

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Sanger Substation Expansion Project Pursuant to General Order 131-D

Applie 20012 No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SANGER SUBSTATION EXPANSION PROJECT

JOHN W. BUSTERUD DAVID T. KRASKA Law Department Pacific Gas and Electric Company 77 Beale Street, B30A San Francisco, CA 94105 Telephone: (415) 973-7503 Facsimile: (415) 972-5952 DTK5@pge.com

JO LYNN LAMBERT Attorney at Law 707 Brookside Avenue Redlands, CA 92373 Telephone: (909) 793-4942 or (415) 973-5248 Facsimile: (909) 793-8944 JLLm@pge.com

Attorneys for Applicant PACIFIC GAS AND ELECTRIC COMPANY

Dated: September 30, 2015

TABLE OF CONTENTS

					Page		
I.	PRO	JECT (OVERV	TEW	1		
II.	REGIONAL CONTEXT AND PROJECT COMPONENTS						
	A.	ontext	2				
	1. Existing Regional Electric System						
			a.	Substation System	2		
			b.	Transmission System	3		
	B. Project Components				3		
	1.		Expanded Substation				
		2.	Pow	er Line Reconfiguration	4		
III.	THE APPLICANT5						
IV.	ADDITIONAL INFORMATION REQUIRED BY SECTION IX(B) OF GO 131-D:						
V.	MEASURES TAKEN TO REDUCE EMF EXPOSURE						
VI.	PUB	LIC NO	OTICE .		11		
VII.	REQUEST FOR TIMELY ACTION						
VIII.	EXHIBITS						
IX.	CONCLUSION						

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Sanger Substation Expansion Project Pursuant to General Order 131-D

Application No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SANGER SUBSTATION EXPANSION PROJECT

Pursuant to Section IX(B) of General Order ("GO") 131-D and Rules 2.1 through 2.5 and 3.1 of the California Public Utilities Commission's ("Commission" or "CPUC") Rules of Practice and Procedure, Pacific Gas and Electric Company ("PG&E") respectfully requests a Permit to Construct ("PTC") the Sanger Substation Expansion Project ("project") to upgrade and expand the existing substation with a new breaker-and-a-half ("BAAH") bus configuration, enabling the substation to better serve as the hub of the Central Valley 115 kV transmission system.

I. PROJECT OVERVIEW

PG&E's Sanger Substation is located southeast of the City of Fresno and west of the City of Sanger in unincorporated Fresno County. The substation was built in the 1920s and its power transfer facilities are due for a major upgrade. It currently has one antiquated main transfer bus, which serves as a common terminal for all 12 power lines entering and leaving the substation, and 16 outdated 115 kV circuit breakers. PG&E is proposing to replace these aging facilities with a new bus configuration having seven BAAH bays, each with two elements (line or transformer connections) and three 115 kV circuit breakers per bay. Using this configuration, only two breakers per BAAH bay are used at one time, allowing one breaker to be taken out of service without taking either of the two lines out of

service. Two additional circuit breakers will serve as tie-breakers at the substation, providing flexibility in the event of a failure.

New substation equipment will be constructed adjacent to the existing equipment so that the existing facilities can remain in service during construction. Within the expanded substation, the 12 existing power lines entering and leaving the substation will be reconfigured to terminate at the new equipment; this will require relocating structures and conductors located outside of the existing substation. (*See* Project Overview Map, attached as Exhibit A.) Some distribution pole and line relocations will occur if required to accommodate the new power line reconfigurations. The project will also include two new control/Modular Protection Automation Control ("MPAC") buildings to house protective relaying and communications equipment.

