



Michael Calvillo
Senior Land Planner
Environmental Management

Mailing Address:

1455 E. Shaw Ave, Bag 23
Fresno, CA 93710
Phone: 559.263.5780
Fax: 559.263.5262

November 2, 2018

Ms. Billie Blanchard, Project Manager
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Subject: Sanger Substation Expansion Project Notice to Proceed Request No. 1 (NTP#1), to include Laydown/Staging Area Setup, and Modification and Expansion Work at Sanger Substation

Dear Ms. Blanchard:

On March 13, 2017 the California Public Utilities Commission (CPUC) approved the Final Initial Study and Mitigated Negative Declaration (IS/MND) for the Sanger Substation Expansion Project and approved the project (Application 15-09-012) in a decision issued on July 13, 2017. The decision grants Pacific Gas and Electric Company (PG&E) a Permit to Construct (PTC) and approves the project conditionally with the implementation of Applicant Proposed Measures (APMs) and Mitigation Measures (MMs).

PG&E intends to construct the project to accommodate construction phasing, environmental restrictions, land rights acquisitions, and implementation of the pre-construction mitigation measures. PG&E is tentatively scheduled to begin construction on or about November 5, 2018, or as soon as project plans and approvals are in place. The first Notice to Proceed (NTP#1) is being sought for the work locations and description of activities as described in the sections that follow. Work under NTP#1 would include the scopes of work described in Phases 1, 2 and 3 of Table 1.3-1 of the MMCRP, and a portion of Phase 5 scope of work (i.e., existing substation equipment removal). Phase 4, powerline reconfiguration, will not be a part of NTP#1. PG&E formally requests a Notice to Proceed (NTP) from the CPUC for the construction activities described in this request.

Laydown/Staging Area Setup

Per Minor Project Refinement #2 (approved by the CPUC on July 20, 2018), the temporary laydown/staging area immediately west of Sanger Substation and within PG&E's property, will be prepared for the project. Work will entail placing heavy-duty geotextile fabric over an approximately 112 feet x 974 feet area (approximately 2.5 acres), placing rock rip-rap or gravel on top the fabric, and installing a temporary chain-link fence around the laydown/staging area. The ground coverings (i.e., the geotextile fabric and rock/gravel) will act as a barrier to reduce the possibility of topsoil and subsoil mixing. The fencing, rip-rap/gravel and geotextile fabric will be removed once construction activities have been completed. The laydown/staging area will be used to store new TSPs, wood poles, and equipment related to the proposed transmission line expansion. This area contains approximately 0.66 acres of Farmland of Statewide Importance and approximately 1.83 acres of Prime Farmland. The temporary laydown/staging area will be restored to pre-construction conditions following project

completion. Therefore, laydown/staging activities will not result in a permanent conversion of either Prime Farmland or Farmland of Statewide Importance. Construction of the Laydown/Staging Area is tentatively scheduled to begin on or about November 5, 2018, or as soon as project plans and approvals are in place and/or following harvesting of the field, and will be removed approximately November 30, 2021.

Sanger Substation

Work at Sanger Substation will occur within the existing substation footprint (approximately 4.5 acres), as well as within the expanded substation footprint (approximately 6.6 acres) (See Figure 1 for details on project components and location). Construction will include removal of some existing substation equipment. Sanger Substation expansion work will include:

- Installation of two new access driveways from South McCall Avenue, vegetation removal, and site grading
- Installation of a 9-foot perimeter security fence around the new substation
- Installation of concrete foundations and footings
- Installation of new substation equipment (including two new Modular Protection Automation Control (MPAC) buildings, underground conduit, trench systems, duct banks, ground grid area, and substation lighting)
- Expansion of the substation area into an approximately 0.5-acre area immediately west of the existing substation for the installation of a stormwater retention basin
- Installation of an 80-100 foot tall microwave tower, including a tower foundation
- Installation of two dishes, each measuring about 4 feet in diameter, on an existing tower at the Fence Meadow Repeater Station (see detailed description below).

Vehicles and equipment will be limited to within existing access roads, and within the new and existing substation footprints. Vehicles will also access the temporary laydown/staging area as described above. Access to the existing substation will be from existing substation driveways.

Construction at Sanger Substation is tentatively scheduled to begin on or about November 5, 2018, or as soon as project plans and approvals are in place, and is scheduled to be completed by approximately November 30, 2021.

Fence Meadow Repeater Station

Work at the Fence Meadow Repeater Station will include installation of two communications dishes (i.e., the receiving antenna system), each measuring approximately 4 feet in diameter, on an existing tower at the Fence Meadow Repeater Station located approximately 30 miles northeast of Sanger Substation. No ground disturbance will occur as a result of the installation, and no additional tall structures will be installed. Existing roads will be used to access the site. Additionally, work will take place within an existing facility. There are no expected impacts to biological resources as a result of work on at the Fence Meadow Repeater Station. Work at this location will begin approximately June 2019 and be completed within approximately 2-4 weeks.

Disturbance Areas

The estimated area of total new land disturbance for NTP#1 is approximately 9.6 acres (new substation expansion areas (7.1 acres) plus the approved laydown/staging area (2.5 acres) combined). However, impacts from the laydown/staging area will be temporary, and the area will be restored to pre-construction conditions following project completion. Work will also occur within the existing Sanger Substation footprint, an approximately 4.5 acre area that is already disturbed (therefore, no new disturbance will occur within the existing substation footprint).

Table 1: Approximate Extent of Temporary and Permanent Impacts to Vegetation Community Areas within New Land Disturbance Areas (table does not include the existing Sanger Substation area)*

Vegetation or Land Cover Type	Approximate Impact Area (acres)
Row Crops (permanent impact)	7.1
Row Crops (temporary impact)	2.5
Approximate Total Impacts (permanent plus temporary)	9.6

* Areas apply to NTP#1 scope of work within new land disturbance areas only

Up to 30 construction workers (peak number) could be present on the site at any given time throughout construction. Equipment anticipated to be required for construction for NTP#1 is listed in Attachment 2.

Ministerial Permits

PG&E will conduct work within Fresno County roadways (East Jensen Avenue and South McCall Avenue) and also construct two new driveways off South McCall Avenue for access to the expanded substation area. As such, PG&E submitted a request for an Improvement Permit from Fresno County on August 10, 2018 which covers the installation of both driveways. The permit number is IP18-0587 and the date the permit was acquired is October 5, 2018.

