TABLE 6.1
PROJECTED ALTERNATIVES ANALYSIS POWER PLANT CAPACITY FACTORS^a

	Unit	Туре	Fuel	Net Capacity (MW) ^b	Capacity Factor by Case/Scenario/Analysis (percent)					
Plant					1999 Baseline and Alternative 1 (No Project)	1999 Analytical Maximum (Project)	2005 Cumulative Analytical Maximum ^c (Project)	2005 Alternative 1 (No Project)	1999 Alternative 3 (Geysers Steam Owners)	2005 Alternative 3 (Geysers Steam Owners)
Potrero	3	ST	NG	207	41	76	64	34	43	34
	4	CT	DF	52	3	3	9	10	3	9
	5	CT	DF	52	2	2	8	8	2	8
	6	CT	DF	52	1	1	7	8	1	7
	Annual Plant Capacity			363 ^d	25	44	40	23	25	23
New 480 MW S.F. Plant		CC	NG	480	NA	NA	91	91	NA	90
Contra Costa	6	ST	NG	340	32	71	70	45	32	45
	7	ST	NG	340	40	88	69	46	40	46
	Annual Plant Capacity			680 ^d	36	79	70	46	36	46
Pittsburg	1	ST	NG	163	23	43	45	21	23	21
	2	ST	NG	163	23	69	70	36	23	36
	3	ST	NG	163	33	76	retired	retired	33	retired
	4	ST	NG	163	28	66	retired	retired	28	retired
	5	ST	NG	325	39	80	60	42	39	42
	6	ST	NG	325	40	87	76	47	40	47
	7	ST	NG	682	27	58	71	49	27	50
	Annual Plant Capacity			1984 ^d	32	68	56/67 ^e	36/43 ^e	31	36/44 ^e
Geysers	5	G	GS	39/39	68	58	82	87	94	93
	6	G	GS	39/39	68	58	81	86	94	92
	7	G	GS	38/37	72	65	85	89	91	95
	8	G	GS	38/37	73	64	86	89	91	95
	9	G	GS	32/32	54	47	73	80	88	89
	10	G	GS	32/32	54	47	73	80	87	89
	11	G	GS	56/56	46	36	94	94	93	95
	12	G	GS	39/39	76	65	85	89	90	92
	13	G	GS	73/69	95	94	95	95	94	95
	14	G	GS	61/61	81	70	87	90	92	93
	16	G	GS	73/69	94	94	94	94	94	95
	17	G	GS	47/47	78	70	89	92	94	95
	18	G	GS	58/62	82	73	88	91	92	93
	20	G	GS	44/46	78	67	86	89	91	93
	Annual F	Plant Capaci	ity	669/665 ^d	75	68	87	90	92	93

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TABLE 6.1 (Continued) PROJECTED ALTERNATIVES ANALYSIS POWER PLANT CAPACITY FACTORS^a

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.
- 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 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.
- This scenario reflects the replacement of PG&E's Hunters Point Power Plant in San Francisco with a new 480 MW power plant in combination with divestiture and other cumulative projects.
- d Net capacity for the entire plant.
- 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.