II. REGIONAL CONTEXT AND PROJECT COMPONENTS

A. Regional Context

1. Existing Regional Electric System

The project is located in unincorporated Fresno County, approximately two miles west of the City of Sanger and approximately three miles southeast of the City of Fresno. (*See* Project Area Map, Figure 2-1 of the Proponent's Environmental Assessment ("PEA"), attached as Exhibit B.) Sanger Substation currently occupies an approximately 4.5-acre parcel at the northwest corner of East Jensen Avenue and South McCall Avenue. The substation will be expanded onto approximately 7 acres adjacent to and generally north and west of the existing substation, which will be acquired by PG&E. (*See* Project Overview Map, attached as Exhibit A.)

a. Substation System

The existing substation includes a main-transfer bus configuration, with twelve 115 kV lines and sixteen 115 kV circuit breakers, and a distribution component consisting of two 115/12 kV 30 MVA transformer banks and two 12 kV systems. The existing 115 kV transfer facilities no longer

meet PG&E's utility standards and must be updated. The new facilities will comply with PG&E's current utility standards. Of the existing 16 circuit breakers, eight are oil-filled and eight are Sulfur Hexafluoride (SF6) breakers. All of the existing circuit breakers will be removed and replaced, along with 24 disconnect switches, 18 steel support structures and one control building.

b. Transmission System

The Fresno Area relies on cogeneration and power from outside the area to serve its load. The amount of transmission imported from outside the area is dependent on electric demand and generation dispatched within the area. This area is characterized by mostly radial (one way) 70 kV lines, and long networked 115 kV and 230 kV lines with even longer lines serving as back ties to neighboring systems. Sanger Substation is a critical 115 kV hub for the transfer of power in the Central Valley 115 kV transmission system.

Twelve power lines connect to the 115 kV bus at Sanger Substation, importing and exporting approximately 200 MW of net power under peak conditions. The McCall-Sanger 115 kV power lines from McCall Substation are the main sources of power to the Sanger Substation. In addition, Sanger Substation also receives power from Sanger Cogen (42 MW), Balch Power House (139 MW), and Kings River Power House (44 MW). The major distribution substations served by Sanger through its 115 kV lines include Manchester, Barton, Airways, California Avenue., Malaga, West Fresno, Las Palmas, Clovis, Reedley, and Parlier.

B. Project Components

The project includes the following major components:

1. Expanded Substation

PG&E will install new electric equipment at the substation, including new circuit breakers, bus structures, 115 kV disconnect switches, instrument transformers, protective relaying, metering and control equipment, remote supervisory control and data acquisition

equipment, telemetering equipment, an auxiliary alternating current and direct current power system, an electric grounding system, and underground conduits or trench systems. The expanded substation will be unmanned, with automated features and remote control capabilities.

PG&E will install two MPAC buildings to house sensitive recording and communication equipment that requires weather protection. The buildings will house the controls and relays for the 115 kV lines and circuit breakers. Each building will measure approximately 64 feet long, 15 feet wide and 11 feet high, and be covered in steel sheeting with a sloped roof. These structures and all the equipment in the expanded substation will be a non-reflective neutral color. For security, a 9-foot-tall fence, consisting of an 8-foot chain link fence topped with 1 foot of barbed wire, will enclose the station.

A stormwater retention basin will be constructed in the southwestern portion of the expanded substation. Based on preliminary design, the rectangular basin will measure approximately 200 by 100 feet with an approximate depth of 6 feet. The basin is designed to provide sufficient capacity to handle runoff from the expanded substation in conformance with applicable codes. Access to the expanded substation will be through two entrances from South McCall Avenue.

2. Power Line Reconfiguration

Existing structures and conductors located outside the existing substation will be reconfigured to connect to the new substation equipment. This will be achieved by relocating and replacing existing structures and installing new structures to accommodate the new line angles resulting from the new arrangements. No new power lines will be constructed.

Approximately 17 existing lattice steel towers and 24 wood poles will be removed, and approximately 41 new tubular steel poles (TSPs) or light duty steel poles (LDSPs) will be

installed. A detailed description of the proposed project and components is contained in Chapter 2 of the PEA, Exhibit B.

III. THE APPLICANT

PG&E is, and since October 10, 1905, has been, an operating public utility corporation organized under California law. It is engaged principally in the business of furnishing electric and gas services in California. PG&E's principal place of business is 77 Beale Street, San Francisco, California 94105.

