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Pacific Gas and Electric Company

*Cogeneration and Small Power Production  
Semi Annual Report*

July 2016

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PACIFIC GAS AND ELECTRIC COMPANY

SUMMARY OF PROJECTS

July 2016

Project Type	Contracts Currently Delivering*	
	Number of Projects	Contract Capacity (kW)
COGENERATOR	35	1,050,937
SMALL POWER PRODUCERS		
BIOGAS	3	15,490
BIOMASS	8	230,650
GEOTHERMAL	0	-
HYDRO	39	131,143
SOLAR	1	7
WIND	4	50,510
<b>Total</b>	<b>90</b>	<b>1,478,737</b>

PROJECTS TERMINATED/EXPIRED DURING THE HALF YEAR

All Project Types	Number of Projects	Contract Capacity (kW)
1 WIND	6	136,850
2 BIOMASS	1	12,000
3 HYDRO	5	32,990
<b>Total</b>	<b>12</b>	<b>181,840</b>

\*Includes active contracts (not terminated or expired as of 11:59 pm on June, 30, 2016) that have delivered within the last twelve months as either a Qualifying Cogeneration Facility or a Small Power Production Facility as defined by the Public Utility Regulatory Act ("PURPA"). This report identifies all generators that have delivered under Transition PPAs during the reporting period.