PG&E will construct a 9-foot-high security fence around the expanded substation footprint in December 2018. This work will require a building permit from Fresno County. PG&E submitted an application for a building permit to Fresno County on July 31, 2018. PG&E expects to acquire the permit approximately November 16, 2018.

Request for Notice to Proceed

PG&E requests to begin construction on the above project components with the implementation of conditions and approvals summarized in the attached pre-construction measures table (see table in Attachment 1). This table includes pre-construction MMCRP measures that PG&E has met, and outlines how other requirements will be met prior to construction. Surveys for special-status species and sensitive habitats will be conducted within the preconstruction time frames detailed in the Project's Final MMCRP. A burrowing owl survey was conducted on October 21, 2018 and was submitted to CPUC on October 24, 2018. A preactivity survey was conducted on November 1, 2018 and was submitted to the CPUC on November 2, 2018. Nesting bird surveys (as applicable for work occurring during nesting bird season) along with any required survey reports will also be conducted within the appropriate preconstruction time frames. PG&E has obtained all access rights for individual properties for work proposed in NTP#1, and has purchased lands in fee that encompass Sanger Substation expansion areas and the temporary laydown/staging area. Surveys for avian resources, including Swainson's hawk and white-tailed kite, were conducted in 2017 and 2018 and were previously submitted to the CPUC. Environmental training was provided to key construction personnel on October 17, 2018; any new work crew members (including construction workers) will receive in-person tailboard trainings administered by qualified personnel and utilizing CPUC-approved training brochures before beginning work. The project's Storm Water Pollution Prevention Plan (SWPPP) has been completed and approved by the Regional Water Quality Control Board (WDID number 5F10C384810 issued on October 9, 2018). The SWPPP will be implemented before and during construction, and will be regularly inspected throughout the project duration. Land owners (including farmers) were notified by PG&E of proposed construction activities and dates for work associated with NTP#1 in person and by letter on October 25, 2018. The letter notifications were compiled and provided to CPUC on October 25, 2018. PG&E conducted a preconstruction survey of the existing agricultural fields to document baseline conditions of farmland adjacent to NTP#1 work areas. Survey results were provided to the CPUC on October 25, 2018.

No jurisdictional permits or other agency approvals are required for the work described in NTP#1.

There are no outstanding preconstruction plan submittals. The existing Sanger Substation currently has a Spill Prevention, Control and Countermeasures (SPCC) Plan in place that was completed in 2013 (and previously submitted to the CPUC). Because no new oil deliveries will be required during work conducted under NTP#1, the plan will be modified as part of NTP#2 to include the new expanded Sanger Substation area (including any additional materials, such as oil, not accounted for in the 2013 plan). Once the plan is updated, the plan will be submitted to the CPUC for review and approval. The project contractor's Traffic Management Plan (TMP) was submitted to CPUC on 10/31/18, and a revised version of the plan was submitted to CPUC on 11/1/18. The TMP was approved by the CPUC on November 2, 2018. The Dust Control Plan was developed by PG&E and was submitted to the San Joaquin Valley Air Pollution Control District (SJVAPCD) on October 24, 2018. The Dust Control Plan was approved by the District on November 2, 2018. PG&E has provided the CPUC with verification that the Dust Control Plan was submitted/approved by the SJVAPCD.

We anticipate that the next NTP request will include transmission line work areas outside of the existing and new Sanger Substation work site areas, and that any additional NTPs for the project will include the work areas outside of NTP#1 work areas. Additionally, we anticipate that these future NTPs will be requested as land and access rights become available to PG&E. There are no known actions that have not been proposed or authorized that would need to be included in any future NTP requests.

We respectfully request that the CPUC complete the approval of NTP #1 for the Sanger Substation Expansion Project by November 2, 2018.

Please don't hesitate to contact me at 559-263-5780 (office) or 559-417-3337 (cell) if you have any questions or concerns.

Sincerely,



Michael Calvillo
Senior Land Planner

Cc:

Ilja Nieuwenhuizen / CPUC Monitoring Manager / Ecology and Environment, Inc.
Aileen Cole / CPUC Monitoring Supervisor / Ecology and Environment, Inc.