Communications with regard to this Application should be addressed to:

Jo Lynn Lambert Attorney at Law 707 Brookside Avenue Redlands, CA 92373

Telephone: (909) 793-4942 or (415) 973-5248

Facsimile: (909) 793-8944

JLLm@pge.com

A certified copy of PG&E's Restated Articles of Incorporation, effective April 12, 2004, is on record before the Commission in connection with PG&E's Application 04-05-005, filed with the Commission on May 3, 2004. These articles are incorporated herein by reference pursuant to Rule 2.2 of the Commission's Rules.

A copy of PG&E's most recent proxy statement dated March 25, 2015, and copies of PG&E's most recent financial statements (contained in the Form 10-Q Quarterly Report filed on June 29, 2015, by PG&E and PG&E Corporation for the period ending June 30, 2015) were filed with the California Public Utilities Commission as part of Applications 15-05-016 and 15-09-001, filed May 28, 2015 and September 1, 2015 respectively.

IV. ADDITIONAL INFORMATION REQUIRED BY SECTION IX(B) OF GO 131-D:

Pursuant to Rule 2.4 (b) of the Commission's Rules of Practice and Procedure, PG&E has submitted a PEA, which is attached as <u>Exhibit B</u> to this Application. The following information is required by Section IX.B of GO 131-D:

a. A description of the proposed power line and substation facilities, including the proposed power line route; proposed power line equipment, such as tower design and appearance, heights, conductor sizes, voltages, capacities, substations, switchyards, etc., and a proposed schedule for authorization, construction, and commencement of operation of the facilities.

A detailed description of the proposed project and components is contained in Section II.B above and in Chapter 2 of the PEA, Exhibit B. A Preliminary Project Schedule is attached as Exhibit C.

b. A map of the proposed power line routing or substation location showing populated areas, parks, recreational areas, scenic areas, and existing electrical transmission or power lines within 300 feet of the proposed route or substation.

A project map showing the expanded substation location and existing power lines within 300 feet of the project is attached as <u>Exhibit A</u>. A project location map is also provided in Chapter 2 of the PEA, <u>Exhibit B</u>, Figure 2-1. Maps of the populated areas (single residences) as well as land use/zoning are provided in Chapter 3 of the PEA, <u>Exhibit B</u> (*see* Figures 3.10-1, and 3.12-1). There are no parks, recreational areas, or scenic areas within 300 feet of the project.

c. Reasons for adoption of the power line route or substation location selected, including comparison with alternative routes or locations, including the advantages and disadvantages of each.

PG&E evaluated alternative locations for the project based on the factors listed below. The process resulted in three potential locations for substation expansion (Sites 1-3).

PG&E defined the following objectives for selection of site alternatives:

Maximizing proximity to Sanger Substation and the associated confluence of existing 115
 kV lines to minimize the number of new and relocated structures needed to tie in the facility,

- Locating the facilities on an undeveloped site to avoid or minimize the relocation of residences and businesses or the purchase of high-cost land, and
- Locating the facilities in an area that would feasibly support an adequately-sized, level substation footprint and adequate access for construction and operation.

Alternative sites were then analyzed to determine their suitability using the following siting criteria:

- Potential to affect sensitive environmental resources and agricultural operations,
- Proximity to other sensitive land uses (e.g., residences, churches, schools),
- Existing and future land use, and
- Potential impacts to views from East Jensen Avenue and South McCall Avenue.

Site 1 (Portion of APN 314-080-13; Project Location)

Site 1 is located on land contiguous to and generally north of the existing substation. The expansion area would occupy an approximately 7-acre portion of the adjacent privately-owned 112.5-acre parcel. The expansion area is currently used for the production of row crops. The other properties in the area are also active in agricultural production, primarily row crops, orchards and vineyards, and are currently zoned for agriculture. The parcel is currently enrolled in a Williamson Act contract.

Site 1 was selected because it is immediately adjacent to the existing substation, is an undeveloped site, avoids sensitive resources, and does not require substantial site grading. An east-west agricultural drainage ditch located along the northern perimeter of the site can be avoided. Only one residence and no other sensitive receptors are located near the expansion area. There is adequate land in the southwestern portion of Site 1 to accommodate a retention basin that would collect site runoff from the expanded substation. Site 1 would have the least impact on aesthetics because it is set back from East Jensen Avenue and would result in a coherent unified substation appearance. Physical

changes to the existing substation would result in an improved visual setting at the intersection of East Jensen Avenue and South McCall Avenue. The existing residence located north of the expanded substation is largely screened from views of the expanded substation.

