BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Investigation into Implementation of Assembly Bill 970 Regarding the Identification of Electric Transmission and Distribution Constraints, Actions to Resolve those Constraints, and Related Matters affecting the Reliability of Electric Supply. (U 39 E)	Investigation No. 00-11-001 (Filed November 2, 2000)

QUARTERLY PROJECT STATUS REPORT OF PACIFIC GAS AND ELECTRIC COMPANY (PUBLIC VERSION)

JOHN BUSTERUD
DAVID T. KRASKA

Law Department
Pacific Gas and Electric Company
Post Office Box 7442
San Francisco, CA 94120
Telephone: (415) 973-7503
Facsimile: (415) 972-5952
E-Mail: DTK5@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

Dated: January 2, 2014

BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Investigation into Implementation of Assembly Bill 970 Regarding the Identification of Electric Transmission and Distribution Constraints, Actions to Resolve those Constraints, and Related Matters affecting the Reliability of Electric Supply. (U 39 E)	Investigation No. 00-11-001 (Filed November 2, 2000)

QUARTERLY PROJECT STATUS REPORT OF PACIFIC GAS AND ELECTRIC COMPANY

In compliance with Administrative Law Judge Gottstein's December 14, 2000 prehearing conference order, Pacific Gas and Electric Company ("PG&E") attaches hereto, as Appendix A, its January 2, 2014 quarterly project status report for the transmission projects discussed in the Comments of Pacific Gas and Electric Company dated November 22, 2000, as supplemented on November 30, 2000 and December 22, 2000, as well as for the generation interconnection projects discussed at the prehearing conference, to the extent still required under D.06-09-003. Also included in Appendix A is status information on the transmission projects listed in Table 4 of D.01-03-077, together with additional transmission projects over the 2002-2008 time period identified since the issuance of D.01-03-077, as requested in the April 2, 2002 Administrative Law Judge's Ruling Requiring Additional Information on Status of Transmission Projects and Notice of Further Prehearing Conference, and other projects required under D.06-09-003.[1/]

In a January 29, 2003 Administrative Law Judge's Ruling and Notice of Evidentiary Hearings on Tehachapi Transmission Project, Administrative Law Judge Gottstein directed the

1/ As discussed in various pleadings in this and other Commission dockets, PG&E does not believe the CPUC has authority over transmission planning or ratemaking in California. Neither PG&E's participation in this proceeding nor anything stated herein should be construed as a waiver of PG&E's position on these issues.

utilities to describe in their status reports, beginning with their April 2003 reports, the responses to their general solicitation of interest. This status report complies with this ruling and updates information previously provided.

PG&E originally received requests from five developers, proposing a total of twelve projects representing 2,562 megawatts ("MW"). Of these, seven projects representing 1102 MW were located within PG&E's service territory. Three projects representing 220 MW were located in PacificCorp's service territory with proposed interconnection points at Bonneville Power Administration owned substations. Two projects representing 1240 MW were located outside California and will be excluded from the Screening Level Evaluation. PG&E has organized the projects by geographical regions – North Area, Central Area, and South Area.

PG&E has had meetings or conference calls with all five developers. By June 30, 2003, three developers (four projects totaling 1557 MW) had declined the screening studies. Also, by that date, as a result of discussions with the remaining two developers, three projects all inside California (totaling 139 MW) had been added. There has not been any change in the number of developers or projects since then. As of July 30, 2003, PG&E had completed all screening studies requested by the renewable developers as a result of the solicitation letter PG&E sent out in February 2003.

Pursuant to ALJ TerKeurst's Ruling dated March 18, 2004, PG&E has undertaken a supplemental solicitation for information from developers of eligible renewable energy projects. In response to this supplemental solicitation, PG&E received information from nine developers, proposing a total of forty-one projects representing 4,313.5 MW. Of these, fourteen projects representing 736 MW were located within PG&E's service territory. Twenty-five projects representing 3477.5 MW were located in Southern California. Two projects representing 100 MW were located in PacificCorp's service territory with proposed interconnection points at Bonneville Power Administration owned substations. PG&E has organized the projects by geographical regions within the PG&E service territory – North Area, Central Area, and South Area – and North and South of the PG&E service territory. As of May 14, 2004, PG&E has

responded to all developers who responded to this supplemental solicitation for information. Both of the developers who previously requested screening level studies have withdrawn their requests.

On March 18, 2005, PG&E sent another letter of solicitation for information to developers regarding eligible renewable energy projects expected to commence deliveries to the PG&E-owned transmission system by January 2010. PG&E received responses from four developers by the closing date of March 28, 2005, for sixteen generation projects totaling 2,905 MW.[2/] Of these, six projects totaling 671 MW are expected to be in the PG&E service area, three projects totaling 732 MW are expected to be located north of the PG&E service area but within California, and seven projects totaling 1,502 MW are expected to be located in Southern California.

Respectfully submitted,

JOHN BUSTERUD
DAVID T. KRASKA

By _____ */s/ David T. Kraska*
DAVID T. KRASKA

Law Department
Pacific Gas and Electric Company
Post Office Box 7442
San Francisco, CA 94120
Telephone: (415) 973-7503
Facsimile: (415) 972-5952
E-mail: DTK5@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

Dated: January 2, 2014

2/ Some of the responses included information expressed in gigawatt hours ("GWH"), rather than MW as requested. Therefore, for purposes of this filing, PG&E has estimated the number of MW of generation based on similar projects from the same developer(s).

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
1	Green Ridge Wind Power Project	Contra Costa County	Green Ridge Power, LLC is proposing to repower the Jackson Substation via Green Ridge Wind Power Generation Interconnection Project. This project will interconnect 75.1 MW (net output) wind power-based generation facility to the PG&E transmission system. Jackson Substation is currently interconnected onto PG&E's Lone Tree-Cayetano 230 kV Line.	230 kV		Yes	Yes	NOC Effective	Operational	Dec-12	$1-$5	Tariff Compliance: Repower existing generation
2	Helm-McCall 230 kV Reconductoring	Fresno	The Helm-McCall 230 kV Line will be reconductored to be capable of carrying 1893 amps under normal and emergency conditions. Upgrades to terminal equipment at McCall and Helm substations should be performed as necessary to accommodate the higher ratings.	230 kV	T1286	Yes	2010	NOC Effective	Operational	Feb-13	**$30-$40**	Reliability: Increase grid reliability and capacity
3	Cottle 230 kV Ring Bus and MPAC Project	Stanislaus	Build a four-breaker 230 kV ring bus arrangement at Cottle Substation and loop the substation onto the Bellota – Melones 230 kV Line. Reconfigure the Bellota – Melones 230 kV Line to loop in and out of the new Cottle 230 kV Ring Bus and, if necessary, upgrade associated substation equipment.	230 kV		Yes	N/A	Exempt	Operational	Mar-13	$10-$20	Reliability: Increase grid reliability
4	Midway-Morro Bay 230 kV Reconductoring	Carrizo Plains	Reconductor the Midway-Morro Bay 230 kV lines with higher capacity conductors to enable renewable resources to be delivered to the grid.	230 kV	T1093A	Yes	Yes	NOC Effective	Operational	Mar-13	**$50-$60**	Reliability: Increase grid reliability and capacity
5	Gold Hill - Horseshoe 115 kV Line Reconductor	Sierra	Reconductor the Placer - Gold Hill 115 kV Line between Gold Hill and Horseshoe with larger capacity conductors.	115 kV	T444D	Yes	2009	NOC Effective	Operational	Mar-13	**$5-$10**	Reliability: Increase grid reliability and capacity
6	Corcoran 115/70 kV Transformer	Fresno	Replace Corcoran 115/70 kV Transformer with a transformer rated for 200 MVA or higher.	**115/70 kV**	T089	Yes	2010	Exempt	Operational	Mar-13	$10-$20	Reliability: Increase grid reliability and capacity
7	Lagunitas - Anzar Jct 115 kV Line Reconductoring (Hollister 115 kV Reconductoring)	San Benito County	Reconductor the line sections on the Moss Landing - Salinas - 115 kV lines feeding Hollister with larger size conductors (140 MVA rating).	**115 kV**	T458C	Yes	2005	PTC Effective	Operational	Apr-13	**$20-$30**	Reliability: Increase grid reliability and capacity
8	Los Esteros 115 kV Breaker	Santa Clara County	Install a new, fourth 115 kV breaker at Los Esteros in conjunction with the interconnection of the Los Esteros Critical Energy Facility	115 kV	T1493	Yes	N/A	NOC Effective	Operational	Apr-13	$1-$5	Reliability: Increase grid reliability
9	Los Esteros Critical Energy Facility Generation Interconnection - Expansion	San Jose	Los Esteros Critical Energy Facility, LLC, is proposing to expand their existing Los Esteros Critical Energy Facility by converting a four-unit, simple cycle plant to a combined cycle plant by installing one steam turbine and four heat recovery steam generators. The total net output of the Los Esteros Critical Energy Facility will be 315 MW. The project will interconnect to the Los Esteros Substation via two 115 kV underground cables from the Los Esteros Critical Energy Facility to PG&E's Los Esteros Substation. The proposed Commercial Operation Date (COD) of the Project is May 1, 2013.	115 kV	T1411	Yes	Yes	NOC Effective	Operational	Apr-13	$5-$10	Tariff Compliance: Connect new generation
10	Contra Costa – Moraga SPS Installation	Contra Costa County	Install a redundant SPS to improve reliability and resolve overloads on Contra Costa-Moraga 230 kV Transmission Lines Nos. 1 and 2.	230 kV		Yes	N/A	Exempt	Operational	Apr-13	**$1-$5**	Reliability: Increase grid reliability
11	Sneath Lane 60 kV Ring Bus	Peninsula	Build a six-breaker 60 kV ring bus arrangement at Sneath Lane Substation and loop the substation onto the Martin No. 1 and Millbrae-Pacifica 60 kV lines. Install a new 60 kV MPAC building at Sneath Lane Substation.	60 kV		Yes	N/A	Exempt	Operational	May-13	**$10-$20**	Reliability: Increase grid reliability
12	Humboldt 115/60 kV Transformer No. 2	Humboldt	Replace the existing 115/60 kV transformer No. 2 with a transformer rated for 200 MVA or higher.	**115/60 kV**	T945C	Yes	2009	Exempt	Operational	May-13	$5-$10	Reliability: Increase grid reliability and capacity
13	Caliente Switching Station	San Luis Obispo County	High Plains Ranch II, LLC, (SunPower) proposes to interconnect 250 MW of solar generation onto PG&E's Midway-Morro Bay 230 kV Lines by December 2013. This will require construction of a new switching station to interconnect this project onto the Midway-Morro Bay 230 kV Lines. Prior to December 2013, High Plains Ranch II will temporarily interconnect 140 MW of solar generation on the Midway-Morro Bay 230 kV No. 1 Line by December 2011, which will require construction of a temporary tap connection.	230 kV		Yes	Yes	NOC Effective	Operational	Interim connection: August 4, 2012 Permanent connection June 6, 2013	**$30-$40**	Tariff Compliance: Connect new generation
14	Kansas South Generation Interconnection Project	Kings	Interconnect a 20 MW (net output) solar power-based generation facility to the Guernsey – Henrietta 70 kV transmission line	70 kV		Yes	Yes	Exempt	Operational	Jun-13	**$1-$5**	Tariff Compliance: Connect new generation
15	Caribou No. 2 Reconductor Reliability Project	Sierra	Reconductor 8 miles of the limiting section of the Caribou 60 kV No. 2 Line from Caribou No. 1 PH (CB 42) to Grays Flat substation	60 kV	T1075	Yes	N/A	NOC Effective	Operational	Jun-13	$10-$20	Reliability: Increase grid reliability and capacity
16	White River PV 20 MVA Solar Generation Facility	Tulare	Enco Utility Services, LLC proposes to interconnect 20 MW of solar generation onto the Smyrna-Alpaugh 115 kV Line	115 kV	N/A	Yes	Yes	NOC Effective	Operational	Jun-13	**$10-$20**	Tariff Compliance: Connect new generation
17	Carrizo Plain Solar Generation	San Luis Obispo County	First Solar plans to interconnect 190 MW of solar generation onto the Morro Bay - Midway 230 kV Lines	230 kV	N/A	Yes	Yes	NOC Effective	Operational	Jul-13	**$30-$40**	Tariff Compliance: Connect new generation
18	Hollister 115 kV Reconductoring (Anzar Jct - Hollister)	San Benito County	Rebuild the Hollister No. 1 115 kV Tap Line into a double-circuit line with larger size conductors (140 MVA rating).	**115 kV**	T458D	Yes	2005	PTC Effective	Operational	Aug-13	**$20-$30**	Reliability: Increase grid reliability and capacity