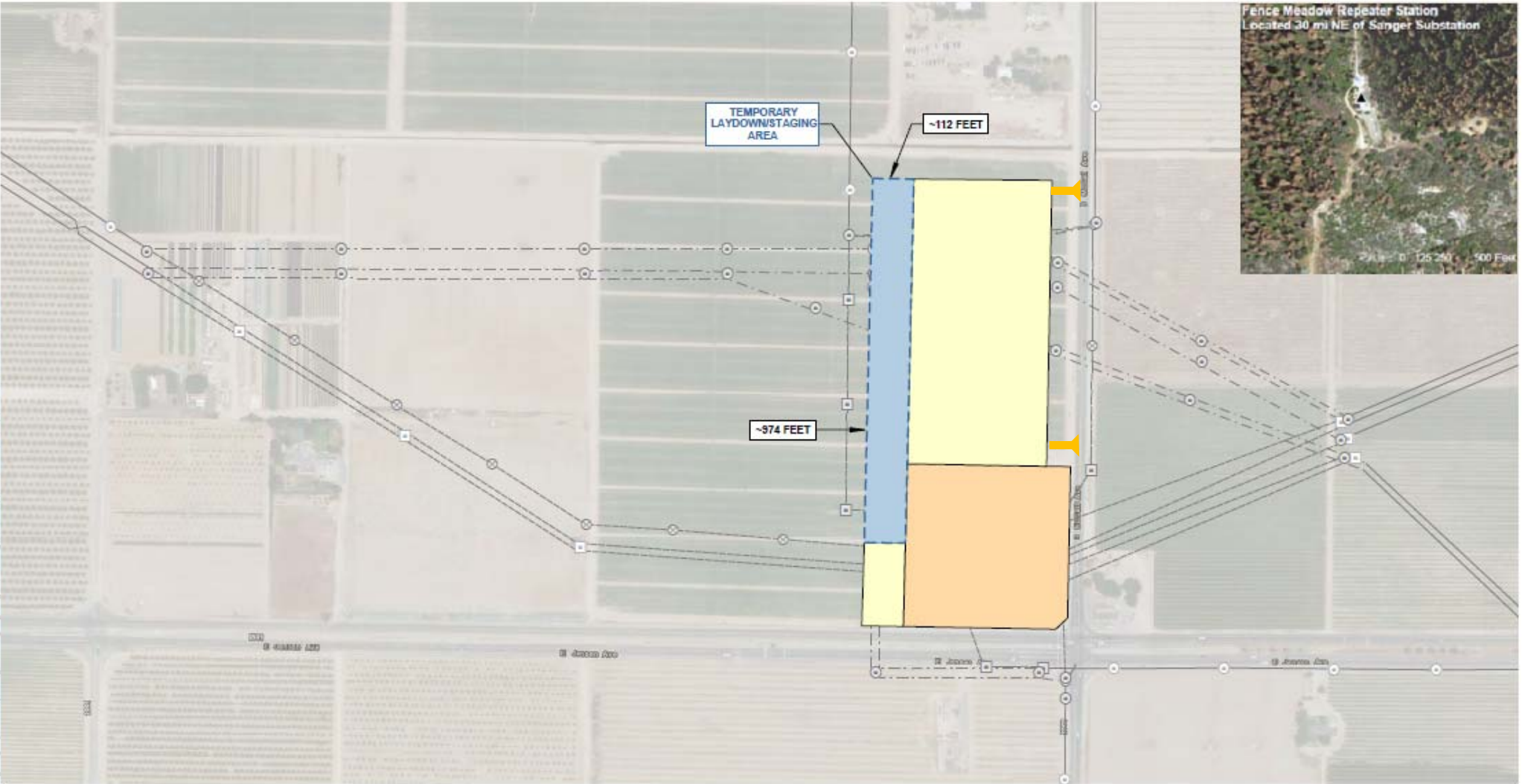
List of Figures

1. Figure 1: NTP#1 Project Work Areas

List of Attachments

1. Attachment 1: Pre-Construction Measures
2. Attachment 2: Equipment Required for Construction

G:\B FILE INT\1 - Unlabeled\dwg\work\comment\21292_PGE_Sanger GE Work\2018_10\21\2018_10_21_PGE_Sanger GE Work\2018_10\21\2018_10_21_PGE_Sanger GE Work.dwg - USER: DMM - LAST SAVED: 10/11/2018 11:01:02 AM



- LEGEND**
- EXISTING POLE TO REMAIN
 - EXISTING TOWER TO BE REMOVED
 - ⊗ EXISTING POLE TO BE REMOVED
 - ⊠ EXISTING POLE TO BE TOPPED
 - ⊙ NEW POLE TO BE INSTALLED

- NTP-1 WORK AREAS**
- ▶ PLANNED DRIVEWAY APPROACHES
 - TEMPORARY LAYDOWN/STAGING AREA
 - EXISTING SUBSTATION FOOTPRINT
 - PLANNED SUBSTATION EXPANSION FOOTPRINT
 - ▲ FENCE MEADOW REPEATER STATION (INSET ONLY)

NOTES

1. THIS FIGURE IS BASED ON FIGURE 2-2, PROJECT OVERVIEW MAP, PRODUCED BY CARDNO FOR PG&E, DATED 9/1/2015.
2. AERIAL IMAGERY SOURCE: ESRI



HALEY ALDRICH PG&E SANGER SUBSTATION EXPANSION PROJECT
FRESNO COUNTY, CALIFORNIA

PROJECT AREAS COVERED UNDER NTP-1

NOVEMBER 2018

FIGURE 1

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
Agriculture and Forestry Resources				
APM AGR-1	<p>Agriculture impacts avoidance and compensation. To avoid potential impacts on agriculture, PG&E will work with farmers to conduct its work between their harvest and planting periods where and whenever possible. In areas containing permanent crops that must be removed and replaced to gain access to pole sites for construction purposes, PG&E will provide compensation to farmers and/or landowners in accordance with PG&E’s Property Damage Settlement Guidelines. Within 6 months of completion of project construction, PG&E shall also repair, replace or provide compensation for damage to fences, irrigation facilities and other such agricultural infrastructure. Access across active crop areas will be negotiated with the farmers and/or owners in advance of any construction activities.</p>	<p>Prior to construction – negotiate with farmers and provide documentation of PG&E’s property damage settlement information specific to project landowner</p> <p>CPUC verifies that PG&E schedules work between harvest and planting periods where and whenever possible.</p>	<p>PG&E provided advance notice to landowners, farmers, and ranchers regarding construction activities</p> <p>A copy of the letter template, mailing list, and the date the letter was provided to the CPUC on 10/25/18.</p> <p>During construction, PG&E will coordinate on scheduling project work with farmers and ranchers around harvest and planting periods; negotiate with farmers and landowners for access across active fields, and provide compensation to farmers/landowners as necessary.</p>	PG&E

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
MM AGR-1	<p>Farmland Construction Impact Mitigation (supplements APM AGR-1). PG&E shall implement the following measures for temporarily disturbed Farmland:</p> <ul style="list-style-type: none"> • The applicant shall survey agricultural fields prior to construction and return all temporary disturbance areas to preconstruction conditions (i.e, meeting the definition of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency) after the completion of construction, except that crops will not be replanted. • If topsoil is removed from an area to accommodate temporary construction activities, it shall be restored to preconstruction conditions within two months of the completion of construction, except that crops will not be replanted by PG&E. 	<p>Prior to construction – conduct surveys of agricultural fields</p> <p>CPUC verifies that PG&E completes pre-construction surveys of Farmland.</p>	<p>PG&E surveyed agricultural fields and provided CPUC with documentation that preconstruction surveys of agricultural fields were completed on 10/16/18.</p>	PG&E
	Air Quality			

