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Pacific Gas and Electric Company

*Cogeneration and  
Small Power Production  
Semi-Annual Report*

July 2013

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*Cogeneration and  
Small Power Production  
Semi-Annual Report*

to the  
California Public Utilities  
Commission

July 2013

# Pacific Gas and Electric Company

## Summary of Projects

July 2013

### Signed Contracts \* Currently Delivering

Project Type	Number of Projects	Contract Nameplate (kW) **
COGENERATOR	55	1,780,917
SMALL POWER PRODUCER		
BIOGAS	8	27,890
BIOMASS	17	373,450
GEOTHERMAL	2	2,900
HYDRO	60	182,239
SOLAR	1	7
WASTE TO ENERGY	1	50
WIND	21	474,290
Total	165	2,841,743

### Projects Terminated During the Half Year

All Project Types	Number of Projects	Contract Nameplate (kW) **
Total	5	11,460

\* Includes projects that have delivered within the last twelve months.

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Table 1

## Summary of Signed Contracts

1 - 1

## Cogeneration Projects - Operational and Currently Delivering

July 2013

## 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	25C049QAA	AERA ENERGY LLC (SOUTH BELRIDGE)	BELRIDGE / KERN	1	NATURAL GAS EOR	20,000	1/10/86	Yes
3	25C249	AERA ENERGY LLC. (COALINGA)	COALINGA / FRESNO	1	NATURAL GAS EOR	8,500	6/3/88	Yes
4	04C140	AIRPORT CLUB	SANTA ROSA / SONOMA	3	NATURAL GAS	60	8/27/92	
5	02C047	ARDEN WOOD BENEVOLENT ASSOC.	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	90	9/9/87	
6	25C151QPA	BERRY PETROLEUM COMPANY - TANNEHILL FACILITY	TAFT / KERN	1	NATURAL GAS EOR	15,200	12/8/86	Yes
7	25C193QPA	CHEVRON MCKITTRICK (MCKITTRICK COGEN)	MCKITTRICK / KERN	1	NATURAL GAS EOR	9,651	10/16/91	Yes
8	25C055	CHEVRON USA (COALINGA)	COALINGA / FRESNO	1	NATURAL GAS EOR	16,500	11/7/86	Yes
9	25C002	CHEVRON USA (TAFT/CADET)	TAFT / KERN	1	NATURAL GAS EOR	10,000	7/26/82	Yes
10	08C097	CITY OF MILPITAS	MILPITAS / SANTA CLARA	3	NATURAL GAS	60	10/6/89	
11	08C071	COUNTY OF SANTA CRUZ ( WATER ST. JAIL)	SANTA CRUZ / SANTA CRUZ	1	NATURAL GAS	180	9/1/87	
12	25C063QPA	FRITO-LAY COGEN	BAKERSFIELD / KERN	1	NATURAL GAS	2,000	4/2/86	
13	04C130	GREATER VALLEJO RECREATION DISTRICT	VALLEJO / SOLANO	3	NATURAL GAS	60	8/15/85	
14	01C201	HAYWARD AREA REC & PARK DIST.	HAYWARD / ALAMEDA	3	NATURAL GAS	60	2/2/88	
15	02C058	NIHONMACHI TERRACE	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	75	6/1/92	
16	01C245	ORINDA SENIOR VILLAGE	ORINDA / CONTRA COSTA	3	NATURAL GAS	60	2/6/91	
17	12C019	OROVILLE COGEN	OROVILLE / BUTTE	2	NATURAL GAS	8,500	12/18/89	
18	25C308QPA	PLAINS EXPLORATION & PRODUCTION - WELPORT	MCKITTRICK / KERN	1	NATURAL GAS EOR	500	1/27/90	Yes
19	25C293	PLAINS EXPLORATION AND PRODUCTION COMPANY (DOFELLOWS / KERN	MARTINEZ / CONTRA COSTA	1	NATURAL GAS EOR	6,064	9/2/88	Yes
20	01C108	RHODIA INC. (RHONE- POULENC)	MARTINEZ / CONTRA COSTA	1	NATURAL GAS	5,000	6/1/77	
21	25C178	SAINT AGNES MED. CTR	FRESNO / FRESNO	1	NATURAL GAS	2,325	11/21/85	
22	01C199	SATELLITE SENIOR HOMES	OAKLAND / ALAMEDA	3	NATURAL GAS	60	7/6/89	
23	02C041	SRI INTERNATIONAL	MENLO PARK / SAN MATEO	1	NATURAL GAS	6,000	3/10/87	
24	12C085	YUBA CITY RACQUET CLUB	YUBA CITY / SUTTER	3	NATURAL GAS	60	7/18/91	
<b>Subtotal:</b>						<b>111,065</b>		
<b>Greater than 20 MW</b>								
25	25C250QTR	BADGER CREEK LIMITED	BAKERSFIELD / KERN	1	NATURAL GAS EOR	48,000	4/1/91	Yes
26	25C251	BEAR MOUNTAIN LIMITED	BAKERSFIELD / KERN	2	NATURAL GAS EOR	48,094	4/3/95	Yes

