

APPENDIX

Table 1. 10-Year CSI Budget and Estimated Current Status

Note Reference Number	Program Component	Original Budget (\$ M)	Spent &/or Committed as of June 2010 (\$M)	Revised Budget (\$M)	Net Change from Original Budget
	General Market Program				
1	General Market Program Incentives	\$1,707,410,000	\$1,400,000,000	\$1,747,810,000	+\$40,400,000
2	Program Administration	94,860,000	\$41,600,000	\$94,860,000	
3	Total Measurement & Evaluation (M&E)	\$46,700,000	\$7,000,000	\$26,700,000	- \$20,000,000
4	<i>M&E, except CSI-Thermal Electric M&E</i>	<i>\$45,450,000</i>	<i>7,000,000</i>	<i>25,450,000</i>	
5	<i>M&E, CSI-Thermal Electric Only</i>	<i>\$1,250,000</i>	<i>0</i>	<i>1,250,000</i>	
6	Total Marketing and Outreach (M&O)	\$21,250,000	\$4,300,000	\$21,250,000	
7	<i>M&O, except CSI-Thermal M&O</i>	<i>\$15,000,000</i>	<i>4,300,000</i>	<i>15,000,000</i>	
8	<i>M&O for CSI-Thermal</i>	<i>\$6,250,000</i>	<i>\$0</i>	<i>6,250,000</i>	
9	Unallocated	\$26,900,000	\$0	6,900,000	- \$20,000,000
10	Subtotal General Market Program	\$1,897,120,000	\$1,452,900,000	\$1,897,520,000	+400,000
11	RD&D Program	\$50,000,000	\$40,500,000	\$50,000,000	
12	Low Income Single-family (SASH) Program	\$108,340,000	\$5,000,000	\$108,340,000	
13	Low Income Multifamily (MASH) Program	\$108,340,000	\$80,000,000	\$108,340,000	
14	SWH Pilot Program (SWHPP) in San Diego	\$3,000,000	\$2,200,000	\$2,600,000	-\$400,000
15	Total CSI Electric Budget	\$2,166,800,000	\$1,580,600,000	\$2,166,800,000	0

Notes on Table 1: See Next Page.

References for Table 1:

Note Reference Number	Program Component	Source of Original Budget	Difference Between Original and Revised	Source of Spent and/or Committed
	General Market Program			
1	General Market Program Incentives	D.06-12-033 stated that incentives were \$1,707.41 M. D.06-12-033 (p.26) notes this includes up to \$100.8 M for non-PV incentives (including solar thermal), allocated on a pro-rata basis across utilities and available on a first-come, first-serve basis.	Adds \$40.4 million to incentives budget from M&E (\$20.0 million) an unallocated (20.0 million). Also moves \$400,000 originally allocated to SWHPP to the incentives budget.	June 2010 Annual Program Assessment, sum of all current CSI reservations (pending + installed)
2	Program Administration	D. 06-12-033, p.28 (Table 1) sets Admin Budget at \$189.71 and D.07-05-047, p. 8 limits the program to 50% of the admin budget for actual program administration (the remainder for M&E, M&O and unallocated).	Adds precision by removing the rounding.	July 2010 Expense Reports
3	Total Measurement & Evaluation (M&E)			
4	<i>M&E, except CSI-Thermal Electric M&E</i>	R.08-03-008, ACR 7/29/08, at Appendix A, p.9 (Table 2) established M&E budget of \$46.7M. Subsequently, the Electric CSI Thermal M&E budget of \$1.25M per D.10-01-022, p.66 effectively reduced the M&E budget for the CSI M&E program.	Removes \$20 million from total M&E budget to general market program incentives budget.	Sum of total M&E contracts as of June 2010.