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
19	Oceano 115 kV Circuit Breaker	San Luis Obispo County	This project proposes to upgrade Oceano Substation's 115 kV Circuit Switcher Nos. 316 and 326 with new Supervisory Control And Data Acquisition (SCADA)-operable circuit breakers.	115 kV		Yes	N/A	Exempt	**Operational**	**Sep-13**	**$1-$5**	Reliability: Increase grid reliability
20	Atascadero-San Luis Obispo Reconductoring: Atascadero-Cuesta Grade	San Luis Obispo County	Reconductor approximately 8 miles of line and replacing the 144 wood poles with light duty steel direct bury poles.	70 kV	TBD	Yes	N/A	PTC Effective	**Operational**	**Sep-13**	**$40-$50**	Reliability: Increase grid reliability and capacity
21	Arco Transformer Installation Project	Kern	Install a second 230/70 kV transformer (No. 1), a 230 kV circuit breaker and upgrade the 70 kV bus to connect the new transformer	230 kV		Yes	2013	Exempt	**Operational**	**Oct-13**	**$10-$20**	Reliability: Increase grid reliability and capacity
22	Half Moon Bay Reactive Support	Peninsula	Install additional voltage support or construct new 60 kV transmission facilities into Half Moon Bay.	60 kV	T979	Yes	2007	Exempt	**Operational**	**Nov-13**	**$10-$20**	Reliability: Increase grid reliability and capacity
23	Garberville Voltage Support	Humboldt	Install a voltage support device at Garberville Substation.	60 kV		Yes	2009	Exempt	**Operational**	**Nov-13**	$20-$30	Reliability: Increase grid reliability and capacity
24	Wheeler Ridge 230/70 kV Transformer Capacity Increase	Kern	Install second 230/70 kV Transformer at Wheeler Ridge Substation rated to handle 200 MVA or higher.	**230/70 kV**	T1000	Yes	2008	Exempt	**Operational**	**Nov-13**	$10-$20	Reliability: Increase grid reliability and capacity
25	Herndon 230/115 kV Transformer	Fresno	Install third 230/115 kV Transformer at Herndon Substation rated for 420 MVA.	**230/115 kV**	T1003	Yes	2009	Exempt	**Operational**	**Dec-13**	**$10-$20**	Reliability: Increase grid reliability and capacity
26	Valley Springs 230/60 kV Transformer	Stockton	Install redundant transformer at Valley Springs Substation rated to handle 200 MVA or higher.	**230/60 kV**	N/A	Yes	2009	Exempt	**Operational**	**Dec-13**	**$40-$50**	Reliability: Increase grid reliability and capacity
27	Westlands Solar Farm Generation Interconnection Project	Fresno	Interconnect 20 MW of solar power-based generation via the Gates-Coalinga 70 kV transmission line No. 1	70 kV		**Yes**	Yes	Exempt	**Construction**	Feb-14	**$10-$20**	Tariff Compliance: Connect new generation
28	East Nicolaus 115/60 kV Transformer No. 3 Addition	Sierra	Install East Nicolaus 115/60 kV Transformer No. 3 with a transformer rated for 200 MVA or higher..	**115/60 kV**		Yes	N/A	Exempt	Construction	**Mar-14**	$10-$20	Reliability: Increase grid reliability and capacity
29	FRV Orion Kern Solar Generation Interconnection Project	Kern	Interconnect 20 megawatts (MW) (net output) solar power-based generation facility to Pacific Gas and Electric Company's (PG&E's) Weedpatch – San Bernard 70 kV Line in Kern County.	70 kV		Yes	Yes	Exempt	Engineering	Mar-14	**$1-$5**	Tariff Compliance: Connect new generation
30	Panoche-McMullin 230 kV Reconductoring	Fresno County	The Panoche-McMullin 230 kV Line will be reconductored to be capable of carrying 1893 amps under normal and emergency conditions. Upgrades to terminal equipment at Panoche and McMullin substations should be performed as necessary to accommodate the higher ratings.	230 kV	T1289	Yes	2009	**NOC Effective**	**Construction**	Mar-14	**$20-$30**	Reliability: Increase grid reliability and capacity
31	Oakland 115 kV Cable No. 3 Capacity Increase	East Bay	This project proposes to upgrade the limiting substation equipment (four feet section of the Oakland Station X 115 kV bus) at Oakland Station X to increase the Oakland 115 kV Cable No. 3 existing summer normal and emergency ratings.	115 kV		Yes	2006	Exempt	Engineering	May-14	$1-$5	Reliability: Increase grid reliability and capacity
32	Palermo - Rio Oso 115 kV Reconductoring	North Valley and Sierra	Reconductor 115 kV lines between Palermo and Rio Oso substations	115 kV	T686A	Yes	2005	PTC Effective	Construction	May-14	**$90-$100**	Reliability: Increase grid reliability and capacity
33	Pittsburg-Lakewood SPS	Contra Costa County	Install a Special Protection System to address reliability issues.	115 kV	T1218	Yes	2010	Exempt	Construction	Jul-14	$1-$5	Reliability: Increase grid reliability
34	Cortina 60 kV Reliability	Colusa County	Install an additional 115/60 kV transformer at Cortina rated for 200 MVA or higher.	**115/60 kV**	T346A	Yes	2007	Exempt	Construction	**Oct-14**	**$10-$20**	Reliability: Increase grid reliability and capacity
35	**White River West Generation Interconnection Project**	**Tulare County**	**Interconnect 19.75 MW solar generation to Pacific Gas and Electric Company's (PG&E's) Smyrna-Alpaugh 115 kV line via Olive Switching Station**	**115 kV**		**No**	**Yes**	**TBD**	**Engineering**	**Oct-14**	**$1-$5**	**Tariff Compliance: Connect new generation**
36	**Vega Solar Generation Interconnection Project**	**Merced County**	**Interconnect 20 MW solar generation facility to Pacific Gas and Electric Company's (PG&E's) Los Banos -Canal-Oro Loma 70 kV Line**	**70 kV**		**No**	**Yes**	**TBD**	**Engineering**	**Oct-14**	**$1-$5**	**Tariff Compliance: Connect new generation**
37	Mendocino Coast Reactive Support	North Coast	Install dynamic reactive device at Big River 60 kV substation	60 kV	T993	Yes	2006	Exempt	Engineering	Dec-14	**$20-$30**	Reliability: Increase grid reliability and capacity
38	Helms PSP Special Protection Scheme	Fresno County	Install redundant special protection schemes at multiple substations and Helms PSP to trip pumping units offline at Helms PSP.	230 kV	T1291	Yes	2010	Exempt	**Construction**	Dec-14	**$10-$20**	Reliability: Increase grid reliability
39	FRV Regulus Solar Generation Interconnection Project	Kern	Interconnect 67.5 megawatts (MW) (net output) solar power-based generation facility to Pacific Gas and Electric Company's (PG&E's) Lamont Substation	115 kV		No	**Yes**	Exempt	Engineering	Dec-14	**$10-$20**	Tariff Compliance: Connect new generation
40	Henrietta-McCall 230kV Reconductoring	Fresno County	The Henrietta to McCall section of the Gates-McCall 230 kV Line will be reconductored to be capable of carrying 1893 amps under normal and emergency conditions. Upgrades to terminal equipment at Gates, Henrietta and McCall substations should be performed as necessary to accommodate the higher ratings.	230 kV	T1287	Yes	2010	NOC Effective	Engineering	Apr-15	**$40-$50**	Reliability: Increase grid reliability and capacity
41	Pittsburg - Tesla 230 kV Reconductoring	East Bay	Reconductor the Pittsburg-Tesla 230 kV Nos. 1 and 2 Lines with larger capacity conductors.	230 kV	T984	Yes	2007	NOC	Permitting	**Apr-15**	**$50-$60**	Reliability: Increase grid reliability and capacity