Table 1  
SUMMARY OF SIGNED CONTRACTS  
COGENERATION PROJECTS - OPERATIONAL AND CURRENTLY DELIVERING  
July 2016

COGENERATOR

No.	Log. No.	Project Name	City / County	Contract Type*	Primary Energy Source	Contract Capacity(kw)	Operating Start Date	Enhanced Oil Recovery
1	02C048	20 MW OR LESS						
2	25C249	1080 CHESTNUT CORP.	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	30	3/23/1988	
3	04C140	AERA ENERGY (COALINGA)	COALINGA / FRESNO	1	NATURAL GAS	8,500	6/3/1988	Yes
4	02C047	AIRPORT CLUB	SANTA ROSA / SONOMA	3	NATURAL GAS	60	8/27/1992	
5	25C151QPA	ARDEN WOOD BENEVOLENT ASSOC.	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	90	9/9/1987	Yes
6	25C055	BERRY PETROLEUM COMPANY - TANNEHILL	MARICOPA / KERN	P	NATURAL GAS	15,200	10/1/2012	Yes
7	25C003	CHEVRON U.S.A. (COALINGA)	COALINGA / FRESNO	1	NATURAL GAS	16,500	11/7/1986	Yes
8	25C002	CHEVRON U.S.A. (CYMRIC)	COALINGA / FRESNO	1	NATURAL GAS	16,000	10/15/1982	Yes
9	08C097	CHEVRON U.S.A. (TAFT/CADET)	TAFT / KERN	1	NATURAL GAS	10,000	7/26/1982	Yes
10	01C108	CITY OF MILPITAS	MILPITAS / SANTA CLARA	3	NATURAL GAS	60	10/6/1989	
11	25C293	ECO SERVICES OPERATIONS LLC	MARTINEZ / CONTRA COSTA	1	NATURAL GAS	5,000	6/7/1977	
12	25C063QPA	FREEPORT-MCMORAN OIL AND GAS (DOME)	FELLOWS / KERN	1	NATURAL GAS	6,064	9/2/1988	Yes
13	04C130	FRITO LAY COGEN	BAKERSFIELD / KERN	P	NATURAL GAS	2,000	10/1/2012	
14	01C201	GREATER VALLEJO RECREATION DISTRICT	VALLEJO / SOLANO	3	NATURAL GAS	60	8/15/1985	
15	02C058	HAYWARD AREA REC & PARK DIST.	HAYWARD / ALAMEDA	3	NATURAL GAS	60	2/2/1988	
16	01C199	NIHONMACHI TERRACE	SAN FRANCISCO / SAN FRANCISCO	3	NATURAL GAS	75	6/1/1992	
17	02C041	SATELLITE SENIOR HOMES	OAKLAND / ALAMEDA	3	NATURAL GAS	60	7/6/1989	
18	25C138QPA	SRI INTERNATIONAL	MENLO PARK / SAN MATEO	1	NATURAL GAS	6,000	3/10/1987	Yes
19	12C085	WESTERN POWER AND STEAM, INC.	BAKERSFIELD / KERN	P	NATURAL GAS	18,650	10/1/2015	
		YUBA CITY RACQUET CLUB	YUBA CITY / SUTTER	3	NATURAL GAS	60	7/18/1991	
					SUBTOTAL	104,469		
20	18C006	GREATER THAN 20 MW						
21	25C248	CALPINE KING CITY COGEN	KING CITY / MONTEREY	4	NATURAL GAS	120,000	3/14/1989	Yes
22	25C246	CHEVRON U.S.A. (EASTRIDGE)	BAKERSFIELD / KERN	1	NATURAL GAS	48,800	6/13/1988	Yes
23	25C124QTR	CHEVRON U.S.A. (SE KERN RIVER)	BAKERSFIELD / KERN	1	NATURAL GAS	34,468	1/31/1989	Yes
24	01C045	COALINGA COGENERATION COMPANY	COALINGA / FRESNO	T	NATURAL GAS	40,200	12/1/2011	Yes
25	25C092**	CROCKETT COGEN	CROCKETT / CONTRA COSTA	4	NATURAL GAS	260,000	12/20/1995	
26	12C020**	FRESNO COGENERATION PARTNERS, LP	FRESNO / FRESNO	2	NATURAL GAS	33,000	12/27/1989	
27	12C021	GREENLEAF UNIT #1	YUBA CITY / SUTTER	4	NATURAL GAS	49,200	1/11/1989	
28	25C123QTR	GREENLEAF UNIT #2	YUBA CITY / SUTTER	4	NATURAL GAS	49,500	10/12/1989	Yes
29	01C084	MID-SET COGENERATION COMPANY	FELLOWS / KERN	T	NATURAL GAS	37,500	12/1/2011	
30	25C164**	PE - BERKELEY, INC.	BERKELEY / ALAMEDA	4	NATURAL GAS	26,350	5/19/1987	
31	01C061	PE - KES KINGSBURG	KINGSBURG / FRESNO	2	NATURAL GAS	34,500	12/5/1990	
32	18C059QTR	PHILLIPS 66	RODEO / CONTRA COSTA	1	NATURAL GAS	49,850	5/21/1987	Yes
33	25C016	SALINAS RIVER COGENERATION COMPANY	SAN ARDO / MONTEREY	T	NATURAL GAS	36,800	12/1/2011	Yes
34	18C052QTR	SARGER POWER	SAN ARDO / MONTEREY	2	NATURAL GAS	42,000	12/11/1990	Yes
35	12C026**	SARGENT CANYON COGENERATION COMPANY	SAN ARDO / MONTEREY	T	NATURAL GAS	35,300	12/1/2011	Yes
		YUBA CITY COGEN PARTNERS	YUBA CITY / SUTTER	4	NATURAL GAS	49,000	12/27/1990	
					SUBTOTAL	946,468		
					TOTAL	1,050,937		

\*Contract Type: 1=Standard Offer 1, 2=Standard Offer 2, 3=Standard Offer 3, 4=Standard Offer 4, P=PURPA, T=Transition  
 \*\*These projects amended their Standard Offer PPAs and are now operating as Exempt Wholesale Generators

