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Pacific Gas and Electric Company

***Cogeneration and  
Small Power Production  
Semi-Annual Report***

July 2011

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***Cogeneration and  
Small Power Production  
Semi-Annual Report***

to the  
California Public Utilities  
Commission

July 2011

# Pacific Gas and Electric Company

## Summary of Projects

July 2011

Project Type	<b>Signed Contracts *</b>	
	<b>Currently Delivering</b>	
	Number of Projects	Contract Nameplate (kW) **
COGENERATOR		
	65	2,202,233
SMALL POWER PRODUCER		
BIOGAS	12	53,675
BIOMASS	18	387,100
GEOTHERMAL	2	2,900
HYDRO	81	204,202
SOLAR	1	7
WASTE TO ENERGY	7	111,750
WIND	24	607,990
<b>Total</b>	210	3,569,857

### Projects Terminated During the Half Year

All Project Types	Number of Projects	Contract Nameplate (kW) **
<b>Total</b>	4	64,730

\* Includes projects that have delivered within the last twelve months pursuant to a QF PURPA contract with PG&E.

\*\* Beginning with the July 2010 report, the capacity designation of "operating size" has been replaced with the term "contract nameplate" to provide consistent nomenclature among the three California investor-owned utilities. Contract nameplate is the size of the generator indicated by the seller in the power purchase agreement.

Table 1

## Summary of Signed Contracts

## Cogeneration Projects - Operational and Currently Delivering

July 2011

## COGENERATOR

No.	Log. No.	Project Name	City / County	Contract Type *	Primary Energy Source	Contract** Nameplate (kW)	Operating Start Date	Enhanced Oil Recovery
<b>20 MW or Less</b>								
1	02C048	1080 CHESTNUT CORP.	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	60	3/23/88	
2	25C249	AERA ENERGY LLC. (COALINGA)	COALINGA / FRESNO	1	NATURAL GAS EOR	8,500	6/3/88	Yes
3	02C047	ARDEN WOOD BENEVOLENT ASSOC.	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	90	9/9/87	
4	25C151EO2	BERRY PETROLEUM COMPANY	TAFT / KERN	1	NATURAL GAS EOR	17,000	12/8/86	Yes
5	25C055	CHEVRON USA (COALINGA)	COALINGA / FRESNO	1	NATURAL GAS EOR	16,500	11/7/86	Yes
6	25C002	CHEVRON USA (TAFT/CADET)	TAFT / KERN	1	NATURAL GAS EOR	10,000	7/26/82	Yes
7	06C061	CITY OF FAIRFIELD	FAIRFIELD / SOLANO	1	NATURAL GAS	775	8/15/84	
8	08C097	CITY OF MILPITAS	MILPITAS / SANTA CLARA	3	NATURAL GAS	60	10/6/89	
9	08C071	COUNTY OF SANTA CRUZ ( WATER ST. JAIL)	SANTA CRUZ / SANTA CRUZ	1	NATURAL GAS	180	9/1/87	
10	25C063EO2	FRITO LAY COGEN	BAKERSFIELD / KERN	1	NATURAL GAS	6,000	4/2/86	
11	04C130	GREATER VALLEJO RECREATION DISTRICT	VALLEJO / SOLANO	3	NATURAL GAS	60	8/15/85	
12	01C201	HAYWARD AREA REC & PARK DIST.	HAYWARD / ALAMEDA	3	NATURAL GAS	60	2/2/88	
13	04C054	NAPA STATE HOSPITAL	NAPA / NAPA	1	NATURAL GAS	1,330	7/18/84	
14	02C058	NIHONMACHI TERRACE	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	75	6/1/92	
15	01C245	ORINDA SENIOR VILLAGE	ORINDA / CONTRA COSTA	3	NATURAL GAS	60	2/6/91	
16	12C019	OROVILLE COGEN	OROVILLE / BUTTE	2	NATURAL GAS	8,500	12/18/89	
17	25C293	PLAINS EXPLORATION AND PRODUCTION COMPANY (DOFELLOWS / KERN		1	NATURAL GAS EOR	6,064	9/2/88	Yes
18	25C308EO1	PLAINS EXPLORATION AND PRODUCTION COMPANY (WEMCKITTRICK / KERN		1	NATURAL GAS EOR	4,000	1/27/90	Yes
19	01C108	RHODIA INC. (RHONE- POULENC)	MARTINEZ / CONTRA COSTA	1	NATURAL GAS	4,000	6/1/77	
20	25C178	SAINT AGNES MED. CTR	FRESNO / FRESNO	1	NATURAL GAS	2,325	11/21/85	
21	08C030EO1	SAN JOSE COGEN	SAN JOSE / SANTA CLARA	1	NATURAL GAS	6,000	12/18/84	
22	01C199	SATELLITE SENIOR HOMES	OAKLAND / ALAMEDA	3	NATURAL GAS	60	7/17/86	
23	02C041	SRI INTERNATIONAL	MENLO PARK / SAN MATEO	1	NATURAL GAS	6,000	3/10/87	
24	02C071EO2	UCSF	SAN FRANCISCO / SAN FRANCISCO	1	NATURAL GAS	12,600	1/26/98	
25	12C085	YUBA CITY RACQUET CLUB	YUBA CITY / SUTTER	3	NATURAL GAS	60	7/18/91	
<b>Subtotal:</b>						<b>110,359</b>		
<b>Greater than 20 MW</b>								
26	25C049EO2	AERA ENERGY LLC. (S. BELRIDGE)	BELRIDGE / KERN	1	NATURAL GAS EOR	48,000	1/10/86	Yes