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
42	Crazy Horse Canyon Switching Station	Central Coast	Construct a 115 kV switching station.	115 kV	T970	Yes	2007	PTC Effective	Construction	May-15	$20-$50	Reliability: Increase grid reliability
43	Caruthers - Kingsburg 70 kV Reconductoring	Fresno	Reconductor the Caruthers - Lemoore NAS - Camden 70 kV line (25 miles) and install a new 2 mile 70 kV section from Henrietta to Lemoore NAS Substation.	70 kV	T1128	Yes	2009	NOC	Engineering	May-15	**$15-$25**	Reliability: Increase grid reliability and capacity
44	Newark - Ravenswood 230 kV Reconductoring	Bay Area	Reconductor the Newark - Ravenswood 230 kV Line with larger conductors.	230 kV	T982	Yes	2006	NOC	Engineering	May-15	**$40-$50**	Reliability: Increase grid reliability and capacity
45	Tulucay 230/60 kV Transformer No.1 Capacity Increase	North Bay	This project proposes to replace Tulucay Circuit Breaker No. 62 and all of its associated switches with a circuit breaker rated at 2000 Amps or higher. Any other associated terminal equipment will also be replaced as necessary	**230/60 kV**		No	2012	Exempt	Engineering	May-15	**$5-$10**	Reliability: Increase grid reliability and capacity
46	Menlo Area 60 kV Reinforcement	San Mateo County	The project scope is to reconductor the Glenwood bus, replace all 60 kV line switches that have a rating of less then 800 Amps with switches that have a capability of 800 Amps or greater; reconductor the line section between Glenwood and Menlo Substations, and upgrade equipment within Menlo Substation.	60 kV	T1036	Yes	2007	NOC	**Permitting**	May-15	$10-$20	Reliability: Increase grid reliability and capacity
47	Lemoore 70 kV Disconnect Switches Replacement	Kings	Replace disconnect switches 21, 23, and 25 with disconnect switches rated for 1200 amps or higher at Lemoore Substation	70 kV		No	2011	Exempt	Engineering	May-15	<$1	Reliability: Increase grid reliability
48	Lockheed 1 Distribution Substation (D)	Santa Clara County	Re-build the Lockheed 1 Station into a two-bank distribution substation	115 kV	T1494	No	Not Yet	Exempt	Engineering	Jun-15	$10-$20	Reliability: Increase Distribution System Capacity
49	Shepherd Substation Interconnection	Fresno County	Interconnect new distribution substation by looping Kerckhoff-Clovis-Sanger 115 kV No. 1 Line	115 kV	T1120	No	2009	**PTC**	Engineering	Jun-15	**$10-$20**	Reliability: Increase Distribution System Capacity
50	**Freshwater Solar Generation Interconnection Project**	**Kings County**	**Interconnect 20 MW solar generation facility to Pacific Gas and Electric Company's (PG&E's) Kingsburg-Corcoran #1 115 kV Line**	**115 kV**		**No**	**Yes**	**TBD**	**Engineering**	**Jun-15**	**$1-$5**	**Tariff Compliance: Connect new generation**
51	**Solar Star Generation Interconnection Project**	**Merced County**	**Build a 230 kV Quinto Switching Station to interconnect 110 MW solar generation to Pacific Gas and Electric Company's (PG&E's) Los Banos-Westley 230 kV Line and reconductoring 26 miles of the line from switching station to Westley Sub**	**230 kV**		**Yes**	**Yes**	**NOC**	**Construction**	**Jun-15**	**$50-$60**	**Tariff Compliance: Connect new generation**
52	Cressy - Gallo 115 kV Line Reliability Project	Merced County	Construct new transmission 115 kV line from Cressey to Gallo and install new circuit breakers at Cressey and Gallo Substations	115 kV	T1026	Yes	2013	PTC	Engineering	Jun-15	$10-$20	Reliability: Increase grid reliability and capacity
53	Placer Solar Generation Interconnection Project	Fresno	Interconnect 20 megawatts (MW) (net output) solar power-based generation facility to Pacific Gas and Electric Company's (PG&E's) Helm Substation	70 kV		No	Yes	Exempt	Engineering	Sep-15	**$1-$5**	Tariff Compliance: Connect new generation
54	Ignacio-Alto 60 kV Circuit Breaker Installation	Marin	Install one 60 kV circuit breaker with bypass switches on the Ignacio 60 kV Bus, in order to sectionalize the Ignacio-Alto 60 kV Line. The Ignacio – Alto 60 kV Line will be disconnected at the Ignacio Junction and reconnected into Ignacio Substation. This reconfiguration will create the Ignacio-Greenbrae-Alto and Ignacio-Novato-Stafford 60 kV lines. Also, replace Greenbrae 60 kV Switch (SW) number (No.) 27 with a 3 Gap-Bottle switch for adequate line operation.	60 kV	N/A	Yes	N/A	Exempt	Construction	Sep-15	$1-$5	Reliability: Increase grid reliability
55	Tesla 115 kV Capacity Increase	Stockton	The project scope is to reconductor the Tesla-Salado-Manteca and Schulte - Lammers 115 kV lines.	115 kV	T680B	Yes	2007	NOC Effective	Construction	Oct-15	$10-$20	Reliability: Increase grid reliability and capacity
56	Rose Solar Generation Interconnection Project	Fresno	Interconnect 20 megawatts (MW) (net output) solar power-based generation facility to Pacific Gas and Electric Company's (PG&E's) Helm Substation	70 kV		No	Yes	Exempt	Cancelled	Nov-15	**$1-$5**	Tariff Compliance: Connect new generation
57	Laytonville 60 kV Circuit Breaker Installation Project	North Coast	This project proposes to construct a loop bus at Laytonville Substation, install three circuit breakers, and terminate the Laytonville-Covelo 60 kV Line into the new bus.	60 kV		Yes	Not Yet	Exempt	Construction	Dec-15	**$5-$10**	Reliability: Increase grid reliability
58	East Nicolaus Area Reinforcement	Sierra	Replace East Nicolaus 115/60 kV Transformer No. 2 with a larger capacity unit.	115 kV	T962	Yes	2007	Exempt	Engineering	**Dec-15**	$5-$10	Reliability: Increase grid reliability and capacity
59	Fort Ross 60 kV Circuit Breaker	Sonoma	Add new 60 kV CB to Fort Ross Substation in order to sectionalize the Gualala - Monte Rio 60 kV Line.	60 kV	T1156	No	N/A	Exempt	Engineering	Dec-15	**$1-$5**	Reliability: Increase grid reliability
60	Embarcadero-Potrero 230 kV Project	San Francisco	Construct a new 230 kV underground cable to connect Embarcadero and Potrero substations.	230 kV	T1032	No	2012	CPCN	Engineering	Dec-15	**$150-$200**	Reliability: Increase grid reliability and capacity
61	**Henrietta Solar Generation Interconnection Project**	**Kings County**	**Interconnect 100 MW solar generation to Pacific Gas and Electric Company's (PG&E's) Henrietta-GWF 115 kV Line**	**115 kV**		**No**	**Yes**	**TBD**	**Engineering**	**Dec-15**	**$10-$20**	**Tariff Compliance: Connect new generation**
62	Lompoc Wind Power Project Interconnection	Santa Barbara County	Pacific Renewable Energy Generation LLC proposes to interconnect 55.5 MW of wind power generation onto the Cabrillo - Divide 115 kV line.	115 kV		No	N/A	NOC Effective	Cancelled	Dec-15	$10-$20	Tariff Compliance: Connect new generation
63	Cotati 60 kV Circuit Breaker Installation	Sonoma	Install CB at Cotati and fully loop in sub between Fulton - Molino - Cotati 60 kV Line and Lakeville No. 2 60 kV Line. Also install high-side CB on Cotati Bank No. 1	60 kV		Yes	N/A	Exempt	Engineering	Dec-15	$1-$5	Reliability: Increase grid reliability

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
64	McMullin-Kearney 230 kV Reconductoring	Fresno County	The McMullin to Kearney section of the Panoche-Kearney 230 kV Line will be reconductored to be capable of carrying 1893 amps under normal and emergency conditions. Upgrades to terminal equipment at Kearney and McMullin substations should be performed as necessary to accommodate the higher ratings.	230 kV	T1288	Yes	2010	NOC	Engineering	Dec-15	$10-$20	Reliability: Increase grid reliability and capacity
65	Westside Solar Generation Interconnection Project	Fresno	Interconnect a 20 megawatts (MW) (net output) solar power-based generation facility via a tap onto Schindler-Coalinga No. 2 70 kilovolt (kV) transmission line	70 kV		No	Yes	TBD	Engineering	Dec-15	**$1-$5**	Tariff Compliance: Connect new generation
66	Whitney Point Solar Generation Interconnection Project	Fresno	Interconnect a 20 MW (net output) solar power-based generation facility via a switching station that loops the Schindler-Huron-Gates 70 kilovolt (kV) transmission line	70 kV		No	Yes	TBD	**Engineering**	Dec-15	**$1-$5**	Tariff Compliance: Connect new generation
67	LeGrand-Chowchilla 115 kV Reconductoring	Fresno County	**Reconductor 11 mile section of the Legrand-Certainteed 115 kV Line**	230 kV	T1285	Yes	2010	**NOC**	Engineering	Dec-15	$10-$20	Reliability: Increase grid reliability and capacity
68	**Grangeville Generation Interconnection Project**	**Kings County**	**Interconnect 20 MW solar generation to Pacific Gas and Electric Company's (PG&E's) Caruthers-Lemoore NAS-Camden 70 kV Line**	**70 kV**		**No**	**Yes**	**TBD**	**Engineering**	**Dec-15**	**$1-$5**	**Tariff Compliance: Connect new generation**
69	Weber 230/60 kV Transformer Nos. 2 and 2A Replacement	San Joaquin County	Replace Weber 230/60 kV Transformer Nos. 2 and 2a with a new transformer rated at least 300 MVA with LTC and associated equipment	**230/60 kV**	TBD	No	2010	Exempt	Engineering	**Apr-16**	**$10-$20**	Reliability: Increase grid reliability and capacity
70	Kern - Old River 70 kV Reconductoring	Kern	Reconductoring Kern-Old River 70 kV lines in two phases. Phase 1- Reconductor Kern-Old River 1, 70 kV line with operation date of April 2014, Phase 2- Kern-Old River 2, 70 kV with operation date of April 2016	70 kV	T1081	No	2009	NOC	Engineering	Apr-16	**$30-$40**	Reliability: Increase grid reliability and capacity
71	Monta Vista - Los Altos 60 kV Reconductoring	De Anza	**Reconductor about 2 miles of the Monta Vista - Los Altos 60 kV Line with larger conductors.**	60 kV	T981	No	2007	NOC	Planning	May-16	$1-$5	Reliability: Increase grid reliability and capacity
72	**Contra Costa sub 230kV Switch Replacement**	**Contra Costa County**	**Replace 230 kV Switch No. 239 at Contra Costa Substation that currently limits the Contra Costa PP-Contra Costa Sub 230 kV Line to 1600 Amps. Any other limiting element will be replaced as well.**	**230 kV**		**No**	**2013**	**TBD**	**Planning**	**May-16**	**$1-$5**	**Reliability: Increase grid reliability and capacity**
73	Kearney 230/70 kV Transformer 2	Fresno	Install second 230/70 kV Transformer at Kearney Substation rated for 200 MVA or higher, install 4 element 230 kV ring, expand 70 kV bus and re-terminate lines	**230/70 kV**	T1260	Yes	**2013**	Exempt	Engineering	May-16	$30-$40	Reliability: Increase grid reliability and capacity
74	Ripon 115 kV New Line	Stockton	Install 2nd, 5 mile line from Riverbank Jct. Sw. Sta. - Manteca 115 kV Line to Ripon Sub and loop Ripon Sub between new line and exsiting tap line.	115 kV	T5915	No	2013	NOC	Engineering	May-16	**$10-$20**	Reliability: Increase grid reliability and capacity
75	**Cal SP V Generation Interconnection Project**	**Merced County**	**Interconnect a 20 megawatt (MW) (net output) solar power-based generation facility to Pacific Gas and Electric Company's (PG&E's) Merced – Poso Junction #1 70 kV Line**	**70 kV**		**No**	**Yes**	**TBD**	**Engineering**	**May-16**	**$1-$5**	**Tariff Compliance: Connect new generation**