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

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Table 1

## Summary of Signed Contracts

## Cogeneration Projects - Operational and Currently Delivering

July 2013

## 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	25C099QTR	BERRY PETROLEUM COMPANY - UNIVERSITY COGEN	TAFT / KERN	1	NATURAL GAS EOR	37,200	12/8/86	Yes
28	18C006	CALPINE KING CITY COGEN.	KING CITY / MONTEREY	4	NATURAL GAS	120,000	3/14/89	
29	08C003	CARDINAL COGEN	STANFORD UNIVERSITY / SANTA CLARA	4	NATURAL GAS	49,900	2/20/88	
30	25C272QTR	CHALK CLIFF LIMITED	BAKERSFIELD / KERN	1	NATURAL GAS EOR	48,000	3/20/90	Yes
31	01C202	CHEVRON RICHMOND REFINERY	RICHMOND / CONTRA COSTA	1	NATURAL GAS	99,000	8/31/92	
32	25C246	CHEVRON U.S.A. INC. (SE KERN RIVER)	BAKERSFIELD / KERN	1	NATURAL GAS EOR	34,468	1/31/89	Yes
33	25C003	CHEVRON USA (CYMRIC)	CYMRIC / KERN	1	NATURAL GAS EOR	21,990	10/15/82	Yes
34	25C248	CHEVRON USA (EASTRIDGE)	BAKERSFIELD / KERN	1	NATURAL GAS EOR	48,800	6/13/88	Yes
35	25C124QTR	COALINGA COGENERATION COMPANY	COALINGA / FRESNO	1	NATURAL GAS EOR	40,200	3/1/92	Yes
36	01C045	CROCKETT COGEN	CROCKETT / CONTRA COSTA	4	NATURAL GAS	260,000	12/20/95	
37	25C092	FRESNO COGENERATION CORPORATION	FRESNO / FRESNO	2	NATURAL GAS	33,000	12/27/89	
38	08C023QTR	GRAPHIC PACKAGING INTERNATIONAL, INC.	SANTA CLARA / SANTA CLARA	1	NATURAL GAS	26,000	12/20/85	
39	12C020	GREENLEAF UNIT #1	YUBA CITY / SUTTER	4	NATURAL GAS	49,200	1/11/89	
40	12C021	GREENLEAF UNIT #2	YUBA CITY / SUTTER	4	NATURAL GAS	49,500	10/12/89	
41	25C274QTR	LIVE OAK LIMITED	BAKERSFIELD / KERN	1	NATURAL GAS EOR	48,000	3/16/91	Yes
42	01C044QTR	MARTINEZ COGEN LIMITED PARTNERSHIP (MCLP)	MARTINEZ / CONTRA COSTA	1	NATURAL GAS	99,900	2/23/87	
43	25C275QTR	MCKITTRICK LIMITED	BAKERSFIELD / KERN	1	NATURAL GAS EOR	48,000	10/16/91	Yes
44	25C123QTR	MIDSET COGEN CO.	TAFT / KERN	1	NATURAL GAS EOR	37,500	12/1/11	Yes
45	25C170	OILDALE ENERGY LLC	OILDALE / KERN	4	NATURAL GAS	33,800	12/29/84	
46	01C084	PE - BERKELEY, INC.	BERKELEY / ALAMEDA	4	NATURAL GAS	26,350	5/19/87	
47	25C164	PE - KES KINGSBURG,LLC	KINGSBURG / FRESNO	2	NATURAL GAS	34,500	12/5/90	
48	01C061	PHILLIPS 66	RODEO / CONTRA COSTA	1	NATURAL GAS	49,850	5/21/87	
49	25C076	RIO BRAVO POSO	BAKERSFIELD / KERN	4	COAL	37,000	9/27/89	Yes
50	16C034	RIPON COGENERATION, LLC	RIPON / SAN JOAQUIN	4	NATURAL GAS	49,500	4/19/88	
51	18C053QTR	SALINAS RIVER COGEN CO	SAN ARDO / MONTEREY	1	NATURAL GAS EOR	36,800	10/11/91	Yes
52	25C016	SANGER POWER, L.L.C.	SANGER / FRESNO	2	NATURAL GAS	42,000	12/11/90	
53	18C052QTR	SARGENT CANYON COGENERATION COMPANY	SAN ARDO / MONTEREY	1	NATURAL GAS EOR	35,300	10/7/91	Yes
54	25C138QTR	WESTERN POWER & STEAM INC.	OILDALE / KERN	1	NATURAL GAS EOR	29,000	11/30/89	Yes