\* Contract Type: 1/ As-Delivered Capacity Energy, 2/ Firm Capacity Energy, 3/ Energy Purchase, 4/ Long-term Energy Capacity.

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## Summary of Signed Contracts

## Cogeneration Projects - Operational and Currently Delivering

July 2011

## COGENERATOR

No.	Log. No.	Project Name	City / County	Contract Type *	Primary Energy Source	Contract** Nameplate (kW)	Operating Start Date	Enhanced Oil Recovery
<b>Greater than 20 MW</b>								
27	16C036E02	AIR PRODUCTS MANUFACTURING CORPORATION	STOCKTON / SAN JOAQUIN	1	COAL	49,900	2/27/88	
28	25C250E01	BADGER CREEK LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	4/1/91	Yes
29	25C251	BEAR MOUNTAIN LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	4/3/95	Yes
30	25C099E02	BERRY PETROLEUM COGEN	TAFT / KERN	1	NATURAL GAS EOR	37,200	12/8/86	Yes
31	18C006	CALPINE KING CITY COGEN.	KING CITY / MONTEREY	4	NATURAL GAS	120,000	3/14/89	
32	08C003	CARDINAL COGEN	STANFORD UNIVERSITY / SANTA CLARA	4	NATURAL GAS	49,900	2/20/88	
33	25C272E01	CHALK CLIFF LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	3/20/90	Yes
34	01C202	CHEVRON RICHMOND REFINERY	RICHMOND / CONTRA COSTA	1	NATURAL GAS	99,000	8/31/92	
35	25C005E02	CHEVRON U.S.A. INC. (NORTH MIDWAY)	MCKITTRICK / KERN	1	NATURAL GAS EOR	23,614	6/27/86	Yes
36	25C246	CHEVRON U.S.A. INC. (SE KERN RIVER)	BAKERSFIELD / KERN	1	NATURAL GAS EOR	34,468	1/31/89	Yes
37	25C003	CHEVRON USA (CYMRIC)	CYMRIC / KERN	1	NATURAL GAS EOR	21,040	10/15/82	Yes
38	25C248	CHEVRON USA (EASTRIDGE)	BAKERSFIELD / KERN	1	NATURAL GAS EOR	48,800	6/13/88	Yes
39	25C124E01	COALINGA COGENERATION COMPANY	COALINGA / FRESNO	1	NATURAL GAS EOR	46,000	3/1/92	Yes
40	01C061	CONOCOPHILLIPS COMPANY	RODEO / CONTRA COSTA	1	NATURAL GAS	49,850	5/21/87	
41	01C045	CROCKETT COGEN	CROCKETT / CONTRA COSTA	4	NATURAL GAS	260,000	12/20/95	
42	25C138E01	DAI / OILDALE , INC.	OILDALE / KERN	4	NATURAL GAS EOR	32,000	11/30/89	Yes
43	25C241E01	DOUBLE "C" LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	3/14/89	Yes
44	25C092	FRESNO COGENERATION CORPORATION	FRESNO / FRESNO	2	NATURAL GAS	33,000	12/27/89	
45	08C010	GATX/CALPINE COGEN-AGNEWS INC.	SAN JOSE / SANTA CLARA	4	NATURAL GAS	36,100	10/19/90	
46	08C023E02	GRAPHIC PACKAGING INT'L (BLUE GRASS)	SANTA CLARA / SANTA CLARA	1	NATURAL GAS	30,000	12/20/85	
47	12C020	GREENLEAF UNIT #1	YUBA CITY / SUTTER	4	NATURAL GAS	49,500	1/11/89	
48	12C021	GREENLEAF UNIT #2	YUBA CITY / SUTTER	4	NATURAL GAS	49,500	10/12/89	
49	25C242E01	HIGH SIERRA LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	2/24/89	Yes
50	25C188E01	KERN FRONT LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	1/7/89	Yes
51	25C274	LIVE OAK LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	3/16/91	Yes
52	01C044	MARTINEZ COGEN LIMITED PARTNERSHIP	MARTINEZ / CONTRA COSTA	4	NATURAL GAS	99,900	2/23/87	
53	25C275	MCKITTRICK LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	10/16/91	Yes
54	25C123E02	MIDSET COGEN CO.	TAFT / KERN	1	NATURAL GAS EOR	46,000	3/16/89	Yes
55	25C170	OILDALE ENERGY LLC	OILDALE / KERN	4	NATURAL GAS	33,800	12/29/84	

