

Table 1

Projected Reserves for 2005 - 2011 (Megawatts)

Resource Adequacy Planning Conventions	2005	2006	2007	2008	2009	2010	2011
1 Existing Generation ¹	21,103	21,005	21,936	22,036	22,136	22,286	22,586
2 Mohave shutdown (SP-15 share)	-	(776)					
3 Forecast of Retirements	-	-	-	(800)	(700)	-	-
4 New Renewables	-	-	100	100	300	300	300
5 High Probability CA Additions	2	1,707		800	550	-	-
Imports carrying own reserves	5,900	5,900	5,900	5,900	5,900	5,900	5,900
Imports not carrying own reserves	4,003	3,882	3,882	3,882	3,882	3,882	3,882
6 Net Interchange ²	9,903	9,782	9,782	9,782	9,782	9,782	9,782
7 Total Net Generation (MW)	31,008	31,718	31,818	31,918	32,068	32,368	32,668
8 1-in-2 Summer Temperature Demand (Normal) ³	27,400	27,948	28,507	29,077	29,659	30,252	30,857
9 Demand Response (DR)	395	390	430	460	480	520	560
10 Interruptible/Curtailable Programs	807	900	1,060	1,230	1,310	1,310	1,310
Expected Operating Conditions							
11 Outages (Average forced + planned)	(844)	(1,070)	(1,070)	(1,070)	(1,080)	(1,090)	(1,100)
12 Zonal Transmission Limitation ⁵	(400)	(150)	(150)	(150)	(150)	(150)	(150)
13 Expected Operating Generation with Outages/Limitations ⁶	29,764	30,498	30,598	30,698	30,838	31,128	31,418
14 Expected Operating Reserve Margin (1-in-2) ⁷	11.0%	11.6%	9.2%	7.0%	5.0%	3.6%	2.2%
Adverse Conditions							
15 High additional Zonal Transmission limitation	(550)	(250)	(250)	(250)	(250)	(250)	(250)
16 High Forced Outages (1 STD above average)	(386)	(560)	(560)	(560)	(560)	(570)	(580)
17 Adverse Temperature Impact (1-in-10)	(1,603)	(1,720)	(1,750)	(1,790)	(1,830)	(1,870)	(1,910)
18 generation under adverse conditions	28,828	29,688	29,788	29,888	30,028	30,308	30,588
19 1-in10 Summer Temperature Demand (Hot)	29,003	29,668	30,257	30,867	31,489	32,122	32,767
20 Adverse Scenario Operating Reserve Margin ⁷	-0.8%	0.1%	-1.9%	-3.9%	-5.7%	-6.9%	-8.1%
21 operating reserve requirements	1,155	1,188	1,218	1,248	1,279	1,311	1,343
22 Adverse Scenario Operating Reserve Margin w/DR ⁸	1.0%	1.7%	-0.2%	-2.1%	-3.8%	-4.9%	-6.0%
23 Adverse Scenario Operating Reserve Margin w/DR and Interruptibles ⁸	4.4%	5.5%	4.2%	2.8%	1.3%	0.1%	-1.2%
24 Resources needed to meet 5.0% Operating Reserve (W/DR & Interruptibles)	128	(120)	200	540	950	1,300	1,650
SCE area need @ 80%		(100)	160	430	760	1,040	1,320

¹ Dependable capacity by station includes 1,080 MW of stations located South of Miguel.
² Used CEC's 2005 estimate of the Net Imports and made changes for the Mohave shutdown and installation of the new Series Capacitors. Includes some import capability from from new Series Capacitors in the years from 2006 - 2010.
³ Historical peak demand in 2005, escalated at 2.0% in the future.
⁴ Planning Reserve calculation ((Total Generation+Demand Response+Interruptibles)/Normal Demand)-1.
⁵ Estimates provided by CA ISO.
⁶ Does not include Demand Response/Interruptible Programs due to Reserve Margins in excess of 5% (Stage 2).
⁷ Operating Reserve calculation ((Operating Generation-Imports with Reserves)/(Demand-Imports with Reserves))-1. See Footnote 2.
⁸ Demand Response and Interruptibles added to Operating Generation in Reserve Margin formula from Footnote 7.

Table 2

Resource Adequacy Planning Conventions	June	July	August	September
1 Existing Generation ¹	21,321	21,708	21,708	21,708
2 Retirements (Known)	-1,320	0	0	0
3 High Probability CA Additions	1,707	0	0	0
4 Net Interchange ²	10,100	10,100	10,100	10,100
5 Total Net Generation (MW)	31,808	31,808	31,808	31,808
6 1-in-2 Summer Temperature Demand (Average) ³	24,806	26,300	26,717	27,027
7 Demand Response (DR)	395	395	395	395
8 Interruptible/Curtailable Programs	950	950	950	950
9 Planning Reserve ⁴	33.6%	26.1%	24.1%	22.7%
Expected Operating Conditions				
10 Outages (Average forced + planned)	-1,070	-1,070	-1,070	-1,070
11 Zonal Transmission Limitation ⁵	-150	-150	-150	-150
12 Expected Operating Generation with Outages/Limitations ⁶	30,588	30,588	30,588	30,588
13 Expected Operating Reserve Margin (1-in-2) ⁷	30.9%	21.2%	18.8%	17.0%
Adverse Conditions				
14 High Zonal Transmission Limitation	-250	-250	-250	-250
15 High Forced Outages	-560	-560	-560	-560
16 Adverse Temperature Impact (1-in-10)	-1,937	-2,054	-2,086	-2,110
17 Adverse Scenario Reserve Margin ⁷	14.7%	6.4%	4.3%	2.8%
18 Adverse Scenario Reserve Margin w/DR and Interruptibles ⁸	21.2%	12.4%	10.2%	8.6%
19 Resources needed to meet 7.0% Reserve (W/DR & Interruptibles)	0	0	0	0
20 Surplus Resources Above 7.0% Reserve (W/DR & Interruptibles)	2,935	1,211	731	373
21 Existing Generation Without Capacity Contracts ⁹	-3,040	-3,040	-3,040	-3,040