A detailed description of the proposed project and components is contained in Chapter 2 of the PEA, Exhibit B.

Site 2 Alternative (Portion of APN 314-080-13)

Site 2 is site located on land contiguous to and generally west of the existing substation. Site 2 would expand the substation onto an approximately 7-acre portion of the adjacent privately-owned 112.5-acre parcel (the same parcel that is proposed for Site 1). Site 2 would be constructed in the same general configuration as Site 1. As with Site 1, Site 2 is on level land that is currently used for the production of row crops. Site access would likely be from South McCall Avenue, but could also be from East Jensen Avenue.

This alternative has advantages very similar to those for Site 1. However, this alternative location is not preferred due to the bus configuration of the existing substation. In order for the Site 2 alternative to be constructed, the existing substation would need to be taken out of operation while the project is built. Sanger Substation is critical to area power delivery and maintaining operations during construction is essential.

Site 3 Alternative (Portion of APN 314-080-36)

Site 3 would expand the substation onto an approximately 7-acre portion of a privately-owned 37.56-acre parcel located east of South McCall Avenue, across the street from the existing substation and Site 1. Site 3 is zoned for agriculture and is currently in agricultural production (vineyard); the parcel is not currently enrolled in a Williamson Act contract. Site 3 would be constructed in the same general configuration as Site 1. The site is level and use of this site would avoid sensitive resources. A small market is located adjacent to this site, at the northeast intersection of South McCall Avenue

and East Jensen Avenue. Similar to Site 1, an agricultural ditch is located near the northern limit of the alternative site, but this feature could be avoided. Site access would be from South McCall Avenue, and the site would be set back from the street to accommodate future road widening, similar to Site 1. There is adequate land within Site 3 to accommodate the required infrastructure.

This alternative location is not preferred because it would create a physical separation from the existing substation, resulting in unnecessary construction of structures and rerouting of power lines across South McCall Avenue. The overall effect of this alternative would be a greater impact to visual resources as compared to Site 1 or Site 2. This separation between the existing substation and the substation expansion area is not practical given the availability of land at Site 1 and a key project objective of maximizing the proximity to Sanger Substation and the associated confluence of the existing 115 kV lines.

d. A listing of the governmental agencies with which proposed power line route or substation location reviews have been undertaken, including a written agency response to applicant's written request for a brief position statement by that agency. (Such listing shall include The Native American Heritage Commission, which shall constitute notice on California Indian Reservation Tribal governments.) In the absence of a written agency position statement, the utility may submit a statement of its understanding of the position of such agencies.

Native American Heritage Commission

On November 30, 2011, PG&E's consultant contacted the Native American Heritage Commission ("NAHC") in Sacramento to inform them about the current project, request a search of the sacred lands file to determine if any Native American cultural resources have been recorded in the immediate study area, and request a current list of Native American contacts for the project area. On March 7, 2012, PG&E's consultant sent messages by electronic mail to the contacts identified by the NAHC, inquiring about any information or concerns regarding sacred or other sites of cultural importance in the study area. A follow-up email was sent to those contacts with a listed email address on April 12, 2012. Phone calls were placed on April 25,

2012 to contacts that either did not have an email address or to whom the follow up email was unsuccessfully delivered. The responses did not raise a particular concern. (See PEA, attached as Exhibit B, Appendix D, and discussion at 3.5-4-3.5-6.)

To update the previous effort, a new sacred lands search was requested from the NAHC in September 2015. The results were again negative for the presence of sacred lands known by NAHC. A new list of contacts was provided and, on September 17, 2015, letters and project maps were sent. No responses have been received. (*Id.*)

Fresno County

On March 29, 2012, and September 2, 2015, PG&E met with planners from Fresno County's Department of Planning and Public works to provide them with an overview of the project. At both meetings, County staff expressed support for PG&E's proposed project. PG&E formally requested a position statement from the County on September 9, 2015, but has not yet received a written response.