\* Contract Type: 1/ As-Delivered Capacity Energy, 2/ Firm Capacity Energy, 3/ Energy Purchase, 4/ Long-term Energy Capacity.

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**Summary of Signed Contracts**  
**Cogeneration Projects - Operational and Currently Delivering**  
**July 2011**  
**COGENERATOR**

No.	Log. No.	Project Name	City / County	Contract Type *	Primary Energy Source	Contract** Nameplate (kW)	Operating Start Date	Enhanced Oil Recovery
<b>Greater than 20 MW</b>								
56	01C084	PE - BERKELEY, INC.	BERKELEY / ALAMEDA	4	NATURAL GAS	26,350	5/19/87	
57	25C164	PE - KES KINGSBURG,LLC	KINGSBURG / FRESNO	2	NATURAL GAS	34,500	12/5/90	
58	25C076	RIO BRAVO POSO	BAKERSFIELD / KERN	4	COAL	37,000	9/27/89	Yes
59	16C034	RIPON COGENERATION, LLC	RIPON / SAN JOAQUIN	4	NATURAL GAS	49,500	4/19/88	
60	18C053EO1	SALINAS RIVER COGEN CO	SAN ARDO / MONTEREY	1	NATURAL GAS EOR	49,600	10/11/91	Yes
61	25C016	SANGER POWER, L.L.C.	SANGER / FRESNO	2	NATURAL GAS	42,000	12/11/90	
62	18C052EO1	SARGENT CANYON COGERATION COMPANY	SAN ARDO / MONTEREY	1	NATURAL GAS EOR	49,600	10/7/91	Yes
63	02C001	UNITED AIRLINES (COGEN)	SAN BRUNO / SAN MATEO	4	NATURAL GAS	30,000	9/12/86	
64	13C082	WHEELABRATOR LASSEN INC.	ANDERSON / SHASTA	2	NATURAL GAS	42,000	4/28/83	
65	12C026	YUBA CITY COGEN	YUBA CITY / SUTTER	4	NATURAL GAS	49,000	12/27/90	
<b>Subtotal:</b>						2,091,874		
<b>Total:</b>						2,202,233		

\* Contract Type: 1/ As-Delivered Capacity Energy, 2/ Firm Capacity Energy, 3/ Energy Purchase, 4/ Long-term Energy Capacity.

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Table 2

## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## BIOGAS

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
1	08C078	CITY OF WATSONVILLE	WATSONVILLE / SANTA CRUZ	1	DIGESTER GAS	550	1/23/93
2	16P001EO1	COVANTA POWER PACIFIC, STOCKTON	STOCKTON / SAN JOAQUIN	1	LANDFILL GAS	800	11/27/85
3	01P171	EBMUD (OAKLAND)	OAKLAND / ALAMEDA	1	DIGESTER GAS	4,000	10/20/91
4	04P010	GAS RECOVERY SYS. (AMERICAN CYN)	AMERICAN CANYON / NAPA	4	LANDFILL GAS	1,500	12/27/85
5	08P006	GAS RECOVERY SYS. (GUADALUPE)	LOS GATOS / SANTA CLARA	4	LANDFILL GAS	2,600	1/12/84
6	02P014	GAS RECOVERY SYS. (MENLO PARK)	MENLO PARK / SAN MATEO	2	LANDFILL GAS	2,000	1/11/83
7	08P004	GAS RECOVERY SYS. (NEWBY ISLAND 2)	SAN JOSE / SANTA CLARA	4	LANDFILL GAS	4,200	8/3/84
8	10P058	LANGERWERF DAIRY	DURHAM / BUTTE	3	DIGESTER GAS	85	11/3/82
9	18P059	MONTEREY REGIONAL WASTE MGMT DIST.	MARINA / MONTEREY	2	LANDFILL GAS	5,000	12/30/83
10	18C001	MONTEREY REGIONAL WATER	MARINA / MONTEREY	1	DIGESTER GAS	1,740	8/26/88
11	16P052EO1	STANISLAUS WASTE ENERGY CO.	CROWS LANDING / STANISLAUS	1	GARBAGE	18,000	9/6/88
12	01P219	WASTE MANAGEMENT RENEWABLE ENERGY	LIVERMORE / ALAMEDA	1	LANDFILL GAS	13,200	5/4/89
<b>Subtotal:</b>						53,675	
<b>Total:</b>						53,675	