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
76	**Kern-Tevis-Lamont 115kV Line Reconductoring**	**Kern County**	**Reconductor 4.18 miles of Pacific Gas and Electric Company's (PG&E's) Kern-Tvis-Lamont 115kV Line with 477 ACSS as generation interconnection mitigation plan**	**115 kV**		**No**	**Yes**	**TBD**	**Engineering**	**Jun-16**	**$1-$5**	**Tariff Compliance: Connect new generation**
77	Bay Meadows 115 kV Reconductoring	Peninsula	Reconductor 2.5 miles of 115 kV Transmission Lines 1 & 2 between San Mateo and Bay Meadows Substations	115 kV	T249	No	2000	NOC	Engineering	**Sep-16**	$5-$10	Reliability: Increase grid reliability and capacity
78	Maple Creek Ring Bus Configuration	Humboldt	Convert the bus to a five circuit breaker ring bus.	60 kV	N/A	No	Not Yet	TBD	Engineering	**Dec-16**	$10-$20	Reliability: Increase grid reliability
79	Maple Creek SVC Installation Project	Humboldt	Install a voltage support device at Maple Creek Substation.	60 kV	N/A	No	2009	TBD	Engineering	**Dec-16**	$10-$20	Reliability: Increase grid reliability and capacity
80	Green Valley 115 kV Bus Upgrade Project	Santa Cruz County	Rebuild Green Valley 115 kV bus into a BAAH configuration	115 kV	T1172B	No	2009	NOC	Planning	Dec-16	$20-$30	Reliability: Increase grid reliability and capacity
81	Christie 115/60 kV Transformer	Contra Costa County	Install a new 3-phase 115/60 kV, 100 MVA Transformer No. 2, upgrade and install new substation facilities at Christie Substation.	**115/60 kV**		Yes	2013	Exempt	Engineering	Dec-16	$10-$20	Reliability: Increase grid reliability and capacity
82	Contra Costa – Moraga 230 kV Reconductoring	East Bay	Reconductor the Contra Costa - Moraga 230 kV DCTL with larger capacity conductors.	230 kV	T991	Yes	2006	NOC	**Permitting**	**Dec-16**	**$30-$40**	Reliability: Increase grid reliability and capacity
83	Oro Loma 115 kV Breaker-and-a-Half Installation	Merced County	Upgrade the Oro Loma 115 kV to a 3-bay BAAH bus	115 kV		No	N/A	Exempt	Engineering	Dec-16	$10-$20	Reliability: Increase grid reliability
84	Weber-French Camp 60 kV Reconfiguration	San Joaquin County	Extend the Weber 60 kV Line No. 1 by 0.2 mile; extend the Weber 60 kV bus for a new bay; install a 60 kV circuit breaker at Weber Substation; install a station by-pass switch and three 60 kV circuit breakers at French Camp Substation	60 kV	T1233	No	Not Yet	Exempt	Engineering	Dec-16	**$5-$10**	Reliability: Increase grid reliability and capacity
85	AltaGas Renewable Energy Pacific Generation Interconnection	Colusa County	AltaGas Renewable Energy Pacific, Inc., is proposing to interconnect for its Walker Ridge Wind Energy Project, which is a wind generating facility comprised of 29 wind turbines rated at 2.3 MW each and an overall net generating capacity of 66.2 MW. The Project is located in Colusa, California and is proposing to interconnect to the Eagle Rock-Cortina 115 kV Line via a new switching station and a generation tie line. The proposed Commercial Operation Date (COD) of the Project is December 31, 2012.	115 kV	N/A	No	Yes	NOC	Engineering	Dec-16	$1-$5	Tariff Compliance: Connect new generation
86	**Moraga Transformer No. 2 Capacity Increase**	Diablo	Replace Transformer number 2, 230/115 kV at Moraga Substation with a 420 MVA rated unit.	**230/115 kV**		No	2007	Exempt	Engineering	Dec-16	$10-$20	Reliability: Increase grid reliability and capacity
87	Stockton 'A'-Weber 60 kV Line Nos. 1 and 2 Reconductor	San Joaquin County	Reconductor the Stockton 'A'-Santa Fe and Santa Fe-Weber sections of the Stockton 'A'-Weber 60 kV Line Nos. 1 and 2 (4.4 miles each with 2.6 miles of 336 AAC, 1.5 miles of #2/0 CU, and 0.3 miles of 397 AAC conductors for a total of 8.8 miles between the two lines) with a conductor rated at least 700 Amps emergency.	60 kV	T1213	No	2010	NOC	Engineering	May-17	**$5-10**	Reliability: Increase grid reliability and capacity
88	Evergreen-Mabury 115 kV Conversion	San Jose	Convert Mabury Substation for 115 kV operation and rebuild Evergreen-Mabury 60 kV Line for 115 kV operation.	115 kV	T1127	No	2009	PTC	Engineering	**May-17**	**$30-$40**	Reliability: Increase grid reliability and capacity
89	Humboldt - Eureka 60 kV Line Capacity Increase	Humboldt	This project proposes to replace protection equipment on the Humboldt-Eureka 60 kV line between Harris and Eureka substations	60 kV		No	2012	Exempt	Engineering	**May-17**	$1-$5	Reliability: Increase grid reliability and capacity
90	Fulton-Fitch Mountain 60 kV Reconductor	North Coast	The project scope is to reconductor 8-mile section of the Fulton-Hopland 60 kV Line with conductor rated for 742 Amps or higher summer emergency rating. If necessary, associated line terminal equipment would be upgraded.	60 kV	N/A	No	2009	NOC	Engineering	**May-17**	**$10-$20**	Reliability: Increase grid reliability and capacity
91	Glenn #1 60 kV Reconductoring	North Valley	The scope is to reconductor 5.5 miles of the Glenn 60 kV No. 1 Line with a higher capacity conductor capable of handling a minimum of 740 Amps.	60 kV	N/A	No	2009	NOC	Engineering	May-17	**$5-$10**	Reliability: Increase grid reliability and capacity
92	Napa – Tulucay No. 1 60 kV Line Upgrades	North Bay	This project proposes to reconductor 3.7 miles of the Napa – Tulucay No. 1 60 kV Line from Tulucay Substation to Tulucay Junction. This project also proposes to replace Tulucay Junction SW No. 19 and Napa CB No. 12 and its associated disconnect and bypass switches	60 kV		No	2012	TBD	Engineering	May-17	$5-$10	Reliability: Increase grid reliability and capacity
93	Ravenswood-Cooley Landing 115 kV Reconductoring	Peninsula	Reconductor approximately 1.8 miles of line on the Ravenswood-Cooley Landing 115 kV Line Nos. 1 and 2 with conductors 1,100 amps or greater.	115 kV	T1040	No	2009	NOC	Engineering	May-17	$5-$10	Reliability: Increase grid reliability and capacity
94	Reedley-Orosi 70 kV Reconductoring	Tulare County	The project scope involves reconductoring approximately 2 miles of the Reedley-Orosi 70 kV line from Orosi Jct to Orosi Substation with a conductor rated to handle up to 600 Amps and 700 Amps under summer normal and summer emergency conditions, respectively. In addition, 20 MVARs of shunt capacitors will be installed at Dinuba Substation.	70 kV	T1194	No	2010	Exempt	Engineering	May-17	**$5-$10**	Reliability: Increase grid reliability and capacity
95	Cooley Landing - Los Altos 60 kV Reconductoring	Peninsula	Reconductor 11 miles of the Cooley Landing - Los Altos 60 kV Line with larger capacity conductors.	60 kV	T1011	No	2009	NOC	Planning	**May-17**	$5-$10	Reliability: Increase grid reliability and capacity
96	Monta Vista - Los Gatos - Evergreen 60 kV Project	Santa Clara County	Reconductor limiting sections of the Monta Vista-Los Gatos and the Evergreen-Almaden 60 kV Lines and upgrade the Los Gatos 60 kV bus	60 kV	T1106	No	2009	NOC	Planning	May-17	**$10-$20**	Reliability: Increase grid reliability and capacity

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
97	Stockton Generation Expansion Project	San Joaquin County	Stockton Generation, LLC, proposing to interconnect two gas turbines and a steam turbine with a combined output of 508 MW. The proposed Commercial Operation Date of the project is May 1, 2014. The project will interconnect with PG&E's Bellota – Tesla No. 2 and Weber-Tesla 230 kV transmission lines by looping these lines into a new switching station and require reconductoring of the Warnerville-Wilson 230 kV Line.	230 kV	TBD	No	Yes	TBD	Planning	May-17	**$40-$50**	Tariff Compliance: Connect new generation
98	Mesa-Sisquoc 115 kV Line Reconductoring	Santa Barbara and San Luis Obispo Counties	Reconductor approximately four miles of Mesa-Sisquoc 115 kV line	115 kV		No	2011	NOC	Engineering	**May-17**	$10-$20	Reliability: Increase grid reliability and capacity
99	Reedley-Dinuba 70 kV Reconductoring	Tulare County	Reconductor the Reedley-Dinuba 70 kV Line. The project scope includes reconductoring approximately 8 miles of the Reedley-Dinuba 70 kV Line with a conductor rated to handle up to 600 Amps and 700 Amps under summer normal and summer emergency conditions respectively.	70 kV	T1197	No	2010	Exempt	Engineering	May-17	**$5-$10**	Reliability: Increase grid reliability and capacity
100	Mosher Transmission Project	Stockton	Reconductor the Lockeford #1 60 kV Line.	60 kV	T760	No	Not Yet	NOC	Engineering	May-17	$10-$20	Reliability: Increase grid reliability and capacity
101	Helm-Kerman 70 kV Line Reconductor	Fresno	Reconductor 2 miles of the Helm-Kerman 70 kV Line	70 kV	N/A	No	2012	NOC	Engineering	May-17	**$1-$5**	Reliability: Increase grid reliability and capacity
102	Oro Loma- Mendota 115 kV Conversion Project	Merced County	This project proposes to convert 20 circuit miles of the Oro Loma- Mendota 70 kV Line from 70 kV to 115 kV, install two SCADA switches at Firebaugh Substation, replace the 70/12 kV transformer at Firebaugh with a 115/12 kV transformer, and install 115 kV terminals at Oro Loma and Mendota substations.	115 kV		No	**2011**	TBD	Engineering	May-17	$30-$40	Reliability: Increase grid reliability and capacity
103	Midway-Kern PP 230 kV Line Nos. 1, 3 and 4 Capacity Increase Project	Kern	Replace limiting components at Kern PP and Midway Substations, to achieve full capacity on the Midway-Kern 230 kV Line Nos. 1, 3 and 4	230 kV		No	2012	Exempt	Engineering	**May-17**	**$5-$10**	Reliability: Increase grid reliability and capacity
104	Missouri Flat - Gold Hill 115 kV Reconductor	Sierra	Reconductor the Missouri Flat - Gold Hill 115 kV Line between Gold Hill and Shingle Springs with larger capacity conductors.	115 kV	T444C	Yes	2008	PTC	**Permitting**	Jun-17	**$30-$40**	Reliability: Increase grid reliability and capacity
105	Santa Cruz 115 kV Reinforcement Project	Santa Cruz County	Construct new Green Valley-Rob Roy 115 kV Line and build new 115 kV ring bus at Rob Roy	115 kV	T1173A	No	2009	PTC	Engineering	**Oct-17**	**$40-$50**	Reliability: Increase grid reliability and capacity
106	Moraga - Castro Valley 230 kV Line Capacity Increase Project	Alameda County	Upgrade the limiting substation equipment (jumper conductors and wave traps) at Moraga and Castro Valley substations	230 kV		No	2011	Exempt	Engineering	Dec-17	**$5-$10**	Reliability: Increase grid reliability and capacity
107	Fulton 230/115 kV Transformer	Sonoma	This project proposes to install a 230/115 kV transformer at Fulton Substation rated for 420 MVA or higher.	**230/115 kV**		No	2011	Exempt	Engineering	**Dec-17**	$10-$20	Reliability: Increase grid reliability and capacity
108	Jefferson-Stanford #2 60 kV	Peninsula	Construct a new 60 kV transmission line from Jefferson Substation to Stanford's substation	60 kV	T1492	No	2011	PTC	Engineering	**Dec-17**	$20-$30	Reliability: Increase grid reliability and capacity
109	North Tower 115 kV Looping Project	North Bay	This project proposes to loop North Tower Substation into the Martinez-Sobrante 115 kV Line by utilizing an idle 115 kV line into North Tower and reconfiguring the connection points at Martinez JCT	115 kV		No	2012	TBD	Engineering	Dec-17	$5-$10	Reliability: Increase grid reliability and capacity
110	Tesla - Newark 230 kV Upgrade II	Bay Area	Reconductor limiting sections of Tesla - Newark 230 kV No. 2 with larger capacity conductors.	230 kV	T670 B	No	2006	NOC	Engineering	Dec-17	$5-$10	Reliability: Increase grid reliability and capacity
111	Gates No. 2 500/230 kV Transformer	Fresno	Install a second 500/230/13.8 kV transformer (three single-phase units, 374 MVA each) at Gates Substation	**500/230 kV**		No	2013	TBD	Engineering	Dec-17	**$80-$90**	Reliability: Increase grid reliability and capacity
112	Kearney-Herndon 230 kV Line Reconductor	Fresno	Reconductor 10 miles of the Kearney - Herndon 230 kV Line	230 kV		No	2013	TBD	Engineering	Dec-17	**$20-$30**	Reliability: Increase grid reliability and capacity
113	Northern Fresno 115 kV Area Reinforcement	Fresno	Build a new 230/115 kV substation north-east of Fresno. The 230 kV bus will have two 230 kV lines to Gregg, two 230 kV lines to Helms, and two 420 MVA 230/115 kV transformers. In addition to the transformers, the 115 kV bus will also have two 115 kV lines to Kerckhoff PH2, two 115 kV lines to Sanger and one 115 kV line to Shepherd substation.	115 kV		No	2013	CPCN	Engineering	Dec-17	**$150-$200**	Reliability: Increase grid reliability and capacity
114	Rio Oso 230/115 kV Transformers	Sierra	Replace the Rio Oso 230/115 kV transformers (Nos. 1 and 2) with two 420 MVA rated transformers. Convert 115 kV bus to BAAH.	**230/115 kV**	T985B	No	2007	Exempt	Engineering	Dec-17	$10-$20	Reliability: Increase grid reliability and capacity
115	Rio Oso Area 230 kV Voltage Support	Sierra	Install a new Static Var Compensator (SVC) at Rio Oso Substation and a new Shunt Capacitor at Atlantic Substation.	230 kV		No	2012	Exempt	Engineering	Dec-17	$30-$40	Reliability: Increase grid reliability and capacity
116	Warnerville-Wilson 230 kV Series Reactor	Fresno	Install a 230 kV multi-step Reactor totaling 50.5 ohms, and associated equipment at Wilson Substation, on the Warnerville-Wilson 230 kV line	230 kV		No	2013	TBD	Engineering	Dec-17	$20-$30	Reliability: Increase grid reliability and capacity
117	Woodward 115 kV Reinforcement	Fresno	Reconductor the Kerckhoff-Clovis-Sanger and Herndon-Woodward 115 kV lines with larger capacity conductors.	115 kV	T986	No	Not Yet	NOC	Planning	Dec-17	**$40-$50**	Reliability: Increase grid reliability and capacity