Note Reference Number	Program Component	Source of Original Budget	Difference Between Original and Revised	Source of Spent and/or Committed
5	<i>M&E, CSI-Thermal Electric Only</i>	D. 10-01-022, p.66, establishes M&E electric budget of \$1.25 M. Implies that the M&E budget for CSI-Thermal Electric is meant to be part of, not additive to, the CSI general market program M&E budget.		
6	Total Marketing and Outreach (M&O)			
7	<i>M&O, except CSI-Thermal M&O</i>	D.07-05-047, Appendix A, p. 1 establishes interim M&O budget of \$500K per PA per year (implying an interim maximum budget of \$15 M). D.07-05-047, Appendix A, p.4 allows that PAs may request additional \$100K per year for M&O. This interim budget is not allocated across the PAs in the same percentages as other budget allocations.		July 2010 Expense Reports
8	<i>M&O, CSI-ThermalElectric only</i>	D. 10-01-022, Table 10, p.65. Assumes that the CSI-Thermal electric M&O is meant to be additive to the general market program M&O budget.		
9	Unallocated	The \$26.9 M is inferred from other decisions.	Removes \$20 million to move to general market program incentive budget.	

Note Reference Number	Program Component	Source of Original Budget	Difference Between Original and Revised	Source of Spent and/or Committed
10	<i>Subtotal General Market Program</i>	D.06-12-033, Table 1 on page 28 adopted \$1,897,120,000 as the general market budget.	General Market Program increases by 400,000 because the Solar Water Heating Pilot Program was reduced from \$3 million to \$2,600,000 million - so the remainder defaults to the General Market Program incentives budget.	
11	RD&D Program	D.06-12-033, affirmed in D.07-09-042.		Sum of all solicitations awarded, administration spent.
12	Low Income Single-family (SASH) Program	D.06-12-033, affirmed in D.07-11-045.		Sum of all expenditures to date. SASH Progress Report to CPUC.
13	Low Income Multifamily (MASH) Program	D.06-12-033, affirmed in D.08-10-036.		MASH Admin expenditures + MASH reservations.
14	SWH Pilot Program (SWHPP) in San Diego	D.06-12-033, Table 1	R.06-03-004, ACR 2/15/07, p.12. adopted a revised downward SWHPP budget of \$2,590,730. The difference between original and revised (~\$400,000) can be shifted into general market program incentives.	Data Request to CCSE.
15	Total CSI Electric Budget	Public Utilities Code 2851 (e)(1)		

Table 2. Current Budget Status (\$Million), Estimates current as of June 2, 2010

		PG&E			SCE			SDG&E/CCSE			Total
		Non-Res	Res	Total	Non-Res	Res	Total	Non-Res	Res	Total	
1	Current estimate program costs if incentives could be paid for all 1,750 MWs	\$611.48	\$199.28	\$810.77	\$649.75	\$215.91	\$865.66	\$150.87	\$47.62	\$198.49	\$1,874.91
2	Original estimate of program cost	\$534.24	\$211.63	\$745.87	\$562.36	\$222.77	\$785.13	\$125.92	\$49.88	\$175.80	\$1,706.80
3	Estimated shortfall/extra funding with current estimate	-\$77.24	\$12.34	-\$64.89	-\$87.39	\$6.86	-\$80.53	-\$24.95	\$2.26	-\$22.69	-\$168.11
4	Revised program budget	\$552.165	\$211.628	\$763.793	\$581.226	\$222.767	\$803.993	\$130.144	\$49.880	\$180.024	\$1,747.810
5	Estimated shortfall/extra funding with revised program budget	-\$59.32	\$12.34	-\$46.97	-\$68.52	\$6.86	-\$61.66	-\$20.73	\$2.26	-\$18.47	-\$127.10

Notes:

Row 1: Energy Division's estimate of the total cost of the program if all 1,750 MWs of the CSI step table are paid out at the current incentive levels. This budget status estimate uses actual project costs for all active projects that are pending or completed applicants in the CSI program, and the status estimate uses estimated project costs for all projects that have not yet applied. To estimate the cost of future projects, the Energy Division used program's current participation rates for (a) the breakdown between EPBB and PBI projects; and (b) the breakdown between non-taxable and taxable projects. The future estimate does not make any estimate of the budget impact of future program drop-outs.

Row 2: The original estimate of program cost is based on the costs noted in D.06-12-033, Appendix B, Table 13. The estimated original program cost of \$1706.80M varies slightly from the authorized incentive budget of \$1707.41 M, as set forth in Table 1 of D.06-12-033.

Row 3: Row 1 – Row 2.

Row 4: Revised Program Budget is the allocation of the revised general market program incentives budget, as set forth in Table 1, Row 1 of this appendix.

Row 5: Row 1 – Row 4.