## BIOMASS

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
13	10C003	COLLINS PINE	CHESTER / PLUMAS	2	WOODWASTE	12,000	4/4/84
14	19P005	DG FAIRHAVEN POWER, LLC	FAIRHAVEN / HUMBOLDT	4	WOODWASTE	17,250	9/15/86
15	13P118	OGDEN POWER PACIFIC, INC. (BURNEY)	BURNEY / SHASTA	4	WOODWASTE	9,750	8/15/84
16	10P001	OGDEN POWER PACIFIC, INC. (MT. LASSEN)	WESTWOOD / LASSEN	4	WOODWASTE	11,400	10/11/84

\* Contract Type: 1/ As-Delivered Capacity Energy, 2/ Firm Capacity Energy, 3/ Energy Purchase, 4/ Long-term Energy Capacity

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Table 2

## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## BIOMASS

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
17	12P001	OGDEN POWER PACIFIC, INC. (OROVILLE)	OROVILLE / BUTTE	4	WOODWASTE	18,000	9/26/85
18	13P163EO2	SIERRA PACIFIC IND. (ANDERSON)	ANDERSON / SHASTA	1	WOODWASTE	5,000	2/1/98
19	13C049	SIERRA PACIFIC IND. (BURNEY)	BURNEY / SHASTA	4	WOODWASTE	20,000	11/4/86
20	12C008	SIERRA PACIFIC IND. (LINCOLN)	LINCOLN / PLACER	4	WOODWASTE	7,500	6/3/86
21	10C018	SIERRA PACIFIC IND. (QUINCY)	QUINCY / PLUMAS	4	WOODWASTE	20,000	1/14/83
<b>Subtotal:</b>						<u>120,900</u>	
<b>Greater than 20 MW</b>							
22	13C038	BURNEY FOREST PRODUCTS	BURNEY / SHASTA	4	WOODWASTE	31,000	10/17/89
23	25C013	COVANTA MENDOTA L. P.	MENDOTA / FRESNO	4	WOODWASTE	25,000	6/29/89
24	10P005	HL POWER	WENDEL / LASSEN	4	WOODWASTE	32,000	7/26/89
25	16P002	PACIFIC-ULTRAPOWER CHINESE STATION	CHINESE STATION / TUOLUMNE	4	WOODWASTE	22,000	6/4/86
26	19C010	RED-SCOTIA, LLC	SCOTIA / HUMBOLDT	1	WOODWASTE	28,800	3/22/86
27	25P026	RIO BRAVO FRESNO	FRESNO / FRESNO	4	WOODWASTE	26,500	7/20/88
28	15P028	RIO BRAVO ROCKLIN	ROCKLIN / PLACER	4	WOODWASTE	25,000	6/9/89
29	16P054	THERMAL ENERGY DEV. CORP.	TRACY / SAN JOAQUIN	4	WOODWASTE	21,000	4/26/90
30	13P045	WHEELABRATOR SHASTA	COTTONWOOD / SHASTA	4	WOODWASTE	54,900	10/30/87
<b>Subtotal:</b>						<u>266,200</u>	
<b>Total:</b>						<u>387,100</u>	

\* Contract Type: 1/ As-Delivered Capacity Energy, 2/ Firm Capacity Energy, 3/ Energy Purchase, 4/ Long-term Energy Capacity

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## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## GEOTHERMAL