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
118	Racetrack - Curtis 115 kV Line	Stanislaus	Construct a new 115 kV, 8.5 mile line from Racetrack Substation to Curtis Substation. Extend the existing Chinese Station Junction – Racetrack Junction line by 3.6 miles to terminate at Racetrack Substation. Upgrade bus arrangement at Curtis and Racetrack substations.	115 kV		No	Not Yet	TBD	Cancelled	May-18	**$10-$20**	Reliability: Increase grid reliability and capacity
119	Cascade - Benton 60 kV Line	North Valley	Construct a new Cascade – Benton 60 kV Line (10 miles) and reconfigure the Cascade – Benton – Deschutes 60 kV Line to Cascade – Benton and Benton – Deschutes 60 kV Lines.	60 kV		No	2011	TBD	Engineering	**May-18**	$10-$20	Reliability: Increase grid reliability and capacity
120	San Mateo-Bair 60 kV Reconductoring	San Mateo County	Reconductor the San Mateo-Bair 60 kV Line (11 miles) with conductors rated to handle 1100 Amps or greater.	60 kV	T1114	No	2009	NOC	Engineering	May-18	$5-$10	Reliability: Increase grid reliability and capacity
121	Table Mountain - Sycamore Creek 115 kV Line	North Valley	Construct a 20 mile 115 kV transmission line from Table Mountain to Sycamore Creek substations.	115 kV		No	2011	PTC	Engineering	May-18	$30-$40	Reliability: Increase grid reliability and capacity
122	Cressey-North Merced 115 kV Line Addition	Merced County	This project proposes to construct a new 6 mile 115 kV Line from North Merced Substation to Cressey Substation. North Merced and Cressey substations will be expanded as necessary to accommodate the new 115 kV Line.	115 kV		No	2012	PTC	Engineering	May-18	**$20-$30**	Reliability: Increase grid reliability and capacity
123	Metcalf-Piercy, Swift-Metcalf, and Newark-Dixon Landing 115 kV Lines	Santa Clara County	Reconductor 115 kV transmission lines (261 MVA rating). (Evergreen-Mabury project defers the need for this project.)	**115 kV**	T692	No	2002	NOC	Engineering	May-18	$10-$20	Reliability: Increase grid reliability and capacity
124	San Mateo Synchronous Condensor Replacement	San Mateo County	Install reactive support device to replace old synchronous condensers	115 kV	T1107A	No	2006	Exempt	Planning	**May-18**	**$20-$30**	Reliability: Increase grid reliability and capacity
125	Atlantic-Placer 115 kV Line	Sierra	Construct a new 115 kV line between existing Atlantic and Placer 115 kV substations (approximately 14 miles long, capable of 1,100 Amps under emergency conditions), adding a second Placer 115/60 kV three phase transformer rated at 200 MVA and installing an SPS for the loss of two Gold Hill 230/115 kV transformers.	115 kV		No	2013	PTC	Planning	May-18	**$80-$90**	Reliability: Increase grid reliability and capacity
126	Natividad Substation	Central Coast	Interconnect distribution substation.	115 kV	TBD	No	2008	TBD	Planning	May-18	$10-$20	Reliability: Increase grid reliability and capacity
127	Soledad Transformer Capacity Increase	Monterey	Replace 115/60 kV Transformers Nos. 4 and 5 with 200 MVA units at Soledad Substation	**115/60 kV**	T996	No	2006	Exempt	Planning	May-18	$5-$10	Reliability: Increase grid reliability and capacity
128	Cortina #3 60 kV Line Reconductoring	Colusa County	Reconductor the Cortina No. 3 60 kV Line (5.6 miles of 4/0 AA conductors).	60 kV		No	2011	TBD	Engineering	**May-18**	$5-$10	Reliability: Increase grid reliability and capacity
129	Full Moraga - Oakland "J" SPS	Alameda County	Install a Special Protection System to address reliability issues.	115 kV	T1217	Yes	2010	Exempt	Engineering	May-18	$1-$5	Reliability: Increase grid reliability
130	Cayucos 70 kV Shunt Capacitor	San Luis Obispo County	install a 25 MVAR Shunt Capacitor at Cayucos Substation	70 kV		No	2011	Exempt	Engineering	May-18	$10-$20	Reliability: Increase grid reliability and capacity
131	Pittsburg 230/115 kV Transformer Capacity Increase	East Bay	Install 3rd 230/115 kV Transformer at Pittsburg Substation with a rating of 420 MVA	**230/115 kV**	T999	No	2006	Exempt	Engineering	May-18	**$10-$20**	Reliability: Increase grid reliability and capacity
132	Ashlan-Gregg and Ashlan-Herndon 230 kV Reconductor	Fresno	Reconductor limiting sections of Ashlan-Gregg and Ashlan-Herndon 230 kV sections with higher rated conductors.	230 kV	T1195	No	2010	NOC	Engineering	May-18	$10-$20	Reliability: Increase grid reliability and capacity
133	Cottonwood - Red Bluff 60 kV Reconductor	Tehama	Construct new 230kV Station, Construct 2 new 60 kV Lines and Re-terminate existing 60 kV Lines	60 kV	T1211	No	2010	TBD	Engineering	May-18	$50-$60	Reliability: Increase grid reliability and capacity
134	Oro Loma 70 kV Area Reinforcement	Merced County	This project proposes to build a new 230/70 kV Mercy Springs Substation looped into the Los Banos-Panoche 230 kV No.2 Line.	70 kV		No	2012	TBD	Engineering	May-18	$40-$50	Reliability: Increase grid reliability and capacity
135	Reedley 70 kV Reinforcement	Fresno	Reconductor approximately 9 miles of the Dinuba-Orosi 70 kV Line and remove limiting equipment on the Reedley-Orosi 70 kV Line.	70 kV		No	2012	NOC	Engineering	May-18	**$5-$10**	Reliability: Increase grid reliability and capacity
136	Wilson 115 kV Area Reinforcement	Merced County	This project proposes to install a new 230/115 kV substation that is looped into the Melones-Wilson 230 kV Line, and install a new 4 mile 115 kV double circuit tower line from the new substation to El Capitan Substation.	115 kV		No	2012	TBD	Engineering	May-18	**$40-$50**	Reliability: Increase grid reliability and capacity
137	Kerckhoff PH No. 2 -Oakhurst 115 kV Line	Madera	Build new 28 mile 115 kV line from Kerckhoff to Coarsegold and upgrade Oakhurst and Coarsegold to looped stations.	115 kV	T1285	No	2011	PTC	**Permitting**	May-18	$40-$50	Reliability: Increase grid reliability and capacity
138	Diablo Canyon Voltage Support Project	Central Coast	Install a +150/-75 MVAR Reactive support device at Diablo Canyon 230 kV Substation	230 kV		No	2012	Exempt	Planning	May-18	**$40-$50**	Reliability: Increase grid reliability and capacity
139	Mountain View/Whisman-Monta Vista 115 kV Reconductoring	Santa Clara County	Reconductor both the Whisman-Monta Vista and Mountain View-Monta Vista 115 kV Lines (approximately 6 and 4.8 miles long, respectively) with conductors ratings of at least 800 Amps and 1200 Amps for summer normal and summer emergency conditions, respectively.	115 kV	T1182	No	2010	NOC	Planning	**May-18**	$10-$20	Reliability: Increase grid reliability and capacity
140	Vaca Dixon - Lakeville 230 kV Reconductoring	North Coast	Reconductor the Vaca – Lakeville No. 1, Tulucay – Vaca, and Tulucay – Lakeville 230 kV Lines with larger capacity conductors.	230 kV	T603B	Yes	2006	TBD	Engineering	Jun-18	**$90-$100**	Reliability: Increase grid reliability and capacity