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

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Table 1

**Summary of Signed Contracts**  
**Cogeneration Projects - Operational and Currently Delivering**  
**July 2013**  
**COGENERATOR**

1 - 3

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>								
55	12C026	YUBA CITY COGEN	YUBA CITY / SUTTER	4	NATURAL GAS	49,000	12/27/90	
<b>Subtotal:</b>						<u>1,669,852</u>		
<b>Total:</b>						1,780,917		

\* 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

2 - 1

July 2013

## 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	04P010	GAS RECOVERY SYS. (AMERICAN CYN)	AMERICAN CANYON / NAPA	4	LANDFILL GAS	1,500	12/27/85
3	08P006	GAS RECOVERY SYS. (GUADALUPE)	LOS GATOS / SANTA CLARA	4	LANDFILL GAS	2,600	1/12/84
4	02P014	GAS RECOVERY SYS. (MENLO PARK)	MENLO PARK / SAN MATEO	2	LANDFILL GAS	2,000	1/11/83
5	08P004	GAS RECOVERY SYS. (NEWBY ISLAND 2)	SAN JOSE / SANTA CLARA	4	LANDFILL GAS	4,200	8/3/84
6	18P059	MONTEREY REGIONAL WASTE MGMT DIST.	MARINA / MONTEREY	2	LANDFILL GAS	2,100	12/30/83
7	18C001	MONTEREY REGIONAL WATER	MARINA / MONTEREY	1	DIGESTER GAS	1,740	8/26/88
8	01P219	WASTE MANAGEMENT RENEWABLE ENERGY	LIVERMORE / ALAMEDA	1	LANDFILL GAS	13,200	5/4/89
<b>Subtotal:</b>						<b>27,890</b>	
<b>Total:</b>						<b>27,890</b>	