Table 3: Conversion of EPBB Rebate Levels to PBI Rebate Levels

		EPBB Incentive Levels (\$/Watt)					Monthly Incentive Payment Assuming 8% Annual Discount Rate (\$/watt/month)			Estimated Generation			PBI Incentive Levels (\$/month/kWh)			PBI Payment in Nominal Dollars (\$/watt)		
Step	MW in Step	Residential	Commercial	Non-Taxable	Discount Rate	# of Payment Periods (Monthly)	Residential	Commercial	Non-Taxable	Assumed Capacity Factor (%)	Hours per month (hours)	Expected generation per month per watt (kWh)	Residential	Commercial	Non-Taxable	Residential	Commercial	Non-Taxable
							Monthly Rebate Payment makes 60 monthly payments of the EPBB Payment rate + pays 8% annual interest				=8760/12	=cap factor * hours per month/1000	=Monthly Rebate Payment / Expected Generation Per Month			=PBI (\$/month/kWh) * 60 months * Expected Generation per month		
1	50	\$ 2.80	\$ 2.80	\$ 2.80														
2	70	\$ 2.50	\$ 2.50	\$ 3.25	8%	60	\$0.051	\$0.051	\$0.066	0.18	730	0.1314	\$0.39	\$0.39	\$0.50	\$3.07	\$3.07	\$3.94
3	100	\$ 2.20	\$ 2.20	\$ 2.95	8%	60	\$0.045	\$0.045	\$0.060	0.18	730	0.1314	\$0.34	\$0.34	\$0.46	\$2.68	\$2.68	\$3.63
4	130	\$ 1.90	\$ 1.90	\$ 2.65	8%	60	\$0.039	\$0.039	\$0.054	0.20	730	0.146	\$0.26	\$0.26	\$0.37	\$2.28	\$2.28	\$3.24
5	160	\$ 1.55	\$ 1.55	\$ 2.30	8%	60	\$0.031	\$0.031	\$0.047	0.20	730	0.146	\$0.22	\$0.22	\$0.32	\$1.93	\$1.93	\$2.80
6	190	\$ 1.10	\$ 1.10	\$ 1.85	8%	60	\$0.022	\$0.022	\$0.038	0.20	730	0.146	\$0.15	\$0.15	\$0.26	\$1.31	\$1.31	\$2.28
7	215	\$ 0.65	\$ 0.65	\$ 1.40	8%	60	\$0.013	\$0.013	\$0.028	0.20	730	0.146	\$0.09	\$0.09	\$0.19	\$0.79	\$0.79	\$1.66
8	250	\$ 0.35	\$ 0.35	\$ 1.10	8%	60	\$0.007	\$0.007	\$0.022	0.20	730	0.146	\$0.05	\$0.05	\$0.15	\$0.44	\$0.44	\$1.31
9	285	\$ 0.25	\$ 0.25	\$ 0.90	8%	60	\$0.005	\$0.005	\$0.018	0.20	730	0.146	\$0.03	\$0.03	\$0.12	\$0.26	\$0.26	\$1.05
10	350	\$ 0.20	\$ 0.20	\$ 0.70	8%	60	\$0.004	\$0.004	\$0.014	0.20	730	0.146	\$0.03	\$0.03	\$0.10	\$0.26	\$0.26	\$0.88

Table 4 :
Estimated Impact of Original Proposed Actions to Reduce Shortfall

	(\$M)
Total Incentives Budget	\$1,707
Current Incentives for all received applications, Pending and Completed (regardless of reservation status)	\$1,400
Estimated shortfall if no budget change is taken (difference between cost needed to attain 1,750 MW and budget available for incentives)	\$ 170
Proposal 1: Savings from reducing PBI discount rate to 0%	\$ 50
Proposal 2: Savings from reducing government/non-profit incentive premium by 50%	\$ 45
Proposal 3: Reduce administrative budget by \$20 million	\$ 20
Combined savings effect from proposal 1 and 2	\$ 90
Combined savings effect from proposals 1, 2, and 3	\$ 110

NOTE: the estimated shortfall is based on the program's current participation rates of government/non-profit entity participation, as well as the current split between EPBB and PBI projects continuing into the future. Neither the estimated shortfall, nor the subsequent savings estimates, account for the impact of future dropouts.

(END OF APPENDIX)