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
31	10G012EO1	AMEDEE GEOTHERMAL VENTURE 1	WENDEL / LASSEN	4	GEOTHERMAL	2,200	9/11/88
32	10G011	WENDEL ENERGY OPERATIONS 1,LLC	WENDEL / LASSEN	4	GEOTHERMAL	700	6/11/85
						<b>Subtotal:</b>	<b>2,900</b>
						<b>Total:</b>	<b>2,900</b>

## HYDRO

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
33	25H038EO1	AMERICAN ENERGY, INC. ( WOLFSEN BYPASS )	LOS BANOS / MERCED	1	HYDRO	1,000	2/1/86
34	13H008	ARBUCKLE MOUNTAIN HYDRO	PLATINA / SHASTA	4	HYDRO	360	12/1/86
35	13H119	BAILEY CREEK RANCH	MANTON / SHASTA	3	HYDRO	630	5/26/82
36	19H002	BAKER STATION ASSOCIATES L.P.	BRIDGEVILLE / HUMBOLDT	4	HYDRO	1,500	12/10/87
37	12H054EO1	BROWNS VALLEY IRRIGATION DISTRICT	BROWNS VALLEY / YUBA	1	HYDRO	995	6/29/84
38	16H092EO1	CALAVERAS YUBA HYDRO #1	MOKELUMNE HILL / CALAVERAS	1	HYDRO	90	4/15/86
39	16H177EO1	CALAVERAS YUBA HYDRO #2	CHILI GULCH / CALAVERAS	1	HYDRO	90	4/15/86
40	16H178EO1	CALAVERAS YUBA HYDRO #3	CHILI GULCH / CALAVERAS	1	HYDRO	90	4/15/86
41	25H204	CANAL CREEK POWER PLANT (RETA)	MERCED / MERCED	1	HYDRO	900	11/1/82
42	15H068	CHARCOAL RAVINE	SIERRA CITY / SIERRA	3	HYDRO	75	2/13/86
43	06H159	DAVID O. HARDE	SOMERSET / EL DORADO	3	HYDRO	100	11/18/92
44	13H132	DIGGER CREEK RANCH	MONTON / TEHAMA	1	HYDRO	600	5/18/83
45	04H062	E J M MCFADDEN	POTTER VALLEY / MENDOCINO	1	HYDRO	350	7/1/83
46	15H012	EAGLE HYDRO	GEORGETOWN / EL DORADO	1	HYDRO	480	12/23/85

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## Small Power Projects - Operational and Currently Delivering

## HYDRO

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
47	15H005	EIF HAYPRESS LLC (LWR)	SIERRA CITY / SIERRA	4	HYDRO	6,100	4/11/89
48	15H006	EIF HAYPRESS LLC (MDL)	SIERRA CITY / SIERRA	4	HYDRO	8,700	4/15/89
49	13H001	EL DORADO (MONTGOMERY CK)	MONTGOMERY CREEK / SHASTA	4	HYDRO	2,600	2/28/87
50	10H007	ERIC AND DEBBIE WATTENBURG	QUINCY / PLUMAS	1	HYDRO	275	4/6/85
51	25H193	FAIRFIELD POWER PLANT (PAPAZIAN)	MERCED / MERCED	1	HYDRO	900	8/2/83
52	04H011	FAR WEST POWER CORPORATION	POTTER VALLEY / MENDOCINO	4	HYDRO	400	9/30/87
53	10H010	FIVE BEARS HYDROELECTRIC	TAYLORSVILLE / PLUMAS	4	HYDRO	990	4/27/89
54	13H123	HAT CREEK HEREFORD RANCH	HAT CREEK / SHASTA	3	HYDRO	100	12/9/82
55	15H002	HENWOOD ASSOCIATES	SIERRA CITY / SIERRA	4	HYDRO	594	11/28/84
56	19H051	HUMBOLDT BAY MWD	RUTH / TRINITY	1	HYDRO	2,000	4/10/83
57	10H013	HYPOWER, INC.	DE SABLE CITY / BUTTE	4	HYDRO	10,800	3/16/92
58	04H061	INDIAN VALLEY HYDRO	CLEAR LAKE / LAKE	1	HYDRO	2,900	9/15/83
59	16H095EO2	JACKSON VALLEY IRRIGATION DIST	IONE / AMADOR	1	HYDRO	455	9/1/82
60	10H059	JAMES B. PETER	TAYLORSVILLE / PLUMAS	3	HYDRO	15	1/17/84
61	10H090	JAMES CRANE HYDRO	CHICO / BUTTE	3	HYDRO	3	6/20/91
62	04H134	JOHN NEERHOUT JR.	CALISTOGA / NAPA	3	HYDRO	85	5/1/87
63	25H073	KERN HYDRO (OLCESE)	BAKERSFIELD / KERN	4	HYDRO	16,000	5/18/89
64	25H150	KINGS RIVER HYDRO CO.	FRESNO / FRESNO	4	HYDRO	1,000	8/19/90
65	10H002	LASSEN STATION HYDRO	PULGA / BUTTE	4	HYDRO	990	5/22/86
66	13H120	LOFTON RANCH	BIG BEND / SHASTA	1	HYDRO	300	11/4/83
67	25H040	MADERA CANAL (1174 + 84)	MADERA / MADERA	4	HYDRO	563	4/11/86
68	25H042	MADERA CANAL (1923)	MADERA / MADERA	4	HYDRO	925	4/1/86
69	25H041	MADERA CANAL STATION 1302	MADERA / MADERA	4	HYDRO	424	4/16/86
70	25H036	MADERA-CHOWCHILLA WATER AND POWER AUTHORITY	MADERA / MADERA	4	HYDRO	2,000	2/2/85