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
141	East Shore - Oakland J 115 kV Reconductoring	East Bay	This project proposes to reconductor the Grant-East Shore Nos. 1 and 2 115 kV lines, reconductor the Oakland J-Grant 115 kV Line, and bring a third 115 kV line into Oakland J Substation	115 kV		No	2012	TBD	Engineering	Jul-18	$30-$40	Reliability: Increase grid reliability and capacity
142	Pease-Marysville 60 kV Line	North Valley and Sierra	Construct new 60kV transmission line between Pease and Marysville Substations	60 kV	T815	Yes	2005	TBD	Engineering	Dec-18	$10-$20	Reliability: Increase grid reliability and capacity
143	Watsonville 115 kV Conversion (Salinas - Watsonville Plan)	Santa Cruz and Monterey Counties	Convert 60 kV system from Green Valley to Watsonville and from Watsonville to Crazy Horse Canyon to 115 kV	115 kV	T695	No	2009	PTC	Planning	Dec-18	**$40-$50**	Reliability: Increase grid reliability and capacity
144	Cascade 115/60 kV No.2 Transformer	Shasta County	Install a new three-phase, Cascade 115/60 kV Transformer rated at 200 MVA, install a high side 115 kV circuit breaker on Transformer No. 1 and upgrade substation equipment to achieve the maximum transformer rating.	**115/60 kV**	T1116	No	2011	TBD	Engineering	**May-19**	$10-$20	Reliability: Increase grid reliability and capacity
145	Vierra 115 kV Looping Project	San Joaquin County	This project proposes to loop the Tesla-Stockton Co-Gen Junction 115 kV Line into Vierra Substation and convert the Vierra 115 kV bus to a breaker-and-a-half (BAAH) bus.	115 kV		No	2012	TBD	Engineering	May-19	$10-$20	Reliability: Increase grid reliability and capacity
146	Ignacio - Alto 60 kV Line Voltage Conversion	North Bay	This project proposes to replace limiting equipment on the Ignacio – San Rafael Numbers (Nos.) 1 and 3 115 kV lines and to convert 15 miles of the Ignacio – Alto 60 kV Line to 115 kV operation	60 kV		No	2012	TBD	Engineering	**May-19**	**$40-$50**	Reliability: Increase grid reliability and capacity
147	South of Palermo 115 kV Reinforcement	Sierra	Reconductor the southern portions of the Palermo – Rio Oso 115 kV Line Nos. 1 and 2 as well as the entire Palermo – Pease and Pease – Rio Oso 115 kV Lines.	115 kV	T686C	No	2011	TBD	Engineering	**May-19**	$60-$70	Reliability: Increase grid reliability and capacity
148	Kingsburg-Lemoore 70 kV Line Reconductoring	Fresno	Reconductor the Kingsburg-Lemoore 70 kV Line	70 kV	T1228	No	Not Yet	NOC	Engineering	May-19	**$10-$20**	Reliability: Increase grid reliability and capacity
149	Metcalf-Evergreen 115 kV Lines	San Jose	Reconductor Metcalf-Evergreen 115 kV transmission lines (224 MVA rating)	**115 kV**	T854	No	2002	TBD	Planning	May-19	**$10-$20**	Reliability: Increase grid reliability and capacity
150	Ignacio - San Rafael 115 kV Reconductoring	North Bay	Reconductor the Ignacio - San Rafael 115 kV Nos. 1 and 3 lines with larger capacity conductors.	115 kV	T197B	No	2012	NOC	Planning	**May-19**	$1-$10	Reliability: Increase grid reliability and capacity
151	Borden 230 kV Voltage Support	Madera	This project proposes to loop the Wilson-Gregg 230 kV Line into Borden Substation (Borden) and install 200 MVARs of mechanically switched capacitors on the Borden 230 kV bus.	230 kV		No	2012	TBD	Engineering	May-19	**$10-$20**	Reliability: Increase grid reliability and capacity
152	Glenn - Corning 60 kV Line	North Valley	Build new 12 mile line from Glenn to Corning 60 kV Substation. Upgrade bus at Corning and add new bay and breaker to Glenn.	60 kV	T1225	No	Not Yet	TBD	Engineering	May-19	$20-$30	Reliability: Increase grid reliability and capacity
153	South of San Mateo Capacity Increase	Bay Area	**Upgrade the Newark-Ames and Ravenswood-San Mateo 115 kV Lines and substation equipment, as needed.**	115 kV	T920A	No	2006	TBD	Engineering	**May-19**	$50-100	Reliability: Increase grid reliability and capacity
154	Vaca Dixon-Davis 115 kV Conversion	Sacramento	Rebuild 60 kV facilities between Vaca Dixon and Davis substations to 115 kV.	115 kV	T1053	No	2011	TBD	Engineering	**May-19**	$80-$90	Reliability: Increase grid reliability and capacity
155	West Point-Valley Springs 60 kV Radial Line Improvement	Stockton	Add new 18.5 mile line between Valley Springs and Pine Grove substations. Install four-CB ring bus at Pine Grove and one CB at Valley Springs.	60 kV	T1227	No	2011	TBD	Engineering	**May-19**	$30-$40	Reliability: Increase grid reliability and capacity
156	Ignacio-Mare Island 115 kV Reinforcement Plan	Solano County	Reconductor 19 miles of both the Ignacio – Mare Island Numbers (Nos.) 1 and 2 115 kV Lines with higher rated conductors.	115 kV	T1135	No	2010	NOC	Engineering	**May-19**	**$30-$40**	Reliability: Increase grid reliability and capacity
157	Morro Bay 230/115 kV Transformer	San Luis Obispo County	Install an additional 230/115 kV transformer at Morro Bay Substation rated for 200 MVA or higher.	**230/115 kV**	T1196	No	2010	Exempt	Engineering	**May-19**	**$10-$20**	Reliability: Increase grid reliability and capacity
158	Clear Lake 60 kV Reinforcement	Humboldt	This project proposes to install a 115/60 kV transformer at Middletown Substation and construct 12 miles of new 115 kV line to connect Middletown Substation to Lower Lake Substation	60 kV	T1134	No	2009	PTC	Engineering	**May-19**	$30-$40	Reliability: Increase grid reliability and capacity
159	Stagg - Hammer 60 kV Line	Stockton	This project proposes to install a new 4.2 miles of 60 kilovolt (kV) line between at Stagg and Hammer substations.	60 kV		No	2012	TBD	Engineering	**May-19**	$10-$20	Reliability: Increase grid reliability and capacity
160	West Point - Valley Springs 60 kV Line Reinforcement	Stockton	Reconductor about 11 miles of the West Point - Valley Springs 60 kV Line with larger conductors (66 MVA rating).	**60 kV**	T880B	Yes	2007	TBD	Engineering	**May-19**	$5-$10	Reliability: Increase grid reliability and capacity
161	Taft 115/70 kV Transformer #2 Replacement	Kern	Replace Taft 115/70 kV Transformer No. 2 with a 200 MVA rated transformer.	**115/70 kV**		No	2012	Exempt	Engineering	May-19	**$10-$20**	Reliability: Increase grid reliability and capacity
162	Del Monte-Fort Ord 60 kV Reinforcement - Phase II	Monterey County	Reconductor the Fort Ord-Del Monte 60 kV Nos. 1 and 2 Lines with higher capacity conductors.	60 kV	T1138	No	2009	NOC	Planning	**May-19**	$10-$20	Reliability: Increase grid reliability and capacity
163	Kern PP 230 kV Area Reinforcement Project	Kern	• Convert Kern PP 230 kV double bus single breaker arrangement to breaker and a half • Replace limiting equipment on Kern PP 230/115 kV transformer No. 4 as necessary to achieve full transformer rating • Install a 230/115 kV Transformer Special Protection Scheme at Kern 115 kV to mitigate overloads of Kern PP Transformer Nos. 3, 4, and 5	230 kV		No	2012	Exempt	Engineering	Dec-19	$50-$60	Reliability: Increase grid reliability and capacity

CPUC TRANSMISSION AND GENERATION INTERCONNECTION PROJECTS STATUS REPORT -- PG&E TERRITORY -- Present to 2021

NO.	PROJECT NAME	LOCATION	PROJECT DESCRIPTION	RATING	ID	APPROVAL STATUS			CONSTRUCTION STATUS**	DATE IN SERVICE	General COST*** $MM	PURPOSE & BENEFIT
						UTILITY*	ISO	CPUC				
164	Bay Area 500 kV Long Term Plan	Bay Area	In the conceptual planning stage. Phase 2 economic studies underway with input from the CAISO, San Francisco and Palo Alto	TBD	T073	No	Not Yet	TBD	Cancelled	May-20	**$150-$200**	Reliability: Increase grid reliability and capacity
165	Lockeford - Lodi 60 kV Reconductoring	Stockton	Reconductor about 17 miles on the Lockeford-Industrial, Lockeford-Lodi No. 2 and Lockeford-Lodi No. 3 60 kV lines with larger capacity conductors.	60 kV	T678B	No	Not Yet	NOC	**Cancelled**	May-20	**$5-$10**	Reliability: Increase grid reliability and capacity
166	Valley Springs-Martell No. 1 60 kV Line Reconductoring	Stockton	Reconductor the Valley-Springs-Martell No. 1 60 kV Line	60 kV	T850	No	Not Yet	NOC	Engineering	**May-20**	$10-$20	Reliability: Increase grid reliability and capacity
167	Valley Springs-Martell No. 2 60 kV Line Reconductoring	Stockton	Reconductor the Valley Springs-Martell No. 2 60 kV Line	60 kV	T1298	No	Not Yet	NOC	Engineering	**May-20**	$5-$10	Reliability: Increase grid reliability and capacity
168	Wheeler Ridge Voltage Support	Kern	Install three 75 MVAR steps of mechanically switched capacitors on the Wheeler Ridge 230 kV bus, expand the 230 kV bus as necessary reconductor 0.5 miles of the Wheeler Ridge-Lakeview 70 kV line and transfer Copus from the Old River-Copus 70 kV line to the Wheeler Ridge-Lakeview 70 kV line.	230 kV		No	2012	Exempt	Engineering	May-20	**$20-$30**	Reliability: Increase grid reliability and capacity
169	Kern PP 115 kV Area Reinforcement	Kern	Reconductor approximately 38 circuit miles of various 115 kV lines serving Bakersfield area	115 kV		No	2012	TBD	Engineering	**May-20**	$50-$60	Reliability: Increase grid reliability and capacity
170	Semitropic-Midway 115 kV Line Reconductor	Kern	Reconductor 14.2 miles of the Semitropic-Midway 115 kV line	115 kV		No	2012	NOC	Engineering	**May-20**	**$10-$20**	Reliability: Increase grid reliability and capacity
171	Lockeford-Lodi Area 230 kV Development	Stockton	Construct new 15 mile 230 kV DCTL from Eight Mile Substation to Lockeford Substation	230 kV		No	2013	CPCN	Engineering	May-20	$80-$105	Reliability: Increase grid reliability and capacity
172	New Bridgeville – Garberville No. 2 115 kV Line	Humboldt	Build a new 36 mile 115 kV Line from Bridgeville to Garberville substation as well as install a 115/60 kV transformer to Garberville Substation	115 kV		No	2012	PTC	Planning	**May-20**	**$80-$90**	Reliability: Increase grid reliability and capacity
173	Midway-Andrew 230 kV	Central Coast	Upgrade existing 65 miles long Midway-Santa Maria 115KV line to 230kV	230 kV		No	2012	TBD	Planning	**Dec-20**	$120-$150	Reliability: Increase grid reliability and capacity
174	Cortina - Eagle Rock 115 kV Reconductor	North Coast	The project scope is to either install and additional 230/115 kV transformer at Cortina and reconductor Cortina - Eagle Rock and Cortina - Mendocino 115 kV lines with larger capacity conductors or convert the Eagle Rock - Fulton 115 kV line to 230 kV.	TBD	T346B	No	Not Yet	NOC	Engineering	Dec-20	**$40-$50**	Reliability: Increase grid reliability and capacity
175	Moraga-Potrero 230 kV Project	Bay Area	Establish a 230 kV connection between Moraga and Potrero Substations.	230 kV		No	Not Yet	CPCN	Planning	Dec-20	$400-$600	Reliability: Increase grid reliability and capacity
176	Vaca Dixon - Fulton Connection	North Coast and Sacramento	Establish a 115 kV connection between Vaca Dixon and Fulton substations.	115 kV	T603C	No	Not Yet	PTC	Planning	May-21	**$40-$50**	Reliability: Increase grid reliability and capacity
177	Rio Oso – Atlantic 230 kV Line	Sierra	Construct a second Rio Oso – Atlantic 230 kV Line.	230 kV		No	2011	CPCN	Engineering	**Nov-22**	$40-$50	Reliability: Increase grid reliability and capacity
178	Gates-Gregg 230 kV New Line	Fresno	Build new DCTL (roughly 60 miles) of Gates-Gregg 230 kV line and upgrade substation equipment	230 kV		No	2013	CPCN	Engineering	Dec-22	$100-$200	Reliability: Increase grid reliability and capacity

* General project approval from PG&E Management is obtained when a project is submitted to the Cal-ISO for approval. Specific and final project-by-project approval from PG&E Management is obtained after the establishment of detailed project scope, cost and schedule. Permitting, engineering, procurement and construction activities will commence once specific approval is received.