APM AIR-1	<p>Fugitive dust emissions minimization. Pursuant to SJVAPCD Regulation VIII, a Dust Control Plan will be prepared and submitted to SJVAPCD for approval within the required timeframe prior to commencing construction activities. Based on the SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (SJVAPCD 2015b), the following are examples of fugitive dust control measures that may be included in the Dust Control Plan to minimize dust emissions:</p> <ul style="list-style-type: none"> • Apply water to unpaved surfaces and areas. • Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas. • Limit or reduce vehicle speed on unpaved roads and traffic areas. • Maintain areas in a stabilized condition by restricting vehicle access. • Install wind barriers. • During high winds, cease outdoor activities that disturb the soil. • Keep bulk materials sufficiently wet when handling. • Store and handle loose materials that could create dust in a three-sided structure. • When storing bulk materials, apply water to the surface or cover the storage pile with a tarp. • Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials. • Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions. • Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site. • Prevent trackout by installing a trackout control device. • Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately. • Monitor dust-generating activities and implement appropriate measures for maximum dust control. 	Submit Dust Control Plan to SJVAPCD prior to construction.	PG&E developed a Dust Control Plan that was submitted to the SJVAPCD on October 24, 2018. The plan was approved by the SJVAPCD on 11/2/18 and the document was provided to CPUC on 11/2/18.	PG&E
-----------	--	--	---	------

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	Biological Resources			
MM BIO-1	<p>Biological Resources Worker Environmental Awareness Program. The applicant shall develop a Worker Environmental Awareness Program (WEAP). Prior to the start of construction, all construction crew members and contractors shall be required to attend the WEAP training presented by a CPUC-approved, qualified biologist. All construction crew members and contractors who attend the training shall sign a form indicating that they attended the training and understood the information. Follow-up training shall be conducted as needed; new workers shall attend WEAP training prior to beginning at the work site. A record of all trained personnel shall be kept on site, and a sticker indicating training completion shall be worn on all worker hard hats. The WEAP training shall include a review of the special status species and other sensitive resources (e.g., nesting birds) that could exist in the project area, the locations where sensitive biological resources do or may occur, the limits of the work area, applicable laws and regulations, penalties for non-compliance, and APMs and mitigation measures to be implemented for avoidance of these sensitive resources. Additionally, personnel shall be trained for situations where it is necessary to contact a</p>	<p>CPUC approves biologist qualifications</p> <p>Prior to construction – submit training program to CPUC for review and conduct training</p> <p>CPUC verifies that PG&E provides environmental training to all construction personnel. CPUC reviews the training logs and sign-in sheets provided by PG&E and verifies that stickers indicating training completion are worn on worker hard hats</p>	<p>Environmental awareness training will be conducted on 10/17/18 prior to start of construction.</p> <p>A copy of the training and brochure was provided to the CPUC on 8/10/18 before start of construction, and the training was approved by the CPUC on 10/16/18.</p> <p>Training logs and sign-in sheets will be provided to CPUC staff on 10/26/18.</p>	Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	qualified biologist (e.g., should any sensitive biological resources such as an active nest be found during construction). If sensitive resources are found, the qualified biologist shall provide guidelines for the personnel to avoid impacts on them. All WEAP participants shall receive a brochure that outlines all this information including contact information for the appropriate environmental personnel.			
MM BIO-2	Pre-activity surveys for sensitive species. A CPUC-approved qualified biologist shall conduct a pre-activity survey for all activities occurring near where sensitive resources may be found within 7 days prior to work commencing. If there is no work in an area for 7 days, it shall be considered a new work area if construction begins again. The biologist shall survey all suitable habitat for sensitive species within 100 feet of the activities (see MM BIO-4, MM BIO-6, or MM BIO-7 for additional nesting bird procedures). If any species listed by the state or federal endangered species acts or protected by other statutes, or their signs, are found, the CPUC and the appropriate wildlife agencies shall be notified within 48 hours to confirm appropriate avoidance measures. If it is determined that construction activity cannot avoid areas where sensitive biological resources are present, the qualified biologist shall coordinate	CPUC approves biologist qualifications CPUC (and as appropriate CDFW, USFWS, and other jurisdictional agencies) reviews PG&E’s pre-activity survey report summarizing the results of field studies before start of construction; CPUC verifies that all project work areas where sensitive resources may be found are surveyed prior to construction activities. CPUC verifies that PG&E implements any avoidance measures recommended by CPUC,	An approved PG&E biologist will conduct pre-activity surveys for sensitive species within 7 days prior to the beginning of work. A pre-activity survey was conduct within 7 days of the start of construction, and the report was submitted to the CPUC on 11/2/18.	Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	with the CPUC, CDFW, and/or USFWS, as necessary. If a potential San Joaquin kit fox den is found then a minimum buffer of 50 feet shall be implemented. For a known den, the buffer shall be 100 feet and for a natal den the avoidance buffer shall be determined on a case-by-case basis in coordination with CDFW and USFWS. If dens cannot be avoided by these distances, a CPUC-qualified biologist shall determine occupation following the procedures outlined in USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to and During Ground Disturbance (USFWS 2011) and consult and coordinate with CDFW and USFWS.	CDFW, USFWS, or other jurisdictional agencies.		
MM BIO-3	Biological Monitoring. A CPUC-approved qualified biological monitor shall develop an appropriate schedule of monitoring to ensure that disturbance is minimized to sensitive resources to the greatest extent possible during project activities. The schedule shall ensure that a CPUC-approved qualified biological monitor (1.) visits the project area regularly (at a minimum of every 7 days); (2.) is present to monitor all ground disturbing activities, such as grading and trenching; and (3.) is present to monitor any observed special status species (observed sign or individual) that may be disturbed by project activities. Biological monitors	CPUC approves biological monitor qualifications prior to construction.	PG&E submitted the resumes of the proposed qualified biological monitors to the CPUC on 7/25/18. The resumes were approved on 8/14/18. Additional resumes were submitted to the CPUC on 8/29/18 and the CPUC approved the second set of resumes on 8/30/18.	Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>shall be familiar with San Joaquin kit fox and burrowing owl. Avian biologists present during nesting bird season may act as the biological monitor if qualified.</p> <p>The biological monitor shall be responsible for ensuring that impacts on special status species, their associated habitat, and/or sensitive resources are avoided to the fullest extent possible, and the monitor shall have full authority to halt construction if the monitor observes actual or potential disturbances to sensitive resources. At a minimum of once per 7 days, the monitor shall survey all project components near where construction activities may occur in the next 7 days, as well as the irrigation ditch area. Where appropriate, monitors shall flag the boundaries of areas where activities need to be restricted to protect special status species. If a special status species is present in the project area while construction activities are occurring, the restricted areas shall be monitored to ensure their protection during construction.</p>			
MM BIO-4	<p>Mitigation for nesting birds (Supersedes APM BIO-14). The applicant shall implement the measures below in all work areas where any construction-related activities are conducted during the nesting bird season (February 1 to</p>	<p>CPUC approves avian biologist qualifications</p> <p>Nesting bird surveys are performed by PG&E and results</p>	<p>PG&E submitted the resumes of the proposed qualified avian biologists to the CPUC on 7/25/18.</p>	<p>Parsons, SWCA</p>