City of Sanger

On June 26, 2012, PG&E met with the manager of Community and Economic Development for the City of Sanger to provide the City with an overview of the project. The City provided a letter of support on July 6, 2012. In April 2015, PG&E contacted the Community and Economic Development Manager for the City of Sanger to update him on the project. At PG&E's request for a position statement, the City provided a new letter of support, indicating that the project would support the City's plans for local growth and expressing appreciation that PG&E was upgrading the infrastructure in Fresno County. (*See* letter dated April 21, 2015, attached as Exhibit D.)

V. MEASURES TAKEN TO REDUCE EMF EXPOSURE

Section X(A) of GO 131-D requires that applications for a PTC include a description of the measures taken or proposed by the utility to reduce the potential exposure to electric and magnetic fields ("EMF") generated by the proposed facilities. In accordance with Section X(A) of GO 131-D, CPUC Decision No. D.06-01-042 ("EMF Decision"), and the EMF Design Guidelines for Electrical Utilities ("EMF Guidelines") prepared in accordance with the EMF Decision, PG&E is required to prepare a Substation Field Management Plan ("FMP") Checklist for substation projects that identifies the "no-cost" and "low-cost" magnetic field reduction measures that will be installed as part of the final engineering design for the project. Accordingly, the Substation FMP Checklist for this project proposes the following measures to reduce the magnetic field strength levels from substation facilities:

- Keep high current devices, transformers, capacitors, and reactors away from the substation property lines.
- For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines or as close to 12 feet as practical.
- Locate new substations close to existing power lines to the extent practical.
- Increase the substation property boundary to the extent practical.

A copy of the Substation Field Management Plan Checklist for this project is attached as <u>Exhibit</u>

<u>E</u>. The power line reconfigurations are exempt from EMF mitigation under Section 3.4.3 of the EMF Guidelines.

VI. PUBLIC NOTICE

Pursuant to Section XI(A) of GO 131-D, notice of the Application will be sent to Fresno
County Department of Public Works and Planning, the City of Sanger Community and Economic
Development Services, the California Energy Commission, the State Department of
Transportation and its Division of Aeronautics, the Secretary of the Resources Agency, the

California Department of Fish and Wildlife, the California Department of Public Health, the State Water Resources Control Board, the California Air Resources Board, the Fresno County Air Pollution Control District, the Central Valley Regional Water Quality Control Board, the NAHC, the California Department of Transportation's District 6 Office, the United States Fish and Wildlife Service, all owners of land within 300 feet of the proposed project (as determined by the most recent local assessor's parcel roll available to PG&E at the time the notice is sent), and any other interested parties that have requested such notification.

In accordance with Section XI(A)(2), within ten days after filing the Application, PG&E will publish a notice of the Application once a week for two successive weeks in the Fresno Bee newspaper. In accordance with Section XI(A)(3), PG&E will also post a notice of the Application on-site and off-site where the proposed project is located. PG&E will deliver a copy of the notice to the CPUC Public Advisor and the CPUC's Energy Division in accordance with Section XI(A)(3), and will file a declaration of mailing and posting with the Commission within five days after completion.

VII. REQUEST FOR TIMELY ACTION

This reliability project will reinforce PG&E's electrical transmission system to better enable it to safely and reliably serve the Fresno County area without interruptions or emergency conditions. To enable PG&E to procure materials, secure any necessary secondary permits and property rights, and begin construction by early 2017, PG&E respectfully requests that this Application be approved no later than August 1, 2016.

VIII. EXHIBITS

The following exhibits are attached and incorporated by reference to this Application:

Exhibit A: Project Overview Map

Exhibit B: Proponent's Environmental Assessment ("PEA")

Exhibit C: Preliminary Project Schedule

Exhibit D: City of Sanger Letter of Support

Exhibit E: Substation EMF Field Management Plan Checklist

IX. **CONCLUSION**

PG&E respectfully requests that the Commission:

- Issue a Decision and Order, effective immediately, granting PG&E a Permit to 1. Construct the Sanger Substation Expansion Project, adopting an appropriate environmental document for the project, and granting any other permission and authority necessary to construct, operate and maintain the project.
- 2. Authorize Energy Division to approve requests by PG&E for minor project modifications that may be necessary during final engineering and construction of the project so long as Energy Division finds that such minor project modifications would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

///

///

///

3. Grant such other and further relief as the CPUC finds just and reasonable.

Dated in San Francisco, California, this 30th day of September, 2015.