\* Contract Type: 1/ As-Delivered Capacity Energy, 2/ Firm Capacity Energy, 3/ Energy Purchase, 4/ Long-term Energy Capacity

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## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## HYDRO

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
71	13H125	MEGA HYDRO #1 (CLOVER CREEK)	OAK RUN / SHASTA	4	HYDRO	1,000	2/21/86
72	13H122	MEGA HYDRO (GOOSE VALLEY RANCH)	BURNEY / SHASTA	4	HYDRO	280	4/8/83
73	13H017	MEGA RENEWABLES (BIDWELL DITCH)	BURNEY / SHASTA	4	HYDRO	2,000	2/22/87
74	13H015	MEGA RENEWABLES (HATCHET CRK)	MONTGOMERY CR. / SHASTA	4	HYDRO	7,000	1/5/87
75	13H014	MEGA RENEWABLES (ROARING CRK)	MONTGOMERY CREEK / SHASTA	4	HYDRO	2,000	12/5/86
76	13H036	MEGA RENEWABLES (SILVER SPRINGS)	BIG BEND / SHASTA	4	HYDRO	600	8/15/87
77	25H185	MERCED ID (PARKER)	MERCED / MERCED	1	HYDRO	2,690	9/23/81
78	19H006	MILL & SULPHUR CREEK	DINSMORE / HUMBOLDT	4	HYDRO	995	2/23/88
79	18H034EO1	MONTEREY CTY WATER RES AGENCY	SAN LUIS OBISPO / SAN LUIS OBISPO	1	HYDRO	3,750	7/13/87
80	13H042	NELSON CREEK POWER INC.	BIG BEND / SHASTA	4	HYDRO	1,100	12/19/88
81	15H015	NEVADA IRRIGATION DISTRICT/BOWMAN HYDROELECTRIC	NEVADA CITY / NEVADA	4	HYDRO	3,600	8/18/86
82	19H004EO2	NORMAN ROSS BURGESS	ZENIA / TRINITY	1	HYDRO	1,300	12/28/84
83	13H024	OLSEN POWER PARTNERS	WHITMORE / SHASTA	4	HYDRO	5,000	1/3/90
84	25H149	ORANGE COVE IRRIGATION DIST.	FRESNO / FRESNO	4	HYDRO	450	8/23/90
85	15H059	PLACER COUNTY WATER AGENCY	FOREST HILL / PLACER	1	HYDRO	500	4/30/83
86	06H011	ROCK CREEK L.P.	PLACERVILLE / EL DORADO	4	HYDRO	3,700	4/24/86
87	16H033	ROCK CREEK WATER DISTRICT	SALT SPRINGS VA / CALAVERAS	1	HYDRO	700	2/25/86
88	08H013	SANTA CLARA VALLEY WATER DIST.	MORGAN HILL / SANTA CLARA	4	HYDRO	800	12/1/88
89	16H030	SCHAADS HYDRO	WILSEYVILLE / CALAVERAS	1	HYDRO	230	2/18/86
90	19H048	SHAMROCK UTILITIES (CEDAR FLAT)	BURNT RANCH / TRINITY	4	HYDRO	300	1/9/84
91	13H012	SHAMROCK UTILITIES (CLOVER LEAF)	OAK RUN / SHASTA	4	HYDRO	200	2/1/85
92	15H055	SIERRA ENERGY	FORESTHILL / SONOMA	1	HYDRO	208	1/11/88
93	13H016	SNOW MOUNTAIN HYDRO LLC (BURNEY CREEK)	BURNEY / SHASTA	4	HYDRO	3,000	3/28/90
94	13H013	SNOW MOUNTAIN HYDRO LLC (COVE)	MONTGOMERY CR. / SHASTA	4	HYDRO	5,000	2/20/90