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>September 15) for all species except Swainson’s hawk and white-tailed kite (see MM BIO-7), and burrowing owl (see MM BIO-6).</p> <p>Nesting Bird Survey Requirements. If work is scheduled to occur during nesting bird season, then the following provisions shall be employed:</p> <ul style="list-style-type: none"> • A CPUC-approved qualified avian biologist shall conduct surveys for nesting birds within 7 days prior to the start of any construction-related activities. Areas shall be re-surveyed every 7 days while construction activities are occurring. If there is no work in an area for 7 days, it shall be considered a new work area if construction resumes. In addition, a CPUC-approved qualified monitor shall conduct pre-construction clearance sweeps for nesting birds at all access, staging and, work areas where suitable habitat is present within approximately 24 hours of construction activities each day during the nesting season. • Surveys shall be conducted with the appropriate buffer, duration, level of effort, and timing based on level of construction disturbance, time of day, and environmental factors. Surveys shall be conducted within a 500-foot buffer of active work areas for raptors and a 250 foot buffer for non-raptors, at a minimum. 	<p>are reviewed by CPUC weekly and provided to CDFW and USFWS monthly. CPUC verifies that PG&E establishes proper buffers around nesting birds, follows the specified process for buffer reductions, and implements collision-reducing techniques for transmission line. CPUC approves buffer reduction requests from PG&E for special status species after review by USFWS and CDFW.</p>	<p>The resumes were approved on 8/14/18</p> <p>Because construction will begin in October 2018, no nesting bird surveys will be required before the start of construction in 2018. Surveys will be performed, as required, during the 2019 nesting season.</p>	