Respectfully submitted,

JOHN W. BUSTERUD DAVID T. KRASKA Law Department Pacific Gas and Electric Company 77 Beale Street, B30A San Francisco, CA 94105

JO LYNN LAMBERT ATTORNEY AT LAW 707 Brookside Avenue Redlands, CA 92373

By: <u>/s/ Jo Lynn Lambert</u> JO LYNN LAMBERT

Attorneys for Applicant PACIFIC GAS AND ELECTRIC COMPANY

SCOPING MEMO INFORMATION

Category:

Ratesetting. Pursuant to Rule 2.1(c) of the Commission's Rules of Practice and Procedure, the application must propose a category for the proceeding as defined in Rule 1.3. If none of the enumerated categories are applicable, proceedings will be categorized under the catch-all "ratesetting" category. (CPUC Rule 7.1 (e)(2).) The Commission has consistently found that applications for CPCNs and PTCs under GO 131-D do not fit within any of the enumerated categories and should therefore be considered as "ratesetting proceedings."

Need for hearing:

The CPUC has determined that issues related to project need and cost are not within the scope of PTC applications, leaving only environmental review as a relevant issue. No areas of environmental or other public concern are known. If concerns about the project are raised, PG&E recommends that a public participation hearing be held.

Issues:

None known.

Proposed Schedule:

See Exhibit C, attached.

VERIFICATION

I, the undersigned, declare:

I am an officer of PACIFIC GAS AND ELECTRIC COMPANY, a corporation, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are stated on information or belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 23, 2015, at San Francisco, California.

/s/ Andrew Williams

Andrew Williams

Vice President, Safety, Health and Environment

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Sanger Substation Expansion Project Pursuant to General Order 131-D

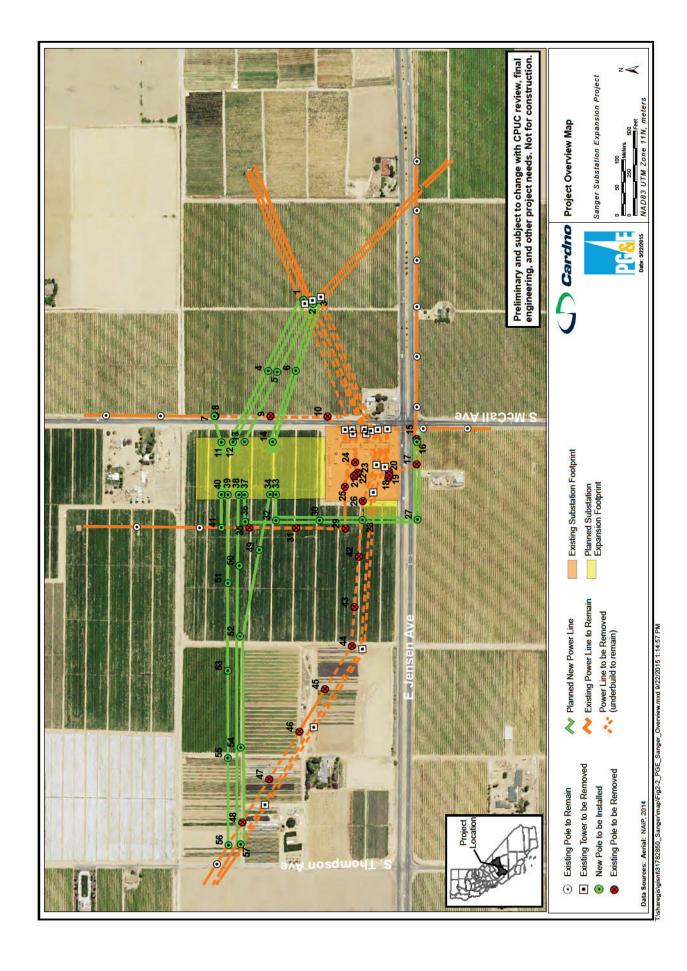
Application No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SANGER SUBSTATION EXPANSION PROJECT