\* Contract Type: 1/ As-Delivered Capacity Energy, 2/ Firm Capacity Energy, 3/ Energy Purchase, 4/ Long-term Energy Capacity

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Table 2

## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## HYDRO

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
95	13H035	SNOW MOUNTAIN HYDRO LLC (PONDEROSA BAILEY CREMANTON / SHASTA		4	HYDRO	1,100	2/25/90
96	16H094	SOUTH SAN JOAQUIN ID (FRANKENHEIMER)	OAKDALE / STANISLAUS	1	HYDRO	5,035	2/12/83
97	16H097	SOUTH SAN JOAQUIN ID (WOODWARD)	OAKDALE / STANISLAUS	1	HYDRO	2,850	4/16/82
98	12H004EO1	SOUTH SUTTER WATER	SHERIDAN / PLACER	1	HYDRO	395	7/17/85
99	13H130	STEVE & BONNIE TETRICK	MILLVILLE / SHASTA	3	HYDRO	100	10/14/83
100	12H007	STS HYDROPOWER LTD. (KANAKA)	FEATHER FALLS / BUTTE	4	HYDRO	1,100	2/13/89
101	13H039EO2	STS HYDROPOWER LTD. (KEKAWAKA)	ALDERPOINT / TRINITY	1	HYDRO	4,950	12/27/89
102	13H006	SUTTER'S MILL	SHINGLETOWN / SHASTA	1	HYDRO	150	6/25/85
103	15H069	SWISS AMERICA	AUBURN / PLACER	3	HYDRO	100	12/23/85
104	13H040	TKO POWER (SOUTH BEAR CREEK)	SHINGLETOWN / SHASTA	4	HYDRO	4,950	1/15/86
105	19H055	TOM BENNINGHOVEN	GARBERVILLE / HUMBOLDT	3	HYDRO	25	11/22/82
106	16H003	TRI-DAM AUTHORITY	SONORA / TUOLUMNE	4	HYDRO	16,200	5/19/86
107	13H124	WATER WHEEL RANCH	MONTGOMERY CREEK / SHASTA	4	HYDRO	975	3/22/84
108	15H072	WRIGHT RANCH HYDROELECTRIC	WRIGHT RANCH / SIERRA	3	HYDRO	40	11/22/85
109	10H060	YOUTH WITH A MISSION/SPRINGS OF LIVING WATERS	CHICO / BUTTE	1	HYDRO	300	1/26/83
110	12H010	YUBA COUNTY WATER (DEADWOOD CREEK)	CHALLENGE / YUBA	4	HYDRO	2,000	1/29/90
111	12H006	YUBA COUNTY WATER AGENCY	MARYSVILLE / YUBA	4	HYDRO	150	9/30/86
<b>Subtotal:</b>						153,202	
<b>Greater than 20 MW</b>							
112	25H037	FRIANT POWER AUTHORITY	FRIANT / MADERA	4	HYDRO	25,000	4/16/85
113	13H047	MALACHA HYDRO L.P.	PITVILLE / LASSEN	4	HYDRO	26,000	12/7/88
<b>Subtotal:</b>						51,000	
<b>Total:</b>						204,202	

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## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## SOLAR

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
114	04S142	ROBIN WILLIAMS SOLAR POWER GEN	NAPA / NAPA	3	PHOTOVOLTAIC	7	4/16/93
						<b>Subtotal:</b>	7
						<b>Total:</b>	7

## WASTE TO ENERGY

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
115	25C062	DOLE ENTERPRISES, INC	KERN / KERN	3	WASTE GAS	50	2/5/91
116	01P049	GWF POWER SYSTEMS INC. #1	PITTSBURG / CONTRA COSTA	4	PETROLEUM COKE	17,740	12/7/90
117	01P086	GWF POWER SYSTEMS INC. #2	PITTSBURG / CONTRA COSTA	4	PETROLEUM COKE	17,740	12/22/89
118	01P091	GWF POWER SYSTEMS INC. #3	ANTIOCH / CONTRA COSTA	4	PETROLEUM COKE	17,740	8/27/90
119	01P051	GWF POWER SYSTEMS INC. #4	ANTIOCH / CONTRA COSTA	4	PETROLEUM COKE	17,740	10/10/89
120	01P087	GWF POWER SYSTEMS INC. #5	PITTSBURG / CONTRA COSTA	4	PETROLEUM COKE	17,740	3/17/90
						<b>Subtotal:</b>	88,750
<b>Greater than 20 MW</b>							
121	25C136	HANFORD L.P.	HANFORD / KINGS	4	PETROLEUM COKE	23,000	9/26/90
						<b>Subtotal:</b>	23,000
						<b>Total:</b>	111,750