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<ul style="list-style-type: none"> • Surveys shall be conducted at a minimum between February 1 and September 15; however, the survey season may need to begin earlier or end later depending on species and weather conditions. • Survey results shall be provided to the CPUC each week. <p>Avoid Impacts on Nesting Birds.</p> <ul style="list-style-type: none"> • When a nest of any avian or raptor species is located within 500 feet of a construction site, a CPUC-approved qualified avian biologist shall determine whether the nest is active. A nest shall be defined as active once a bird begins nest construction or when a raptor begins “nest decoration.” An inactive nest is defined as a nest that has been abandoned by the adult bird or once fledglings are no longer dependent on the nest site or parental care. • If the nest is active, then the qualified biologist shall implement an exclusionary buffer to prevent construction activities from occurring within a specified distance from the active nest. For active raptor nests located more than 500 feet from the nearest work site, and non-raptor active nests located more than 250 feet from the nearest work site, no additional measures shall be implemented. A minimum standard buffer of 500 feet for an active raptor nest or 250 feet for 			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>an active non-raptor nest, as recommended by CDFW (Bahm pers. comm. 2016), shall be implemented when construction activities are occurring. Buffers shall not apply to construction-related traffic using existing roads that are not limited to project-specific use (i.e., county roads, highways, etc.).</p> <ul style="list-style-type: none"> • If any active nest of a species listed by the state or federal endangered species acts or fully protected species (other than those specified MM BIO-7) is found, then the minimum standard buffer shall be implemented and the CPUC and the appropriate wildlife agencies shall be notified immediately (within 48 hours). • As appropriate, nest deterrent strategies may be used to prevent birds from nesting in construction equipment or staged materials. This includes covering equipment with tarps or covering small holes. Bird netting may not be used due to risk of entanglement. • If construction requires removal of a structure or tree that contains a known or historic nest, then removal of that structure must occur when the nest is determined to be inactive and, if feasible, outside of nesting season. • PG&E shall adhere to recommendations published by APLIC’s Reducing Avian Collisions 			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>with Power Lines: The State of the Art in 2012 (APLIC 2012), as feasible.</p> <p>Monitoring and Reporting. Nest locations and exclusion buffers shall be mapped (using a geographic information system [GIS]) for all identified nests. The information shall be maintained in a database; shall be provided to the CPUC weekly and to USFWS and CDFW monthly; and shall include the following information:</p> <ul style="list-style-type: none"> • Date, time, and length of observation period • Status (active or inactive) • Species • Nest location, including nest height • Behavioral observations • Site conditions, including construction activities • Nest exposure • Estimated date of nest establishment • Estimated fledge date • Number of eggs or hatchlings, if observed • Buffer size implemented <p>Nests protected by a standard buffer shall be observed by a CPUC-approved qualified avian biologist at a frequency and length of time the avian biologist deems necessary to ensure activities are not causing disturbance to the nest</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>(minimum of once a week during construction) until the biologist has determined that the nest is inactive or until after construction ends in the work area (whichever occurs first). If the biologist observes the birds becoming agitated or the incubating adult leaves the nest as a result of construction activities, he or she shall have the authority to halt work and expand the buffer. No avian reporting shall be required for construction outside of the nesting season unless species are observed nesting outside of the normal season or special status bird species are observed in the project area.</p> <p>Buffer Reductions. The specified buffer sizes for nests may be reduced on a case-by-case basis based on compelling biological and ecological reasoning (e.g., the biology of the bird species, concealment of the nest by topography, land use type, vegetation, and the level of project activity), and if a CPUC-approved qualified avian biologist determines that a reduced buffer size would not result in the abandonment of the nest or failure. Buffer reduction requests shall be submitted to the independent avian biologist (a qualified avian biologist approved by the CPUC and who reports directly to the CPUC) to be reviewed and approved. The independent avian biologist shall</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>respond to PG&E’s request for a buffer reduction within 48 hours. Buffer reduction requests for special status species (other than those specified in MM BIO-6 and MM BIO-7) shall be submitted to the appropriate wildlife agencies and to the CPUC for approval. The request must include the following:</p> <ul style="list-style-type: none"> • Species • Location • Pre-existing conditions present on site • Description of the work to be conducted within the reduced buffer, including equipment type and start date • Size and expected duration of proposed buffer reduction • Reason for buffer reduction • Name and contact information of the CPUC-approved qualified avian biologist who requested the buffer reduction and who shall conduct subsequent monitoring • Proposed frequency and methods of monitoring necessary for the nest given the type of bird and surrounding conditions as recommended by the CPUC-approved qualified avian biologist. <p>Nests shall be monitored until the avian biologist has determined that the nest is inactive; or construction ends within the standard buffer</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>(whichever occurs first). The biologist shall halt construction and increase the reduced buffer size if it is determined that the nesting bird(s) are agitated or the incubating adult leaves the nest as a result of construction activities.</p> <p>Nesting in Active Work Areas. Non-special status species found building nests within the standard buffer zone after specific project activities begin and the activities are not expected to increase in duration, intensity, or distance from the nest, shall be assumed tolerant of that specific project activity and such nests shall be protected by the immediate implementation of the maximum buffer practicable (as determined by the CPUC-approved avian biologist). Notification, which includes the same data in the above reduction request, shall then be sent to the CPUC’s independent avian biologist within 24 hours and the independent avian biologist shall have the authority to increase the buffer distance. These nests shall be monitored on a schedule determined by the qualified CPUC-approved avian biologist during construction activities until the avian biologist has determined that the nest is inactive; or construction ends within the standard buffer zone (whichever occurs first). If the CPUC-approved avian biologist determines that the</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	nesting bird(s) are not tolerant of project activities, the buffer shall be expanded, and may be expanded beyond the standard buffer distance.			
MM BIO-5	<p>Wildlife Protection (Supersedes APMs BIO-4, -5, and -10). The applicant shall implement the following measures to ensure protection of all wildlife species.</p> <ul style="list-style-type: none"> • Vehicle speed limits on existing unpaved access routes shall not exceed 15 miles per hour and shall not exceed 10 miles per hour on overland access roads. County speed limits shall be followed on existing paved roads. Construction personnel shall avoid collision with wildlife. • If night work is required, all lighting shall be shielded and point downward and away from any identified sensitive biological resources. • All trash and debris shall be secured in animal-proof containers before the end of each workday. Containers shall be emptied at least once per week and disposed of at an appropriate off-site location. • All construction personnel shall not harass any wildlife and shall allow wildlife to leave the work area on their own volition. • Disturbance limits shall be visibly flagged to ensure construction personnel minimize the construction footprint. 	CPUC verifies that PG&E implements measures to protect wildlife.	Prior to beginning construction, PG&E will flag construction disturbance limits.	PG&E, Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
MM BIO-6	<p>MM BIO-6: Specific Requirements for Burrowing Owl (Supersedes APM BIO-13). A CPUC-approved qualified avian biologist familiar with burrowing owl biology and survey methods shall conduct a pre-construction survey for this species no more than 30 days prior to construction activities during the non-breeding season and no more than 14 days prior to construction during the breeding season (February 1 to August 31 with some variance by geographic location and climatic conditions; CDFW 2012). The biologist shall confirm whether the owls are occupying the site and whether they are actively nesting. If any burrowing owl or sign of an occupied burrow is observed, the CPUC shall be informed as soon as possible (and within 48 hours). Surveys shall include the irrigation ditch and any area with suitable habitat within 656 feet (200 meters) of the project activities. If access to areas with suitable habitat is restricted, the biologist shall visually survey with a spotting scope, binoculars, or other visual techniques.</p> <p>If an occupied burrow is identified, the CPUC-approved qualified biologist shall immediately implement a minimum 200 meter (656 foot) buffer. Then an appropriate burrow-specific buffer shall be recommended by the CPUC-approved</p>	<p>CPUC approves avian biologist qualifications</p> <p>CPUC verifies that PG&E conducts pre-construction surveys for burrowing owl according to the specification in this mitigation measure and implements avoidance measures recommended by CDFW in <i>Staff Report on Burrowing Owl</i>.</p>	<p>PG&E submitted the resumes of the proposed qualified avian biologists to the CPUC on 7/25/18. The resumes were approved on 8/14/18</p> <p>Construction will begin during the non-breeding season for burrowing owl. As such, the approved PG&E avian biologist conducted a pre-construction survey for BUOW within 30 days of beginning construction. The survey was conducted on 10/21/18 and was submitted to the CPUC on 10/24/18.</p>	Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>qualified biologist based on the circumstances (e.g., owl tolerance and construction activity level) and as explained by the Staff Report on Burrowing Owl Mitigation (CDFW 2012 or more recent), which shall be approved by the CPUC and then implemented.</p> <p>In areas where owl presence or owl sign is not found, weekly surveys for burrowing owl and its sign shall be conducted for the remainder of the first breeding season and all following breeding seasons. Survey areas shall include work areas where construction-related activities are occurring, and surveys shall adhere to the following procedures:</p> <ul style="list-style-type: none"> • A CPUC-approved qualified avian biologist shall conduct surveys for nesting birds within 7 days prior to the start of any construction-related activities. Areas shall be re-surveyed every 7 days while construction activities are occurring. If there is no work in an area for 7 days, it shall be considered a new work area if construction resumes. In addition, a CPUC-approved qualified monitor shall conduct pre-construction clearance sweeps for nesting birds at all work areas where suitable habitat is present within approximately 24 hours of construction activities each day during the nesting season. 			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<ul style="list-style-type: none"> • Surveys shall be conducted with the appropriate duration, level of effort, and timing based on level of construction disturbance, time of day, and environmental factors. Surveys shall be conducted in the irrigation ditch, and any area with suitable habitat within 656 feet (200 meters) of project activities, at a minimum. If access to areas with suitable habitat is restricted, the biologist shall visually survey with a spotting scope, binoculars, or other visual techniques. • Surveys shall be conducted at a minimum between February 1 and September 15; however, the survey season may need to begin earlier or end later depending on species and weather conditions. <p>Survey results shall be provided to the CPUC each week.</p>			
MM BIO-7	<p>Specific Requirements for Special Status Raptors (Supersedes APM BIO-12). A CPUC-approved qualified avian biologist shall conduct pre-construction surveys for Swainson’s hawk and white-tailed kite in appropriate habitat within 0.5 miles of project construction activities prior to the start of construction during breeding season (i.e., the “first” breeding season). The avian biologist shall be familiar with the survey methods and biology of these species. Surveys for</p>	<p>CPUC approves avian biologist qualifications</p> <p>CPUC verifies that PG&E conducts pre-construction surveys for special status raptors according to the specifications in the mitigation measure and implements</p>	<p>PG&E completed a total of six surveys during the protocol-defined Period III (5 to 20 April) and Period V (10 June to 30 July) for SWHA in 2017 (SWHA surveys were conducted concurrently with white-tailed kite). Surveys were negative for both SWHA</p>	Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>Swainson’s hawk shall follow the protocols outlined in the Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley (CDFW 2000a or more recent).</p> <p>If an active nest (i.e., when nest decoration begins) is identified within 0.5 miles of construction activities, then a CPUC-approved qualified avian biologist shall implement a 0.5 miles buffer around the nest. The CPUC and CDFW shall be informed of the nest as soon as possible (and within 48 hours). Requests to reduce standard buffers must be sent to the CPUC to be reviewed in coordination with CDFW.</p> <p>If no indication of Swainson’s hawk or white-tailed kite nesting (indications include vocalizations or observations of nesting activities, nests, perched adults, displaying adults, eggs, chicks) is found during protocol-level surveys, weekly surveys for nesting Swainson’s hawk and white-tailed kite shall be conducted for the remainder of the breeding season in all work areas where any construction-related activities are occurring, according to the following procedures:</p> <ul style="list-style-type: none"> • A CPUC-approved qualified avian biologist shall conduct surveys for nesting birds within 7 days 	<p>avoidance measure recommended by CDFW.</p>	<p>and white-tailed kite. Survey results were submitted in report form to the CPUC on 11/15/2017.</p> <p>An additional two reconnaissance-level Swainson’s hawk and white-tailed kite surveys were conducted on April 14 and April 15, 2018. Survey results were negative for both species. The survey results were submitted in memorandum form to the CPUC on 4/18/2018.</p> <p>Additional SWHA and white-tailed kite surveys will be performed, as required, in the 2019 breeding season.</p>	