Exhibit A

Project Overview Map



Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Sanger Substation Expansion Project Pursuant to General Order 131-D

Application No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SANGER SUBSTATION EXPANSION PROJECT

Exhibit B

PROPONENTS'S ENVIRONMENTAL ASSESSMENT Archival Grade DVD

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Sanger Substation Expansion Project Pursuant to General Order 131-D

Application No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SANGER SUBSTATION EXPANSION PROJECT

Exhibit C

Preliminary Project Schedule

Exhibit C

SANGER SUBSTATION EXPANSION PROJECT PRELIMINARY PROJECT SCHEDULE

PTC Application submitted	September 30, 2015
Protests and Notice of deficiencies, if any	October 30, 2015 - November 9, 2015
Response to any deficiencies	December 9, 2015 or sooner
Application complete	January 11, 2016
Draft Mitigated Negative Declaration (MND) released	April 15, 2016
Close of Public Review Period	May 16, 2016
Mitigated Negative Declaration (MND) adopted (no later than 180 days (6 months) from complete application per CEQA Guidelines § 15107)	July 11, 2016
MND Adopted and PTC Decision Approved and Effective	July 11, 2016
Acquisition of land rights	September 2015 – December 2016
Materials Procurement	January 2016 – January 2017
Acquisition of Ministerial Permits	July 2016 – December 2017
Initial Notice to Proceed / Construction Begins	Early 2017
In-Service Date for New Substation Equipment	March 2018
Construction Complete	December 2018

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Sanger Substation Expansion Project Pursuant to General Order 131-D

Application No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SANGER SUBSTATION EXPANSION PROJECT

Exhibit D

City of Sanger Letter of Support



CITY OF SANGER

1700 7th Street Sanger, California 93657 (559) 876-6300

April 21, 2015

Pacific Gas & Electric Company ATTN: Michael Calvillo, Senior Land Planner Land & Environmental Management 650 "O" Street, Bag 23 Fresno, CA 93760-0001

RE: Sanger Substation Expansion Project in Fresno County

Dear Mr. Calvillo:

Thank you for meeting with me to explain PG&E's Sanger Substation Expansion Project. I understand the project's importance to Fresno County's economy, as this substation supports much of Sanger, Reedley and other nearby communities, as well as the City of Fresno. This expansion project is consistent with and will support our plans for local growth.

I understand that PG&E will be seeking a Permit to Construct (PTC) from the California Public Utilities Commission (CPUC). This Department is supportive of your application and appreciates that PG&E is investing in upgrading the infrastructure in the County. Once PG&E has received its PTC, there will be no permits necessary from the City of Sanger, as the expansion area is located within the jurisdiction of Fresno County.

Please contact me if I can assist this process in any way.

Sincerely,

Dan Spears, Manager

Community & Economic Development

Application of PACIFIC GAS AND ELECTRIC COMPANY, a California corporation, for a Permit to Construct the Sanger Substation Expansion Project Pursuant to General Order 131-D

Application No.

(U 39 E)

APPLICATION OF PACIFIC GAS AND ELECTRIC COMPANY FOR A PERMIT TO CONSTRUCT THE SANGER SUBSTATION EXPANSION PROJECT

Exhibit E

Substation EMF Field Management Plan Checklist

Sanger Substation EMF Field Management Plan Checklist

Table 5-1 Substation Checklist for an EMF FMP¹

No.	NoCost and LowCost Magnetic Field Reduction Measures Evaluated for a Substation Project	Measures Adopted? (Yes/No)	Reason(s) if not Adopted
1	Keep high current devices, transformers, capacitors, and	X 7	
	reactors away from the substation property lines.	Yes	
2	For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines or as close to 12 feet as practical.	Yes	
3	Locate new substations close to existing power lines to		
	the extent practical.	Yes	
4	Increase the substation property boundary to the extent		
	practical.	Yes	
5	Other:	N/A	

 $^{^1}$ Taken from the EMF Design Guidelines for Electrical Facilities, prepared in accordance with D.06-01-042 (2006), p. 15.