## BIOMASS

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
9	10C003	COLLINS PINE	CHESTER / PLUMAS	2	WOODWASTE	12,000	4/4/84
10	19P005	DG FAIRHAVEN POWER, LLC	FAIRHAVEN / HUMBOLDT	4	WOODWASTE	17,250	9/15/86
11	12P001	PACIFIC OROVILLE POWER	OROVILLE / BUTTE	4	WOODWASTE	18,000	9/26/85
12	13P163EO2	SIERRA PACIFIC IND. (ANDERSON)	ANDERSON / SHASTA	1	WOODWASTE	5,000	2/1/98
13	13C049	SIERRA PACIFIC IND. (BURNEY)	BURNEY / SHASTA	4	WOODWASTE	20,000	11/4/86
14	12C008	SIERRA PACIFIC IND. (LINCOLN)	LINCOLN / PLACER	4	WOODWASTE	7,500	6/3/86
15	10C018	SIERRA PACIFIC IND. (QUINCY)	QUINCY / PLUMAS	4	WOODWASTE	20,000	1/14/83

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## Summary of Signed Contracts

July 2013

## 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>							
16	10C010	SIERRA PACIFIC IND.(SONORA)	SONORA / TOULUMNE	4	WOODWASTE	7,500	1/1/09
						<b>Subtotal:</b>	107,250
<b>Greater than 20 MW</b>							
17	13C038	BURNEY FOREST PRODUCTS	BURNEY / SHASTA	4	WOODWASTE	31,000	10/17/89
18	25C013	COVANTA MENDOTA L. P.	MENDOTA / FRESNO	4	WOODWASTE	25,000	6/29/89
19	19C010	EEL RIVER POWER LLC	SCOTIA / HUMBOLDT	1	WOODWASTE	28,800	3/22/86
20	10P005	HL POWER	WENDEL / LASSEN	4	WOODWASTE	32,000	7/26/89
21	16P002	PACIFIC-ULTRAPOWER CHINESE STATION	CHINESE STATION / TUOLUMNE	4	WOODWASTE	22,000	6/4/86
22	25P026	RIO BRAVO FRESNO	FRESNO / FRESNO	4	WOODWASTE	26,500	7/20/88
23	15P028	RIO BRAVO ROCKLIN	ROCKLIN / PLACER	4	WOODWASTE	25,000	6/9/89
24	16P054	THERMAL ENERGY DEV. CORP.	TRACY / SAN JOAQUIN	4	WOODWASTE	21,000	4/26/90
25	13P045	WHEELABRATOR SHASTA	COTTONWOOD / SHASTA	4	WOODWASTE	54,900	10/30/87
						<b>Subtotal:</b>	266,200
						<b>Total:</b>	373,450

## GEOHERMAL

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
26	10G012EO1	AMEDEE GEOTHERMAL VENTURE 1	WENDEL / LASSEN	1	GEOHERMAL	2,200	9/11/88

\* 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 2013

## Small Power Projects - Operational and Currently Delivering

## GEOHERMAL

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
27	10G011	WENDEL ENERGY OPERATIONS 1,LLC	WENDEL / LASSEN	4	GEOHERMAL	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>							
28	13H008	ARBUCKLE MOUNTAIN HYDRO	PLATINA / SHASTA	4	HYDRO	360	12/1/86
29	25H204	CANAL CREEK POWER PLANT (RETA)	MERCED / MERCED	1	HYDRO	900	11/1/82
30	15H068	CHARCOAL RAVINE	SIERRA CITY / SIERRA	3	HYDRO	75	2/13/86
31	13H132QPA	DIGGER CREEK RANCH HYDROELECTRIC	MONTON / TEHAMA	1	HYDRO	750	5/18/83
32	15H012	EAGLE HYDRO	GEORGETOWN / EL DORADO	1	HYDRO	480	12/23/85
33	15H005	EIF HAYPRESS LLC (LWR)	SIERRA CITY / SIERRA	4	HYDRO	6,100	4/11/89
34	15H006	EIF HAYPRESS LLC (MDL)	SIERRA CITY / SIERRA	4	HYDRO	8,700	4/15/89
35	13H001	EL DORADO (MONTGOMERY CK)	MONTGOMERY CREEK / SHASTA	4	HYDRO	2,600	2/28/87
36	10H007	ERIC AND DEBBIE WATTENBURG	QUINCY / PLUMAS	1	HYDRO	275	4/6/85
37	25H193	FAIRFIELD POWER PLANT (PAPAZIAN)	MERCED / MERCED	1	HYDRO	900	8/2/83
38	04H011	FAR WEST POWER CORPORATION	POTTER VALLEY / MENDOCINO	4	HYDRO	400	9/30/87
39	10H010	FIVE BEARS HYDROELECTRIC	TAYLORSVILLE / PLUMAS	4	HYDRO	990	4/27/89
40	13H123	HAT CREEK HEREFORD RANCH	HAT CREEK / SHASTA	3	HYDRO	100	12/9/82
41	19H051	HUMBOLDT BAY MWD	RUTH / TRINITY	1	HYDRO	2,000	4/10/83
42	10H013	HYPOWER, INC.	DE SABL A CITY / BUTTE	4	HYDRO	10,800	3/16/92