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>prior to the start of any construction-related activities. Areas shall be re-surveyed every 7 days while construction activities are occurring. If there is no work in an area for 7 days, it shall be considered a new work area if construction resumes. In addition, a CPUC-approved qualified monitor shall conduct pre-construction clearance sweeps for nesting birds at all work areas where suitable habitat is present within approximately 24 hours of construction activities each day during the nesting season.</p> <ul style="list-style-type: none"> • Surveys shall be conducted with the appropriate duration, level of effort, and timing based on level of construction disturbance, time of day, and environmental factors. Survey areas shall include work areas and a 500-foot buffer, at a minimum. • Surveys shall be conducted at a minimum between February 1 and September 15; however, the survey season may need to begin earlier or end later depending on species and weather conditions. • Survey results shall be provided to the CPUC each week. <p>During subsequent breeding seasons following the first season, reconnaissance surveys for Swainson’s hawk and white-tailed kite shall be</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.				
Pre-Construction Mitigation Measures				
Color Codes				
Measure In Progress				
Measure In CPUC Review				
Measure Completed				
Measure Does Not Apply to NTP Package #1				
Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	performed in appropriate habitat and at the appropriate time within 0.5 miles of project construction activities in order to detect any new nesting activity. If no indication of nesting is found during reconnaissance surveys, weekly surveys for nesting Swainson's hawk and white-tailed kite shall be conducted for the remainder of the breeding season in all work areas where any construction-related activities are occurring (following procedures in the bullet points above).			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
Cultural and Paleontological Resources				
APM CUL-4	Unanticipated discovery of human remains management. If human remains are discovered, work in the immediate vicinity will stop immediately and a PG&E Cultural Resources Specialist will be contacted. The location of the discovery will be secured to prevent further impacts and the location will be kept confidential. The Cultural Resources Specialist will evaluate the discovery and will contact the Fresno County Coroner upon verifying that the remains are human. If the coroner determines the remains are Native American, the Native American Heritage Commission will be contacted and the remains will be left in situ and protected until a decision is made on their final disposition.	CPUC approves cultural resources specialist qualifications CPUC approves plan for unanticipated discovery of human remains	PG&E submitted the resumes of the proposed qualified cultural resource specialists to the CPUC on 7/25/18. The resumes were approved on 8/14/18. The Cultural Resources Monitoring and Treatment Plan (CRMTP) was re-submitted with a second round of revisions to CPUC on October 9, 2018. The plan was approved by the CPUC on 10/10/18.	PG&E, Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
APM PAL-1	<p>Worker’s Environmental Resources Training. All construction crew members must receive a paleontologically focused worker’s environmental awareness training module prior to ground disturbance activities for the project. The module will be developed by the lead Paleontologist for the project and can be presented in person, through a safety tailboard, or in some other format, such as a brochure or videotape. The training module will cover the following topics: fossil/ paleontological resource identification, discovery guidance, and the contact information of both the paleontological field monitor and the project paleontological resource specialist.</p>	<p>CPUC approves paleontologist qualifications</p> <p>Prior to construction – submit training program to CPUC for review and conduct training</p> <p>The training program is prepared by PG&E, approved by CPUC, and implemented by PG&E; CPUC verifies that new employees are trained by reviewing training records kept by PG&E.</p>	<p>PG&E submitted the resume of the qualified Paleontological Resource Specialist to the CPUC on 7/25/18. The resume was approved on 8/14/18.</p> <p>The environmental awareness program includes focused information on paleontological resources, and includes all training elements as described.</p> <p>Key staff training was provided for CPUC review and was approved on 10/16.18. The key staff training paleontological module was administered during the key staff environmental training on 10/17/18.</p>	Parsons, SWCA
MM CUL-1	<p>Cultural Resources Monitoring and Treatment (supersedes APM CUL-3). A CPUC-approved</p>	<p>CPUC approves archeologist qualifications</p>	<p>PG&E submitted the resumes of the qualified</p>	Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>archaeologist that meets the Secretary of Interior’s Professional Qualifications Standards for archaeology shall implement the following procedures if an unanticipated cultural resource is discovered during construction.</p> <p>Work shall be halted and excluded from within 100 feet of the resource. Protective barriers shall be installed with signage identifying the area as an “environmentally sensitive area.” The CPUC shall be notified of the find. The CPUC will notify parties who have requested notification of the find to the extent allowed, in consideration of confidentiality requirements. Total avoidance of the resource is preferred, and no additional mitigation is necessary if it is avoided. The resource shall be recorded on California Department of Parks and Recreation 523 forms and filed at the South San Joaquin Valley Information Center.</p> <p>If the resource cannot be avoided, the CPUC-approved archaeologist shall determine in consultation with the CPUC if there is a potential for the resource to be historical (CEQA Guidelines section 15064.5(a)) or a unique archaeological resource (Public Resources Code 21083.2(g)). The CPUC must provide a response to the CPUC-approved archaeologist within seven days</p>	<p>Prior to construction – prepare, submit, and obtain approval of CRMTP</p> <p>The CRMTP is prepared by PG&E, approved by CPUC prior to the start of construction, and implemented by PG&E</p>	<p>Archaeologists to the CPUC on 7/25/18. The resumes were approved on 8/14/18.</p> <p>The Cultural Resources Monitoring and Treatment Plan (CRMTP) was re-submitted with a second round of revisions to CPUC on October 9, 2018. The plan was approved by CPUC on 10/10/18.</p>	