** Project Status: 1) Planning, 2) Permitting, 3) Construction, 4) Operational, and 5) Cancelled.

*** With the exception of the cost estimates for the Northeast San Jose and Tri Valley projects, which are based on the extensive evidentiary records developed in CPUC A.99-09-029 and A.99-01-025, these cost estimates are taken from the ISO Grid Planning process. Though based on the best information presently available, these estimates were developed from standard unit costs and do not generally reflect extensive analysis of engineering, routing, environmental mitigation, or feasibility issues. Changes in the presently anticipated scope of these projects -- as a result of additional analysis of the above-listed or other factors, or as a result of changes resulting from any applicable permit processes -- could substantially increase the cost of these projects.

**** Customer funded.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of **"QUARTERLY PROJECT STATUS REPORT OF PACIFIC GAS AND ELECTRIC COMPANY"** on all known parties to I.00-11-001 by

- transmitting an e-mail message with the document attached to each party on the official service list providing an email address; or
- by first-class mail, postage prepaid, to each party on the official service list not providing an email address.

Executed on January 2, 2014, at San Francisco, California.

/s/ Donna Lee
DONNA LEE

********** **SERVICE LIST** **********
Last Updated on 19-NOV-2013 by: JVG
I0011001 NOPOST

********** **PARTIES** **********

Anthony Ivancovich
CALIFORNIA INDEPENDENT SYSTEM OPERATOR
151 BLUE RAVINE ROAD
FOLSOM CA 95630
(916) 608-7135
aivancovich@caiso.com
For: CALIFORNIA INDEPENDENT SYSTEM OPERATOR (CA ISO)

Nancy Rader
Executive Director
CALIFORNIA WIND ENERGY ASSOCIATION
EMAIL ONLY
EMAIL ONLY CA 00000-0000
(510) 845-5077
nrader@calwea.org
For: CALWEA

Clyde Murley
CONSULTANT TO NRDC
1031 ORDWAY STREET
ALBANY CA 94706
(510) 528-8953
clyde.murley@comcast.net

Daniel W. Douglass
GARY ACKERMAN
DOUGLASS & LIDDELL
EMAIL ONLY
EMAIL ONLY CA 00000
(818) 961-3001
douglass@energyattorney.com
For: Western Power Trading Forum

Douglas K. Kerner
Attorney At Law
ELLISON, SCHNEIDER & HARRIS, LLP
2600 CAPITOL AVENUE, SUITE 400
SACRAMENTO CA 95816-5905
(916) 447-2166
dkk@eslawfirm.com
For: Duke Energy North America

Lynn Haug
Attorney At Law
ELLISON, SCHNEIDER & HARRIS, LLP
2600 CAPITOL AVENUE, SUITE 400
SACRAMENTO CA 95816-5905
(916) 447-2166
lmh@eslawfirm.com
For: Cal-wind Energy Association/Department of General Services

---

Norman J. Furuta
ROGER GREEN
Attorney
FEDERAL EXECUTIVE AGENCIES
1455 MARKET ST., SUITE 1744
SAN FRANCISCO CA 94103-1399
(415) 503-6994
norman.furuta@navy.mil
For: Federal Executive Agencies

Barry R. Flynn
FLYNN RESOURCE CONSULTANTS, INC.
5440 EDGEVIEW DRIVE
DISCOVERY BAY CA 94514
(925) 634-7500
brflynn@flynnrci.com
For: CITY OF SAN FRANCISCO

Michael B. Day
Attorney
GOODIN MACBRIDE SQUERI DAY & LAMPREY LLP
505 SANSOME STREET, STE 900
SAN FRANCISCO CA 94111-3133
(415) 392-7900
mday@goodinmacbride.com
For: Goodin, MacBride Law Firm

Brian T. Cragg
Attorney
GOODIN, MACBRIDE, SQUERI, DAY & LAMPREY
505 SANSOME STREET, SUITE 900
SAN FRANCISCO CA 94111
(415) 392-7900
BCragg@GoodinMacbride.com
For: Caithness Energy, LLC

James H. Caldwell Jr.
IBERDROLA RENEWABLES INC
1650 E NAPA STREET
SONOMA CA 95476
(503) 796-6988
For: Iberdrola Renewables

Steven Kelly
INDEPENDENT ENERGY PRODUCERS ASSOCIATION
EMAIL ONLY
EMAIL ONLY CA 00000
(916) 448-9499
steven@iepa.com
For: IEP

Sara Steck Myers
Attorney At Law
LAW OFFICES OF SARA STECK MYERS
122 - 28TH AVENUE
SAN FRANCISCO CA 94121
(415) 387-1904
ssmyers@att.net
For: Center for Energy Efficiency & Renewable Technology; and City of San Diego

---

Randall W. Keen
Attorney At Law
MANATT PHELPS & PHILLIPS, LLP
11355 WEST OLYMPIC BLVD.
LOS ANGELES CA 90064
(310) 312-4361
rkeen@manatt.com
For: MANATT, PHELPS & PHILLIPS, LLP

John W. Leslie, Esq.
Attorney
MCKENNA LONG & ALDRIDGE LLP
EMAIL ONLY
EMAIL ONLY CA 00000
(619) 699-2536
jleslie@McKennaLong.Com
For: Border Generation Group (InterGen, Sempra Energy Resources, Coral Power LLC)

Thomas S Kimball
MODESTO IRRIGATION DISTRICT
1231 11TH STREET
MODESTO CA 95352-4060
(209) 557-1510
tomk@mid.org
For: Modesto Irrigation District

Harold M. Romanowitz
OAK CREEK ENERGY SYSTEMS, INC.
EMAIL ONLY
EMAIL ONLY CA 00000
(661) 822-6853
hal@rwitz.net

David T. Kraska
MICHELLE WILSON
Attorney At Law
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE ST, B30A / PO BOX 7442
SAN FRANCISCO CA 94105
(415) 973-7503
DTK5@pge.com
For: PG&E

Case Administration
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVE. / PO BOX 800
ROSEMEAD CA 91770
(626) 302-4875
case.admin@sce.com

Gary Chen
Attorney
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVENUE, PO BOX 800
ROSEMEAD CA 91770
(626) 302-7214
Gary.Chen@SCE.com
For: Southern California Edison Company

Jorge Chacon
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVE.
ROSEMEAD CA 91770
jorge.chacon@sce.com

Julie A. Miller
Attorney At Law
SOUTHERN CALIFORNIA EDISON COMPANY
2244 WALNUT GROVE AVE, RM. 345/POBOX 800
ROSEMEAD CA 91770
(626) 302-4017
millerja@sce.com
For: Southern California Edison Company

Matthew Freedman
MICHEL PETER FLORIO
THE UTILITY REFORM NETWORK
EMAIL ONLY
EMAIL ONLY CA 00000
(415) 929-8876 X304
matthew@turn.org
For: TURN

Joseph M. Karp
Attorney At Law
WINSTON & STRAWN, LLP
101 CALIFORNIA STREET, 39TH FLOOR
SAN FRANCISCO CA 94111-5894
(415) 591-1000
jkarp@winston.com
For: California Wind Energy Association

********** SERVICE LIST **********
Last Updated on 19-NOV-2013 by: JVG
I0011001 NOPOST

********** STATE EMPLOYEE **********

Jon Davidson
Vice President
ASPEN ENVIRONMENTAL GROUP
5020 CHESEBRO ROAD, STE. 200
AGOURA HILLS CA 91301
(818) 597-3407
jdavidson@aspeneg.com
For: ASPEN ENVIRONMENTAL GROUP

Negar Vahidi
Senior Associate
ASPEN ENVIRONMENTAL GROUP
5020 CHESEBRO ROAD, STE. 200
AGOURA HILLS CA 91301
(818) 597-3407
nvahidi@aspeneg.com
For: ASPEN ENVIRONMENTAL GROUP

Jesse A. Ante
Energy Division
AREA 4-A
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2820
ja1@cpuc.ca.gov

Niki Bawa
Executive Division
RM. 5038
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2049
nb2@cpuc.ca.gov

Billie C. Blanchard
Energy Division
AREA 4-A
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2068
bcb@cpuc.ca.gov

Traci Bone
Legal Division
RM. 5027
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2048
tbo@cpuc.ca.gov

Clare Laufenberg
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS 46
SACRAMENTO CA 95814
(916) 654-4859
claufenb@energy.state.ca.us
For: CALIFORNIA ENERGY COMMISSION

Don Kondoleon
Transmission Evaluation Unit
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS-46
SACRAMENTO CA 95814-5512
(916) 654-3918
dkondole@energy.state.ca.us
For: California Energy Commission

Judy Grau
CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET MS-46
SACRAMENTO CA 95814-5512
(916) 653-1610
jgrau@energy.state.ca.us

Karen Griffin
Executive Office
CALIFORNIA ENERGY COMMISSION
1516 9TH STREET, MS 39
SACRAMENTO CA 95814
(916) 654-4833
kgriffin@energy.state.ca.us
For: CALIFORNIA ENERGY COMMISSION

Anne Gillette
CALIFORNIA PUBLIC UTILITIES COMMISSION
EMAIL ONLY
EMAIL ONLY CA 00000
(415) 703-5219
AEG@cpuc.ca.gov

Judy Cooper
Consumer Service & Information Division
AREA 2-B
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2188
jms@cpuc.ca.gov

********** **SERVICE LIST** **********
Last Updated on 19-NOV-2013 by: JVG
I0011001 NOPOST

Paul Douglas
Energy Division
AREA 4-A
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 355-5579
psd@cpuc.ca.gov

Robert Elliott
Energy Division
AREA 4-A
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2527
rae@cpuc.ca.gov

Thomas Flynn
Energy Division
770 L Street, Suite 1250
Sacramento CA 95814
(916) 324-8689
trf@cpuc.ca.gov

Aaron J. Johnson
Division of Ratepayer Advocates
RM. 4102
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2495
ajo@cpuc.ca.gov

Kelly C. Lee
Division of Ratepayer Advocates
RM. 4108
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-1795
kcl@cpuc.ca.gov

Kenneth Lewis
Energy Division
RM. 4012
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-1090
kll@cpuc.ca.gov

Scott Logan
Division of Ratepayer Advocates
RM. 4108
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-1418
sjl@cpuc.ca.gov

Mark R. Loy
Division of Ratepayer Advocates
RM. 4205
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2268
mrl@cpuc.ca.gov

Chloe Lukins
Division of Ratepayer Advocates
RM. 4102
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-1637
clu@cpuc.ca.gov

Pamela Nataloni
Legal Division
RM. 5124
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-4132
jpn@cpuc.ca.gov

Marcelo Poirier
Executive Division
RM. 5025
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-2913
mpo@cpuc.ca.gov

Merideth Sterkel
Energy Division
AREA 4-A
505 Van Ness Avenue
San Francisco CA 94102 3298
(415) 703-1873
mts@cpuc.ca.gov

********* **INFORMATION ONLY** **********

Tim Wood
Manager, Western Region
AMERICAN SUPERCONDUCTOR
PO BOX 26354
SCOTTSDALE AZ 85255
(602) 296-7507
TWood@AmSuper.com

Susan V. Lee
ASPEN ENVIRONMENTAL GROUP
235 MONTGOMERY STREET, ROOM 935
SAN FRANCISCO CA 94104
(415) 955-4775 X 203
slee@aspeneg.com

Tom Murphy
ASPEN ENVIRONMENTAL GROUP
5020 CHESEBRO ROAD, STE. 200
AGOURA HILLS CA 91301
(818) 597-3407
tmurphy@aspeneg.com
For: ASPEN ENVIRONMENTAL GROUP

Ryan Wiser
BERKELEY LAB
1 CYCLOTRON ROAD, MS-90-4000
BERKELEY CA 94720
(510) 486-5474
rhwiser@lbl.gov
For: BERKELEY LAB

