

**TABLE 5.2  
PROJECTED CUMULATIVE ANALYSIS POWER PLANT ANNUAL CAPACITY FACTORS <sup>a</sup>**

Plant	Unit	Type	Fuel	Net Capacity (MW) <sup>b</sup>	1999 Baseline (No Project)	1999 Analytical Maximum <sup>c</sup>	Cumulative Scenarios		
							2005 Cumulative Analytical Maximum <sup>d</sup>	2005 Cumulative Analytical Maximum- Variant 1 <sup>e</sup>	2005 Cumulative Analytical Maximum- Variant 2 <sup>f</sup>
Potrero	3	ST	NG	207	41	76	64	63	62
	4	CT	DF	52	3	3	9	10	8
	5	CT	DF	52	2	2	8	10	7
	6	CT	DF	52	1	1	7	8	6
	Annual Plant Capacity				363 <sup>g</sup>	25	44	40	40
New 480 MW S.F. Plant		CC	NG	480	NA	NA	91	NA	90
New 240 MW S.F. Plant		CC	NG	240	NA	NA	NA	91	NA
PDEF Plant		CC	NG	450	NA	NA	NA	NA	90
Contra Costa	6	ST	NG	340	32	71	70	71	70
	7	ST	NG	340	40	88	69	69	68
	Annual Plant Capacity				680 <sup>g</sup>	36	79	70	70
Pittsburg	1	ST	NG	163	23	43	45	45	retired
	2	ST	NG	163	23	69	70	72	retired
	3	ST	NG	163	33	76	retired	retired	retired
	4	ST	NG	163	28	66	retired	retired	retired
	5	ST	NG	325	39	80	60	60	59
	6	ST	NG	325	40	87	76	76	75
	7	ST	NG	682	27	58	71	73	71
	Annual Plant Capacity				1984 <sup>g</sup>	31	68	56/67 <sup>h</sup>	57/68 <sup>h</sup>
Geysers	5	G	GS	39/39	68	58	82	83	80
	6	G	GS	39/39	68	58	81	83	79
	7	G	GS	38/37	72	65	85	86	83
	8	G	GS	38/37	72	64	86	86	83
	9	G	GS	32/32	54	47	73	75	71
	10	G	GS	32/32	54	47	73	74	70
	11	G	GS	56/56	46	36	94	95	95
	12	G	GS	39/39	76	65	85	85	83
	13	G	GS	73/69	95	94	95	95	95
	14	G	GS	61/61	81	70	87	89	86
	16	G	GS	73/69	94	94	94	95	94
	17	G	GS	47/47	78	70	89	89	87

**TABLE 5.2 (continued)**  
**PROJECTED CUMULATIVE ANALYSIS POWER PLANT ANNUAL CAPACITY FACTORS <sup>a</sup>**

Plant	Unit	Type	Fuel	Net Capacity (MW) <sup>b</sup>	1999 Baseline (No Project)	1999 Analytical Maximum <sup>c</sup>	Cumulative Scenarios		
							2005 Cumulative Analytical Maximum <sup>d</sup>	2005 Cumulative Analytical Maximum- Variant 1 <sup>e</sup>	2005 Cumulative Analytical Maximum- Variant 2 <sup>f</sup>
Geysers (cont.)	18	G	GS	58/62	82	73	88	89	86
	20	G	GS	44/46	78	67	86	87	84
	Annual Plant Capacity			669/665 <sup>g</sup>	75	68	87	88	86

NOTE: The capacity factors were derived using the SERASYM™ unit-specific, California-wide data set, which was processed by the SERASYM™ production cost model to forecast plant operations.

UNIT TYPES:      CT combustion turbine                      FUELS: NG natural gas with residual oil backup                      NA = not applicable  
                          ST steam turbine    DF distillate fuel oil  
                          G geothermal steam    GS geothermal steam  
                          CC combined cycle

- a Capacity factor is the ratio (expressed as a percentage) of operations of a unit or plant to the rated capacity of the unit or plant.
- b Although the net capacity of Unit 7 at the Pittsburg Power Plant is listed as 720 MW in PG&E's PEA, other sources (including the Master Must-Run Agreement between PG&E and the ISO and the Bay Area Reliability Dispatch Requirements) identify the unit's maximum net capacity as 682 MW. Based on this information, the SERASYM™ model results used in this EIR reflect the 682 MW factor. The net capacity factor of the Geysers Power Plant is actually 1,224 MW (see Table 2.1 in Section 2, Project Description). The net capacities shown here are the predicted capacities for the plant based on projected steam availability in 1999 and 2005, respectively.
- c In accordance with PG&E's July 9, 1998 agreement with the City and County of San Francisco, this scenario assumes that PG&E would continue to operate its Hunters Point Power Plant at the minimum level necessary to ensure continued electric reliability in San Francisco.
- d This scenario reflects the replacement of PG&E's Hunters Point Power Plant with a new 480 MW power plant in combination with divestiture and other cumulative projects. Section 5.3.2 discusses potential environmental impacts under this scenario.
- e This scenario reflects the replacement of PG&E's Hunters Point Power Plant with a new 240 MW power plant (as opposed to a 480 MW power plant) in conjunction with a new 230 kV transmission line into San Francisco in combination with divestiture and other cumulative projects. Section 5.3.3 discusses the potential environmental impacts under this scenario.
- f This scenario is the same as the 2005 Cumulative Analytical Maximum scenario, but also includes the retirement of Units 1 and 2 at the Pittsburg Power Plant and operation of the proposed Pittsburg District Energy Facility (PDEF) in Pittsburg. Section 5.3.4 discusses the potential environmental impacts under this scenario.
- g Net capacity for the entire plant.
- h The total net generating capacity of the Pittsburg Power Plant would decrease in the future due to the retirement of certain generating units. In order to meaningfully portray changes in generation, two annual plant capacity numbers are presented. The first number reflects the annual plant capacity factor based upon the current total net generating capacity of the plant (where all seven units are operational), which is 1,984 MW. The second number reflects the annual plant capacity based upon the combined net generating capacity of the units that are assumed to operate in 2005.

SOURCE: Sierra Energy and Risk Assessment, Inc., and ESA, 1998.