\* 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 2013

## 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>							
43	04H061QPA	INDIAN VALLEY HYDRO	CLEAR LAKE / LAKE	1	HYDRO	3,000	9/15/83
44	10H059	JAMES B. PETER	TAYLORSVILLE / PLUMAS	3	HYDRO	15	1/17/84
45	10H090	JAMES CRANE HYDRO	CHICO / BUTTE	3	HYDRO	3	6/20/91
46	04H134	JOHN NEERHOUT JR.	CALISTOGA / NAPA	3	HYDRO	85	5/1/87
47	25H073	KERN HYDRO (OLCESE)	BAKERSFIELD / KERN	4	HYDRO	16,000	5/18/89
48	25H150	KINGS RIVER HYDRO CO.	FRESNO / FRESNO	4	HYDRO	1,000	8/19/90
49	10H002	LASSEN STATION HYDRO	PULGA / BUTTE	4	HYDRO	990	5/22/86
50	13H120	LOFTON RANCH	BIG BEND / SHASTA	1	HYDRO	300	11/4/83
51	25H040	MADERA CANAL (1174 + 84)	MADERA / MADERA	4	HYDRO	563	4/11/86
52	25H042	MADERA CANAL (1923)	MADERA / MADERA	4	HYDRO	925	4/1/86
53	25H041	MADERA CANAL STATION 1302	MADERA / MADERA	4	HYDRO	424	4/16/86
54	25H036	MADERA-CHOWCHILLA WATER AND POWER AUTHORITY	MADERA / MADERA	4	HYDRO	2,000	2/2/85
55	13H125	MEGA HYDRO #1 (CLOVER CREEK)	OAK RUN / SHASTA	4	HYDRO	1,000	2/21/86
56	13H017	MEGA RENEWABLES (BIDWELL DITCH)	BURNEY / SHASTA	4	HYDRO	2,000	2/22/87
57	13H015	MEGA RENEWABLES (HATCHET CRK)	MONTGOMERY CR. / SHASTA	4	HYDRO	7,000	1/5/87
58	13H014	MEGA RENEWABLES (ROARING CRK)	MONTGOMERY CREEK / SHASTA	4	HYDRO	2,000	12/5/86
59	13H036	MEGA RENEWABLES (SILVER SPRINGS)	BIG BEND / SHASTA	4	HYDRO	600	8/15/87
60	19H006	MILL & SULPHUR CREEK	DINSMORE / HUMBOLDT	4	HYDRO	995	2/23/88
61	13H042	NELSON CREEK POWER INC.	BIG BEND / SHASTA	4	HYDRO	1,100	12/19/88
62	15H015	NEVADA IRRIGATION DISTRICT/BOWMAN HYDROELECTR	NEVADA CITY / NEVADA	4	HYDRO	3,600	8/18/86
63	13H024	OLSEN POWER PARTNERS	WHITMORE / SHASTA	4	HYDRO	5,000	1/3/90
64	25H149	ORANGE COVE IRRIGATION DIST.	FRESNO / FRESNO	4	HYDRO	450	8/23/90
65	06H011	ROCK CREEK L.P.	PLACERVILLE / EL DORADO	4	HYDRO	3,700	4/24/86
66	16H033	ROCK CREEK WATER DISTRICT	SALT SPRINGS VA / CALAVERAS	1	HYDRO	700	2/25/86