Hedy Born
235 MONTGOMERY STR., STE. 935
SAN FRANCISCO CA 94104
hborn@aspeneg.com

Bruce Mclaughlin
Attorney At Law
BRAUN & BLAISING P.C.
EMAIL ONLY
EMAIL ONLY CA 00000
(916) 326-5813
mclaughlin@braunlegal.com

Rich Ferguson, Phd
Research Director
CA ENERGY EFFICIENCY AND RENEWABLE TECH
PO BOX 1045
BOONVILLE CA 95415
(707) 895-9121
rich@ceert.org
For: CEERT

Jim Mchan
CAISO GRID ASSETS
EMAIL ONLY
EMAIL ONLY CA 00000
(916) 608-5815
jmchan@caiso.com

Marilyn Fowler
CAISO GRID ASSETS
EMAIL ONLY
EMAIL ONLY CA 00000
(916) 608-1228
mfowler@caiso.com

Lee Terry
CALIFORNIA DEPARTMENT OF WATER RESOURCES
2033 HOWE AVE., STE. 220
SACRAMENTO CA 95825-0181
(916) 574-0664
lterry@water.ca.gov

Carol J. Hurlock
CALIFORNIA DEPT. OF WATER RESOURCES
JOINT OPERATIONS CENTER
2033 HOWE AVE., STE. 220
SACRAMENTO CA 95825-0181
(916) 574-1367
hurlock@water.ca.gov

Lulu Weinzimer
CALIFORNIA ENERGY CIRCUIT
695 9TH AVE. NO.2
SAN FRANCISCO CA 94118
(415) 387-1025
lisaweinzimer@sbcglobal.net
For: California Energy Circuit

Hillary Corrigan
CALIFORNIA ENERGY MARKETS
425 DIVISADERO STREET, SUITE 303
SAN FRANCISCO CA 94117
(415) 963-4439
cem@newsdata.com
For: California Energy Markets

Robert Sparks
CALIFORNIA ISO
151 BLUE RAVINE ROAD
FOLSOM CA 95630
(916) 608-5880
rsparks@caiso.com
For: California ISO

Peter T. Levitt
CALWIND RESOURCES, INC.
2659 TOWNSGATE ROAD, NO. 122
WESTLAKE VILLAGE CA 91361
(805) 496-4347
pete@calwind.com
For: CALWIND RESOURCES, INC.

David Miller
CEERT
1100 ELEVENTH ST., SUITE 311
SACRAMENTO CA 95814
(916) 442-7785
david@ceert.org

R. Thomas Beach
CROSSBORDER ENERGY
2560 NINTH STREET, SUITE 213A
BERKELEY CA 94710-2557
(510) 549-6922
tomb@crossborderenergy.com
For: CROSSBORDER ENERGY

William F. Dietrich
Attorney At Law
DIETRICH LAW
2977 YGNACIO VALLEY ROAD, NO. 613
WALNUT CREEK CA 94598-3535
(415) 297-2356
dietrichlaw2@earthlink.net

Donald C. Liddell
DOUGLASS & LIDDELL
EMAIL ONLY
EMAIL ONLY CA 00000
(619) 993-9096
liddell@energyattorney.com

Dennis Scullion
ENXCO, INC
17401 WEST COMMERCE WAY
TRACY CA 95377
(209) 836-1921 21
denniss@enxco.com

Dick Timmons
ENXCO, INC.
17401 WEST COMMERCE WAY
TRACY CA 95377
(209) 836-1921 23
dickt@enxco.com

Mark Tholke
Vp, Project Development
EURUS ENERGY AMERICA CORPORATION
4660 LA JOLLA VILLAGE DRIVE, STE 800
SAN DIEGO CA 92122
(858) 638-7115
mtholke@eurusenergy.com

Saeed Farrokhpay
FEDERAL ENERGY REGULATORY COMMISSION
1835 IRON POINT RD., SUITE 160
FOLSOM CA 95630-8771
(916) 294-0322
saeed.farrokhpay@ferc.gov

Robert Jenkins
FLYNN RCI
5440 EDGEVIEW DRIVE
DISCOVERY BAY CA 94505
(888) 634-0777
robertjenkins@flynnrci.com

Pushkar Wagle, Ph.D.
FLYNN RESOURCE CONSULTANTS INC.
2900 GORDON AVENUE, SUITE 100-3
SANTA CLARA CA 95051
(888) 634-3339
pushkarwagle@flynnrci.com

Ed Chang
FLYNN RESOURCE CONSULTANTS, INC.
2165 MOONSTONE CIRCLE
EL DORADO HILLS CA 95762
(888) 634-0222
edchang@flynnrci.com

Gary L. Palo
FPL ENERGY
6 BELCOURT DRIVE
NEWPORT BEACH CA 92660
(949) 721-1554
gary_l_palo@fpl.com

Jack Mcnamara
GEO-ENERGY PARTNERS-1983 LTD.
PO BOX 1380
AGOURA HILLS CA 91376
(818) 865-8515
jackmack@suesec.com

Jeffery S. Ghilardi
Sales Manager-Wind West Region
848 INSPIRATION LANE
ESCONDIDO CA 92025
(760) 294-2482
jeffery.ghilardi@ge.com

Hamid Kazerooni
HENWOOD ENERGY SERVICES
2379 GATEWAY OAKS DRIVE, SUITE 100
SACRAMENTO CA 95833
(916) 609-7782
HKazerooni@henwoodenergy.com

IBERDROLA RENEWABLES INC
1125 N.W. COUCH, SUITE 700
PORTLAND OR 97209
(503) 796-7088

Jon Fischer
Director, Transmission Orgiination
IBERDROLA RENEWABLES INC
1125 NW COUCH ST., SUITE 700
PORTLAND OR 97209
(503) 796-7032
jon.fischer@ppmenergy.com
For: PPM ENERGY INC.

David Barajas
IMPERIAL IRRIGATION DISTRICT
333 EAST BARIONI BLVD
IMPERIAL CA 92251
(760) 482-3450
dlbarajas@iid.com
For: IMPERIAL IRRIGATION DISTRICT

Linda White
KERN WIND ENERGY ASSOCIATION
PO BOX 41616
BAKERSFIELD CA 93384
(661) 831-1038
kweawhite@aol.com
For: KERN WIND ENERGY ASSOCIATION

Brian Koch
Power System Planning & Projects
LADWP
111 N. HOPE ST., RM. 951
LOS ANGELES CA 90012
(213) 367-0054
brian.koch@ladwp.com
For: LADWP

Scott Hempling
Attorney At Law
LAW OFFICES OF SCOTT HEMPLING
417 ST. LAWRENCE DRIVE
SILVER SPRING MD 20901
(301) 681-4669
shempling@hemplinglaw.com
For: CA Wind Energy Association

Robert L. Pettinato
LOS ANGELES DEPARTMENT OF WATER & POWER
NATURAL GAS GROUP ENERGY CONTROL CENTER
PO BOX 51111, RM. 1148
LOS ANGELES CA 90051-0100
(818) 771-6715
robert.pettinato@ladwp.com

David L. Huard
MANATT, PHELPS & PHILLIPS, LLP
ONE EMBARCADERO CENTER, STE 2900
SAN FRANCISCO CA 94111-3736
(415) 291-7430
dhuard@manatt.com
For: MANATT, PHELPS & PHILLIPS, LLP

David E. Morse
EMAIL ONLY
EMAIL ONLY CA 00000
(530) 756-5033
davidmorse9@gmail.com

Tony Parisi
Head, Sustainability Office
NAVAIR RANGE DEPARTMENT
575 I AVENUE STE. 1
POINT MUGU CA 93042
(805) 989-9209
anthony.parisi@navy.mil
For: NAVAIR RANGE DEPARTMENT

Randall Hunt
NAVIGANT CONSULTING
3100 ZINFANDEL DRIVE, SUITE 600
RANCHO CORDOVA CA 95670-6078
rhunt@navigantconsulting.com
For: NAVIGANT CONSULTING

Martin A. Mattes
Attorney
NOSSAMAN, LLP
50 CALIFORNIA STREET, 34TH FL.
SAN FRANCISCO CA 94111-4799
(415) 398-3600
mmattes@nossaman.com
For: TEJON RANCH COMPANY

Diane I. Fellman
Director, Regulatory & Gov'T Affairs
NRG WEST & SOLAR
EMAIL ONLY
EMAIL ONLY CA 00000
(415) 601-2025
Diane.Fellman@nrgenergy.com
For: NEO Corporation

Jason Yan
PACIFIC GAS AND ELECTRIC COMPANY
EMAIL ONLY
EMAIL ONLY CA 00000
(415) 973-4004
jay2@pge.com
For: PACIFIC GAS AND ELECTRIC COMPANY

Michael S. Porter
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE ST., MAIL CODE 13L RM 1318
SAN FRANCISCO CA 94105
(415) 973-6625
mspe@pge.com
For: PACIFIC GAS AND ELECTRIC COMPANY

Regulatory File Room
PACIFIC GAS AND ELECTRIC COMPANY
PO BOX 7442
SAN FRANCISCO CA 94120
(415) 973-4295
CPUCCases@pge.com
For: PACIFIC GAS AND ELECTRIC COMPANY

Robert Jenkins
Merchant Transmission Support Manager
PACIFIC GAS AND ELECTRIC COMPANY
77 BEALE ST., MC-N12G
SAN FRANCISCO CA 94105
rtj1@pge.com
For: PACIFIC GAS AND ELECTRIC COMPANY

Bob Guilliams
POWERTRUSION PRODUCTS
PO BOX 154
ALUM BANK PA 15521
(951) 695-4530
Bguilliams2005@yahoo.com

Allen K. Trial
Attorney At Law
SAN DIEGO GAS & ELECTRIC COMPANY
101 ASH STREET, HQ-12B
SAN DIEGO CA 92112
(619) 699-5162
ATrial@SempraUtilities.com

Paul Scheuerman
SCHEUERMAN CONSULTING
3915 RAWHIDE ROAD
ROCKLIN CA 95677
(916) 630-7073
pgs@starstream.net

Central Files
SDG&E AND SOCALGAS
8330 CENTURY PARK COURT, CP31-E
SAN DIEGO CA 92123-1550
(858) 654-1148
CentralFiles@SempraUtilities.com

Rebecca W. Giles
SDG&E AND SOCALGAS
8330 CENTURY PARK COURT, CP32D
SAN DIEGO CA 92123-1530
(858) 636-6876
RGiles@semprautilities.com

Katie Broussard
SIERRA SALES SALES, INC.
1054 41ST AVENUE
SANTA CRUZ CA 95062
(831) 464-2250
katie@sierrautility.net

Seth D. Hilton
STOEL RIVES, LLP
THREE EMBARCADERO CENTER, STE. 1120
SAN FRANCISCO CA 94111
(415) 617-8943
sdhilton@stoel.com

Janice Lin
Managing Partner
STRATEGEN CONSULTING LLC
EMAIL ONLY
EMAIL ONLY CA 00000
(510) 665-7811
janice@strategenconsulting.com

Ed Smeloff
Senior Manager
SUNPOWER CORPORATION
1414 HARBOUR WAY SOUTH
RICHMOND CA 94804
(510) 289-9082
ed.smeloff@sunpowercorp.com
For: SUNPOWER CORPORATION

Brian L. Haney
UTILITY SYSTEM EFFICIENCIES, INC.
1000 BOURBON STREET, NO. 341
NEW ORLEANS LA 70116
(504) 598-4682

Keith White
312 KELLER ST.
PETALUMA CA 94952
(510) 524-9177
keithwhite@earthlink.net