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Table 2

## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## WIND

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
122	16W014	ALTAMONT POWER LLC (3-4 )	LIVERMORE / ALAMEDA	4	WIND	4,050	4/11/85
123	16W015	ALTAMONT POWER LLC (4-4)	ALTAMONT PASS / ALAMEDA	4	WIND	19,000	1/1/87
124	16W017	ALTAMONT POWER LLC (6-4)	ALTAMONT PASS / ALAMEDA	4	WIND	19,000	1/1/87
125	01W119	DONALD R. CHENOWETH	LIVERMORE / ALAMEDA	3	WIND	10	8/2/82
126	06W148	GREEN RIDGE POWER LLC (10 MW)	MONTEZUMA HILLS / SOLANO	4	WIND	10,000	1/1/90
127	01W146C	GREEN RIDGE POWER LLC (100 MW - C)	TRACY / SAN JOAQUIN	4	WIND	11,900	1/2/90
128	01W146D	GREEN RIDGE POWER LLC (100 MW - D)	TRACY / SAN JOAQUIN	4	WIND	15,000	1/1/91
129	16W011	GREEN RIDGE POWER LLC (23.8 MW)	TRACY / SAN JOAQUIN	4	WIND	10,800	1/5/87
130	01W018	GREEN RIDGE POWER LLC (5.9 MW)	TRACY / SAN JOAQUIN	4	WIND	5,900	3/2/88
131	06W146B	GREEN RIDGE POWER LLC (70 MW - B)	BENECIA / SOLANO	4	WIND	18,500	1/1/90
132	06W146D	GREEN RIDGE POWER LLC (70 MW - D)	BENECIA / SOLANO	4	WIND	1,500	1/1/91
133	01W011	SEA WEST ENERGY - ALTECH	ALTAMONT PASS / SAN JOAQUIN	4	WIND	5,760	1/22/83
134	01W006	SEA WEST ENERGY - SEAWEST	ALTAMONT PASS / SAN JOAQUIN	4	WIND	65	1/22/83
135	01W015	SEA WEST ENERGY - TAXVEST	ALTAMONT PASS / SAN JOAQUIN	4	WIND	715	1/22/83
136	01W014	SEA WEST ENERGY - VIKING	ALTAMONT PASS / SAN JOAQUIN	4	WIND	1,690	1/22/83
137	01W012	SEA WEST ENERGY - WESTERN	ALTAMONT PASS / SAN JOAQUIN	4	WIND	2,700	1/22/83
<b>Subtotal:</b>						<b>126,590</b>	
<b>Greater than 20 MW</b>							
138	16W009	ALTAMONT MIDWAY LTD.	ALTAMONT PASS / SAN JOAQUIN	4	WIND	48,900	4/16/85
139	01W146A	GREEN RIDGE POWER LLC (100 MW - A)	TRACY / SAN JOAQUIN	4	WIND	43,100	1/1/88
140	01W004	GREEN RIDGE POWER LLC (110 MW)	LIVERMORE / ALAMEDA	4	WIND	222,400	1/1/86
141	06W146C	GREEN RIDGE POWER LLC (70 MW - C)	BENECIA / SOLANO	4	WIND	30,000	1/1/91
142	01W035	GREEN RIDGE POWER LLC (70 MW)	LIVERMORE / ALAMEDA	4	WIND	54,000	4/1/87

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## Summary of Signed Contracts

July 2011

## Small Power Projects - Operational and Currently Delivering

## WIND

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>Greater than 20 MW</b>							
143	25W105	INTERNATIONAL TURBINE RESEARCH	PACHECO PASS / MERCED	4	WIND	34,000	6/14/88
144	01W095	NORTHWIND ENERGY	ALTAMONT / CONTRA COSTA	4	WIND	27,000	1/4/86
145	16W028	PATTERSON PASS WIND FARM LLC	ALTAMONT PASS / SAN JOAQUIN	4	WIND	22,000	4/2/85
						<b>Subtotal:</b>	481,400
						<b>Total:</b>	607,990

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