for CB ETS/MU UIE PIRP rate (CC 4546) to be simple sum of ETS-withdrawals (CC4505) and MU-deviations (CC4536) rates Convergence bidding per MWh charge is made up of 9% of MUFE and 9% of FS SMCR rate (CC4575) remains at \$1000 Forward Energy bill determinant set to 20% of net of withdrawals and injections CRS/ETS TOR rate based on cost of service					
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California Independent System Operator 2011 Cost Allocation Model									
Summary of Revenue Requirement Calculation									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
Revenue Requirement									
Operations and Maintenance		\$ 64,024,341	\$26,029,740	\$ 734,937	\$ 6,119,980	\$ 21,308,363	\$ 4,783,476	\$ 39,547,293	\$ 162,548,130
Financing Budget-2000 debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Budget-2004 debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Budget-2007 debt		\$ 2,141,982	\$ 620,156	\$ 22,393	\$ 3,210,973	\$ 1,428,900	\$ 3,177,490	\$ 5,487,395	\$ 16,089,290
Financing Budget-2008 debt		\$ 4,466,883	\$ 1,842,172	\$ 50,911	\$ 2,548,229	\$ 2,332,984	\$ 2,393,708	\$ 6,053,323	\$ 19,688,210
Financing Budget-2009 debt		\$ 2,011,120	\$ 895,446	\$ 24,082	\$ 1,232,704	\$ 1,292,195	\$ 699,244	\$ 1,776,459	\$ 7,931,250
Financing Budget-cash funded		\$ 6,846,366	\$ 3,048,327	\$ 81,982	\$ 4,196,441	\$ 4,398,961	\$ 2,380,405	\$ 6,047,519	\$ 27,000,000
Revenue Requirement before application of other credits		\$ 79,490,692	\$32,435,841	\$ 914,304	\$17,308,327	\$ 30,761,403	\$ 13,434,323	\$ 58,911,989	\$ 233,256,880
Percent of Total		34%	14%	0%	7%	13%	6%	25%	100%
Other Credits									
Expense Recovery Budget		\$ (4,807,952)	\$ (939,638)	\$ (10,191)	\$ (192,927)	\$ (342,882)	\$ (149,746)	\$ (1,156,663)	\$ (7,600,000)
Operating and Capital Reserves		\$ (6,520,332)	\$ (7,495,798)	\$ (114,386)	\$ (2,555,508)	\$ (7,549,806)	\$ (1,694,842)	\$ (4,638,281)	\$ (30,568,955)
Total Other Credits		\$ (11,328,284)	\$ (8,435,436)	\$ (124,578)	\$ (2,748,436)	\$ (7,892,688)	\$ (1,844,588)	\$ (5,794,944)	\$ (38,168,955)
Total Revenue Requirement		\$ 68,162,408	\$24,000,405	\$ 789,727	\$14,559,891	\$ 22,868,715	\$ 11,589,735	\$ 53,117,044	\$ 195,087,926
Percent of Total		35%	12%	0%	7%	12%	6%	27%	100%

California Independent System Operator 2011 Cost Allocation Model									
Summary of Revenue Requirement Calculation: Current Year									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
Revenue Requirement									
Operations and Maintenance		\$ 64,024,341	\$ 26,029,740	\$ 734,937	\$ 6,119,980	\$ 21,308,363	\$ 4,783,476	\$ 39,547,293	\$ 162,548,130
Financing Budget-2000 debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Budget-2004 debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Budget-2007 debt		\$ 2,141,982	\$ 620,156	\$ 22,393	\$ 3,210,973	\$ 1,428,900	\$ 3,177,490	\$ 5,487,395	\$ 16,089,290
Financing Budget-2008 debt		\$ 4,466,883	\$ 1,842,172	\$ 50,911	\$ 2,548,229	\$ 2,332,984	\$ 2,393,708	\$ 6,053,323	\$ 19,688,210
Financing Budget-2009 debt		\$ 2,011,120	\$ 895,446	\$ 24,082	\$ 1,232,704	\$ 1,292,195	\$ 699,244	\$ 1,776,459	\$ 7,931,250
Financing Budget-cash funded		\$ 6,846,366	\$ 3,048,327	\$ 81,982	\$ 4,196,441	\$ 4,398,961	\$ 2,380,405	\$ 6,047,519	\$ 27,000,000
Revenue Requirement before application of other credits		\$ 79,490,692	\$ 32,435,841	\$ 914,304	\$ 17,308,327	\$ 30,761,403	\$ 13,434,323	\$ 58,911,989	\$ 233,256,880
Percent of Total		34%	14%	0%	7%	13%	6%	25%	100%
Other Credits									
Expense Recovery Budget		\$ (4,807,952)	\$ (939,638)	\$ (10,191)	\$ (192,927)	\$ (342,882)	\$ (149,746)	\$ (1,156,663)	\$ (7,600,000)
Operating and Capital Reserves		\$ (6,520,332)	\$ (7,495,798)	\$ (114,386)	\$ (2,555,508)	\$ (7,549,806)	\$ (1,694,842)	\$ (4,638,281)	\$ (30,568,955)
Total Other Credits		\$ (11,328,284)	\$ (8,435,436)	\$ (124,578)	\$ (2,748,436)	\$ (7,892,688)	\$ (1,844,588)	\$ (5,794,944)	\$ (38,168,955)
		13%	61%	34%	-219%	-64%	-65%	84%	
Total Revenue Requirement		\$ 68,162,408	\$ 24,000,405	\$ 789,727	\$ 14,559,891	\$ 22,868,715	\$ 11,589,735	\$ 53,117,044	\$ 195,087,926
Percent of Total		35%	12%	0%	7%	12%	6%	27%	100%