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Table 2

## Summary of Signed Contracts

July 2013

## 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>							
67	15H002	SALMON CREEK HYDROELECTRIC COMPANY	SIERRA CITY / SIERRA	4	HYDRO	594	11/28/84
68	08H013	SANTA CLARA VALLEY WATER DIST.	MORGAN HILL / SANTA CLARA	4	HYDRO	800	12/1/88
69	16H030	SCHAADS HYDRO	WILSEYVILLE / CALAVERAS	1	HYDRO	230	2/18/86
70	19H048	SHAMROCK UTILITIES (CEDAR FLAT)	BURNT RANCH / TRINITY	4	HYDRO	300	1/9/84
71	13H012	SHAMROCK UTILITIES (CLOVER LEAF)	OAK RUN / SHASTA	4	HYDRO	200	2/1/85
72	13H016	SNOW MOUNTAIN HYDRO LLC (BURNEY CREEK)	BURNEY / SHASTA	4	HYDRO	3,000	3/28/90
73	13H013	SNOW MOUNTAIN HYDRO LLC (COVE)	MONTGOMERY CR. / SHASTA	4	HYDRO	5,000	2/20/90
74	13H035	SNOW MOUNTAIN HYDRO LLC (PONDEROSA BAILEY CREMANTON / SHASTA		4	HYDRO	1,100	2/25/90
75	12H007	STS HYDROPOWER LTD. (KANAKA)	FEATHER FALLS / BUTTE	4	HYDRO	1,100	2/13/89
76	13H039QPA	STS HYDROPOWER LTD. (KEKAWAKA)	ALDERPOINT / TRINITY	1	HYDRO	5,445	12/27/89
77	13H006	SUTTER'S MILL	SHINGLETOWN / SHASTA	1	HYDRO	150	6/25/85
78	15H069	SWISS AMERICA	AUBURN / PLACER	3	HYDRO	100	12/23/85
79	13H040	TKO POWER (SOUTH BEAR CREEK)	SHINGLETOWN / SHASTA	4	HYDRO	4,950	1/15/86
80	19H055	TOM BENNINGHOVEN	GARBERVILLE / HUMBOLDT	3	HYDRO	25	11/22/82
81	16H003	TRI-DAM AUTHORITY	SONORA / TUOLUMNE	4	HYDRO	16,200	5/19/86
82	13H124	WATER WHEEL RANCH	MONTGOMERY CREEK / SHASTA	4	HYDRO	975	3/22/84
83	15H072	WRIGHT RANCH HYDROELECTRIC	WRIGHT RANCH / SIERRA	3	HYDRO	40	11/22/85
84	12H010	YUBA COUNTY WATER (DEADWOOD CREEK)	CHALLENGE / YUBA	4	HYDRO	2,000	1/29/90
85	12H006	YUBA COUNTY WATER AGENCY (FISH RELEASE)	MARYSVILLE / YUBA	4	HYDRO	150	9/30/86
<b>Subtotal:</b>						<b>131,239</b>	
<b>Greater than 20 MW</b>							
86	25H037	FRIANT POWER AUTHORITY	FRIANT / MADERA	4	HYDRO	25,000	4/16/85

\* 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 2013

## 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>Greater than 20 MW</b>							
87	13H047	MALACHA HYDRO L.P.	PITVILLE / LASSEN	4	HYDRO	26,000	12/7/88
						<b>Subtotal:</b>	51,000
						<b>Total:</b>	182,239