Table 2  
 SUMMARY OF SIGNED CONTRACTS  
 SMALL POWER PROJECTS- OPERATIONAL AND CURRENTLY DELIVERING  
 July 2016

No.	Log. No.	Project Name	City / County	Contract Type*	Primary Energy Source	Contract Capacity(kw)	Operating Start Date
<b> BIOGAS </b>							
1	08C078	<b>20 MW OR LESS</b> CITY OF WATSONVILLE	WATSONVILLE / SANTA CRUZ	1	BIOGAS	550	1/23/1993
2	18C001	MONTEREY REGIONAL WATER	MARINA / MONTEREY	1	BIOGAS	1,740	8/26/1988
3	01P219	WASTE MANAGEMENT RENEWABLE ENERGY	LIVERMORE / ALAMEDA	1	BIOGAS	13,200	5/4/1989
						<u>11,000</u>	
						<u>15,490</u>	
<b> BIOMASS </b>							
1	19P005	<b>20 MW OR LESS</b> DG FAIRHAVEN POWER	FAIRHAVEN / HUMBOLDT	4	BIOMASS	17,250	9/15/1986
						<u>17,250</u>	
<b> GREATER THAN 20 MW </b>							
2	13C038	BURNEY FOREST PRODUCTS	BURNEY / SHASTA	4	BIOMASS	31,000	10/17/1989
3	10P005	HL POWER	WENDEL / LASSEN	4	BIOMASS	32,000	7/26/1989
4	19C010	HUMBOLDT REDWOOD COMPANY	SCOTIA / HUMBOLDT	1	BIOMASS	22,000	3/22/1986
5	16P002	PACIFIC-ULTRAPOWER CHINESE STATION	JAMESTOWN / TUOLUMNE	4	BIOMASS	22,000	6/4/1986
6	25P026	RIO BRAVO FRESNO	FRESNO / FRESNO	4	BIOMASS	26,500	7/20/1988
7	15P028	RIO BRAVO ROCKLIN	ROCKLIN / PLACER	4	BIOMASS	25,000	6/9/1989
8	13P045	WHEELABRATOR SHASTA	ANDERSON / SHASTA	4	BIOMASS	54,900	10/30/1987
						<u>213,400</u>	
						<u>230,650</u>	

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<b>HYDRO</b>							
1	15H068	20 MW OR LESS					
2	12H010	CHARCOAL RAVINE	SIERRA CITY / SIERRA	3	HYDRO	75	2/13/1986
3	15H005	DEADWOOD CREEK	CHALLENGE / YUBA	4	HYDRO	2,000	1/29/1990
4	15H006	EIF HAYPRESS (LWR)	SIERRA CITY / SIERRA	4	HYDRO	6,100	4/11/1989
5	13H001	EIF HAYPRESS (MDL)	SIERRA CITY / SIERRA	4	HYDRO	8,700	4/15/1989
6	10H007	EL DORADO HYDRO (MONTGOMERY CREEK)	QUINCY PINES / EL DORADO	4	HYDRO	2,600	2/28/1987
7	10H010	ERIC AND DEBBIE WATTENBURG	GENESEE VALLEY / PLUMAS	1	HYDRO	275	4/6/1985
8	13H123	FIVE BEARS HYDROELECTRIC	HAT CREEK / SHASTA	4	HYDRO	990	4/27/1989
9	19H051	HUMBOLDT BAY MWD	RUTH / TRINITY	3	HYDRO	100	12/9/1982
10	13H125QPA	HYDRO PARTNERS (CLOVER CREEK)	OAK RUN / SHASTA	1	HYDRO	2,000	4/10/1983
11	10H013	HYPOWER, INC.	DE SABLE / BUTTE	P	HYDRO	999	4/1/2016
12	10H059	JAMES B. PETER	GREENVILLE / PLUMAS	4	HYDRO	10,800	3/16/1992
13	10H090	JAMES CRANE HYDRO	FOREST RANCH / BUTTE	3	HYDRO	15	1/17/1984
14	04H134	JOHN NEERHOUT JR.	CALISTOGA / NAPA	3	HYDRO	3	6/20/1991
15	25H150	KINGS RIVER HYDRO CO.	SANGER / FRESNO	3	HYDRO	85	5/1/1987
16	13H120	LOFTON RANCH	BIG BEND / SHASTA	4	HYDRO	1,000	8/19/1990
17	13H017	MEGA RENEWABLES (BIDWELL DITCH)	BURNEY / SHASTA	1	HYDRO	300	11/4/1983
18	13H015	MEGA RENEWABLES (HATCHET CRK)	MONTGOMERY CREEK / SHASTA	4	HYDRO	2,000	2/22/1987
19	13H014	MEGA RENEWABLES (ROARING CRK)	MONTGOMERY CREEK / SHASTA	4	HYDRO	7,000	1/5/1987
20	13H036	MEGA RENEWABLES (SILVER SPRINGS)	BIG BEND / SHASTA	4	HYDRO	2,000	12/5/1986
21	13H042	NELSON CREEK POWER INC.	BIG BEND / SHASTA	4	HYDRO	600	8/15/1987
22	15H015	NEVADA IRRIGATION DISTRICT/BOWMAN	BIG BEND / NEVADA	4	HYDRO	1,100	12/19/1988
23	25H073	OLCESE WATER DISTRICT	BAKERSFIELD / KERN	4	HYDRO	3,600	8/18/1986
24	13H024	OLSEN POWER PARTNERS	WHITMORE / SHASTA	4	HYDRO	16,000	5/18/1989
25	25H149	ORANGE COVE IRRIGATION DIST.	FRIANT / FRESNO	4	HYDRO	5,000	11/10/1989
26	06H011QPA	ROCK CREEK HYDRO	PLACERVILLE / EL DORADO	P	HYDRO	450	8/23/1990
27	16H033	ROCK CREEK WATER DISTRICT	FARMINGTON / CALAVERAS	1	HYDRO	2,796	5/1/2016
28	08H013	SANTA CLARA VALLEY WATER DIST.	MORGAN HILL / SANTA CLARA	4	HYDRO	700	2/25/1986
29	16H030	SCHAADS HYDRO	WILSEYVILLE / CALAVERAS	1	HYDRO	800	12/1/1988
30	13H016	SNOW MOUNTAIN HYDRO (BURNEY CREEK)	BURNEY / SHASTA	1	HYDRO	230	2/18/1986
31	13H013	SNOW MOUNTAIN HYDRO (COVE)	MONTGOMERY CREEK / SHASTA	4	HYDRO	3,000	3/28/1990
32	13H035	SNOW MOUNTAIN HYDRO (PONDEROSA BAILEY CREEK)	MANTON / SHASTA	4	HYDRO	5,000	2/20/1990
33	12H007	STS HYDROPOWER (KANAKA)	OROVILLE / BUTTE	4	HYDRO	1,100	2/25/1990
34	13H006	SUTTER S MILL	SHINGLETOWN / SHASTA	4	HYDRO	1,100	2/13/1989
35	15H069	SWISS AMERICA	AUBURN / PLACER	1	HYDRO	150	6/25/1985
36	19H055	TOM BENNINGHOVEN	ZENIA / HUMBOLDT	3	HYDRO	100	12/23/1985
37	16H003	TRI-DAM AUTHORITY	STRAWBERRY / TUOLUMNE	3	HYDRO	25	11/22/1982
38	12H006	YUBA COUNTY WATER AGENCY (FISH RELEASE)	DOBBINS / YUBA	4	HYDRO	16,200	5/19/1986
					HYDRO	150	9/30/1986
					<b>SUBTOTAL</b>	<b>105,143</b>	
39	13H047	GREATER THAN 20 MW					
		MALACHA HYDRO	PITVILLE / LASSEN	4	HYDRO	26,000	12/7/1988
					<b>SUBTOTAL</b>	<b>26,000</b>	
					<b>TOTAL</b>	<b>131,143</b>	