California Independent System Operator 2011 Cost Allocation Model									
Summary of Revenue Requirement Calculation: Prior Year									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
Revenue Requirement									
Operations and Maintenance		\$ 63,845,241	\$ 26,288,245	\$ 724,380	\$ 6,431,708	\$ 21,162,404	\$ 5,017,729	\$ 39,226,102	\$ 162,695,809
Financing Budget-2000 debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Budget-2004 debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Budget-2007 debt		\$ 3,657,475	\$ 1,060,935	\$ 38,229	\$ 5,470,544	\$ 2,437,926	\$ 5,404,979	\$ 9,350,620	\$ 27,420,710
Financing Budget-2008 debt		\$ 7,684,021	\$ 3,186,465	\$ 87,409	\$ 4,331,950	\$ 4,013,024	\$ 3,954,338	\$ 10,297,082	\$ 33,554,290
Financing Budget-2009 debt		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Budget-cash funded		\$ 3,292,665	\$ 869,989	\$ 29,199	\$ 3,252,781	\$ 2,597,866	\$ 801,747	\$ 4,155,754	\$ 15,000,000
Revenue Requirement before application of other credits		\$ 78,479,402	\$ 31,405,634	\$ 879,217	\$ 19,486,984	\$ 30,211,220	\$ 15,178,793	\$ 63,029,559	\$ 238,670,809
Percent of Total		33%	13%	0%	8%	13%	6%	26%	100%
Other Credits									
Expense Recovery Budget		\$ (4,499,752)	\$ (1,076,764)	\$ (13,814)	\$ (306,180)	\$ (474,679)	\$ (238,489)	\$ (1,490,322)	\$ (8,100,000)
Operating and Capital Reserves		\$ (5,524,617)	\$ (4,176,370)	\$ (79,032)	\$ 2,614,143	\$ (21,580,124)	\$ (5,091,959)	\$ (1,651,988)	\$ (35,489,947)
Total Other Credits		\$ (10,024,368)	\$ (5,253,134)	\$ (92,846)	\$ 2,307,963	\$ (22,054,803)	\$ (5,330,449)	\$ (3,142,310)	\$ (43,589,947)
Total Revenue Requirement		\$ 68,455,033	\$ 26,152,500	\$ 786,371	\$ 21,794,947	\$ 8,156,417	\$ 9,848,344	\$ 59,887,249	\$ 195,080,862
Percent of Total		35%	13%	0%	11%	4%	5%	31%	100%

California Independent System Operator 2011 Cost Allocation Model									
		Core Reliability	Energy Transmission Services	CRS/ETS TOR	Forward Scheduling	Market Usage	Market Usage Forward Energy	Settlements, Metering and Client Relations	Total
	Overall change in revenue requirement	\$ (292,625)	\$ (2,152,095)	\$ 3,356	\$ (7,235,055)	\$ 14,712,298	\$ 1,741,390	\$ (6,770,205)	\$ 7,064
	Consisting of:								
	O&M Budget Change	\$ 179,100	\$ (258,505)	\$ 10,557	\$ (311,728)	\$ 145,959	\$ (234,252)	\$ 321,191	\$ (147,678)
	Debt Service and Capital	\$ 832,191	\$ 1,288,713	\$ 24,530	\$ (1,866,929)	\$ 404,224	\$ (1,510,218)	\$ (4,438,762)	\$ (5,266,250)
	Expense Recovery/ / Operating & Capital Reserve	\$ (1,303,916)	\$ (3,182,302)	\$ (31,732)	\$ (5,056,398)	\$ 14,162,115	\$ 3,485,860	\$ (2,652,635)	\$ 5,420,992
	Percentage of change due to:								
	Total	-0.4%	-8.2%	0.4%	-33.2%	180.4%	17.7%	-11.3%	0.00%
	O&M Budget Change	0.3%	-1.0%	1.3%	-1.4%	1.8%	-2.4%	0.5%	-0.08%
	Debt Service and Capital	1%	5%	3%	-9%	5%	-15%	-7%	-2.70%
	Expense Recovery/ / Operating & Capital Reserve	-2%	-12%	-4%	-23%	174%	35%	-4%	2.78%
	Percentages calculated as Dollar amount change divided by 2010 Revenue Requirement by GMC Service Category.								