## SOLAR

No.	Log. No.	Project	City / County	Contract Type *	Primary Energy Source	Contract ** Nameplate (kW)	Operating Start Date
<b>20 MW or Less</b>							
88	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>							
89	25C062	DOLE ENTERPRISES, INC.	KERN / KERN	3	WASTE GAS	50	2/5/91
						<b>Subtotal:</b>	50
						<b>Total:</b>	50

\* 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

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July 2013

## 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>							
90	16W014	ALTAMONT POWER LLC (3-4 )	LIVERMORE / ALAMEDA	4	WIND	4,050	4/11/85
91	16W015	ALTAMONT POWER LLC (4-4)	ALTAMONT PASS / ALAMEDA	4	WIND	19,000	1/1/87
92	16W017	ALTAMONT POWER LLC (6-4)	ALTAMONT PASS / ALAMEDA	4	WIND	19,000	1/1/87
93	01W119	DONALD R. CHENOWETH	LIVERMORE / ALAMEDA	3	WIND	10	8/2/82
94	06W148	EDF RENEWABLE WINDFARM V, INC (10 MW)	MONTEZUMA HILLS / SOLANO	4	WIND	10,000	1/1/90
95	06W146C	EDF RENEWABLE WINDFARM V, INC (70 MW - C)	BENECIA / SOLANO	4	WIND	6,500	1/1/91
96	01W006	FOREBAY WIND LLC- SEAWEST	ALTAMONT PASS / SAN JOAQUIN	4	WIND	65	1/22/83
97	01W015	FOREBAY WIND LLC- TAXVEST	ALTAMONT PASS / SAN JOAQUIN	4	WIND	715	1/22/83
98	01W014	FOREBAY WIND LLC- VIKING	ALTAMONT PASS / SAN JOAQUIN	4	WIND	1,690	1/22/83
99	01W011	FOREBAY WIND LLC-ALTECH	ALTAMONT PASS / SAN JOAQUIN	4	WIND	5,760	1/22/83
100	01W012	FOREBAY WIND LLC-WESTERN	ALTAMONT PASS / SAN JOAQUIN	4	WIND	2,700	1/22/83
101	01W146D	GREEN RIDGE POWER LLC (100 MW - D)	TRACY / SAN JOAQUIN	4	WIND	15,000	1/1/91
102	16W011	GREEN RIDGE POWER LLC (23.8 MW)	TRACY / SAN JOAQUIN	4	WIND	10,800	1/5/87
103	01W018	GREEN RIDGE POWER LLC (5.9 MW)	TRACY / SAN JOAQUIN	4	WIND	5,900	3/2/88
<b>Subtotal:</b>						<b>101,190</b>	
<b>Greater than 20 MW</b>							
104	16W009	ALTAMONT-MIDWAY, LTD.	ALTAMONT PASS / SAN JOAQUIN	4	WIND	48,900	4/16/85
105	01W146A	GREEN RIDGE POWER LLC (100 MW - A)	TRACY / SAN JOAQUIN	4	WIND	43,100	1/1/88
106	01W004	GREEN RIDGE POWER LLC (110 MW)	LIVERMORE / ALAMEDA	4	WIND	144,100	1/1/86
107	01W035	GREEN RIDGE POWER LLC (70 MW)	LIVERMORE / ALAMEDA	4	WIND	54,000	4/1/87
108	25W105	INTERNATIONAL TURBINE RESEARCH	PACHECO PASS / MERCED	4	WIND	34,000	6/14/88
109	01W095	NORTHWIND ENERGY	ALTAMONT / CONTRA COSTA	4	WIND	27,000	1/4/86

\* 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 2013

## 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>							
110	16W028	PATTERSON PASS WIND FARM LLC	ALTAMONT PASS / SAN JOAQUIN	4	WIND	22,000	4/2/85
						<b>Subtotal:</b>	373,100
						<b>Total:</b>	474,290

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