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 July 2016

No.	Log. No.	Project Name	City / County	Contract Type*	Primary Energy Source	Contract Capacity(kw)	Operating Start Date
<b>SOLAR</b>							
1	04S142	20 MW OR LESS VILLA SORRISO SOLAR	NAPA / NAPA	3	SOLAR	7	4/16/1993
					<b>SUBTOTAL</b>	<b>7</b>	
					<b>TOTAL</b>	<b>7</b>	
<b>WIND</b>							
No.	Log. No.	Project Name	City / County	Contract Type*	Primary Energy Source	Contract Capacity(kw)	Operating Start Date
<b>20 MW OR LESS</b>							
1	01W119	DONALD R. CHENOWETH	LIVERMORE / ALAMEDA	3	WIND	10	8/2/1982
2	06W148	EDF RENEWABLE WINDFARM V, INC. (10 MW)	SUISUN CITY / SOLANO	4	WIND	10,000	1/1/1990
3	06W146C	EDF RENEWABLE WINDFARM V, INC. (70 MW - C)	SUISUN CITY / SOLANO	4	WIND	6,500	1/1/1991
					<b>SUBTOTAL</b>	<b>16,510</b>	
<b>GREATER THAN 20 MW</b>							
4	25W105	INTERNATIONAL TURBINE RESEARCH	PACHECO PASS / MERCED	4	WIND	34,000	6/14/1988
					<b>SUBTOTAL</b>	<b>34,000</b>	
					<b>TOTAL</b>	<b>50,510</b>	

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