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>regarding a resource that the CPUC-approved archaeologist has found not to be potentially historical or a unique archaeological resource. If the resource is not potentially a historical or unique archaeological resource, work can resume after the CPUC's concurrence. If the resource is potentially a historical or unique archaeological resource, the CPUC-approved archaeologist shall prepare an Evaluation Plan that details the procedures to be used to determine whether the resource is a historical or unique archaeological resource. The Evaluation Plan shall be submitted to the CPUC for review. The CPUC will approve or request changes to the Evaluation Plan within 7 days of submittal by PG&E. Once approved, the Evaluation Plan shall be implemented, and a report shall be prepared that indicates whether the resource is a historical resource or unique archaeological resource. If the discovery is not historical or a unique archaeological resource and the CPUC concurs with that determination, work may proceed in the area of the discovery. If the discovery is historical or a unique archaeological resource, PG&E shall prepare a Data Recovery Plan that would reduce impacts to less than significant.</p> <p>The Data Recovery Plan shall be prepared in accordance with CEQA Guidelines section</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>15126.4(b)(3)(C) and PRC section 21083.2 and shall describe methods that will yield relevant information. The Data Recovery Plan shall be submitted to the CPUC for review and approval. The CPUC will approve or request changes to the Data Recovery Plan within 7 days of submittal by PG&E. Once approved, the applicant shall implement the plan. When the field work is completed, a Data Recovery Field Memo shall be prepared that briefly describes the data and materials recovery. The Data Recovery Field Memo shall be submitted to the CPUC for review and approval. The CPUC will approve or request changes to the Data Recovery Field Memo within 7 days of submittal by PG&E. Once the Data Recovery Field Memo has been approved, construction may proceed in the area of the discovery. A more detailed Data Recovery Report shall be prepared within 90 days of the Data Recovery Field Memo. The Data Recovery Report shall present thorough results of the data recovery efforts, conclusions drawn from the work, and where materials will be curated and shall also contain completed California Department of Parks and Recreation 523 forms. The Data Recovery Report shall be submitted to the CPUC for review and approval. Once approved, the Data Recovery</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	Report and 523 forms shall be filed with the South San Joaquin Valley Information Center.			
MM CUL-2	<p>Worker Education Program. PG&E shall design and implement a Worker Education Program that shall be provided to all project personnel who may encounter and/or alter historical resources or unique archaeological resources, including construction supervisors and field personnel. No construction worker will be involved in field operations without having participated in the Worker Education Program. The Worker Education Program shall include, at a minimum:</p> <ul style="list-style-type: none"> • A review of archaeology, history, prehistory and Native American cultures associated with historical resources in the project vicinity; • A review of the types of resources that could be uncovered in the area, including historical artifacts associated with the nonextant historical complex at the Sanger Substation site; • A review of applicable local, state, and federal ordinances, laws, and regulations pertaining to historic preservation and Native American resources; • A discussion of procedures to be followed in the event that unanticipated cultural resources or human remains are discovered during implementation of the project; 	<p>Prior to construction – submit training program to CPUC for review and conduct training.</p> <p>The training program is prepared by PG&E, approved by CPUC, and implemented by PG&E; CPUC verifies that new personnel are trained by reviewing training records</p>	<p>The environmental awareness program includes information on archaeological and historical resources, and includes all training elements as described.</p> <p>Key staff training was provided to CPUC for review on 8/10/18. The CPUC approved the training on 10/16/18, including cultural resources sections. The key staff environmental awareness training was administered on 10/17/18 and included a cultural resources section.</p>	PG&E, Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<ul style="list-style-type: none"> • A discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and PG&E policies; and • A statement by the construction company or applicable employer agreeing to abide by the Worker Education Program, PG&E policies and procedures, and other applicable laws and regulations. 			
MM CUL-3	<p>MM CUL-3 (supersedes APM PAL-2): Unanticipated paleontological resource discovery protocol. If a previously unidentified paleontological resource is discovered during construction, PG&E shall immediately require that work be halted within 100 feet of the resource; measures be put in place to prevent further impacts to the resources, such as protective barriers and/or signs, and/or coverings; that PG&E’s CPUC-approved Cultural Resources Specialist (CRS) and paleontological resource specialist be notified; and that the CRS notify the CPUC. PG&E’s CPUC-approved paleontological resource specialist shall examine the find and determine whether it is unique under Part V of CEQA Guidelines Appendix G. The CPUC-approved paleontologist may develop significance criteria for the fossils likely to be yielded by the Riverbank Formation, subject to CPUC approval (such criteria</p>	CPUC approves paleontologist qualifications	<p>PG&E submitted the resume of the qualified Paleontological Resource Specialist to the CPUC on 7/25/18. The resume was approved on 8/14/18.</p> <p>Additional paleontological monitor resumes were sent on 10/12/18 and 10/24/18 for CPUC review. Approvals are pending.</p>	Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>will be documented in the PRMMP discussed in MM CUL-4). In the absence of other agreed-upon criteria, a paleontological resource shall be considered unique if it meets the definition of a significant paleontological resource under the 2010 Society of Vertebrate Paleontology <i>Standard Procedures for the Assessment of Adverse Impacts to Paleontological Resources</i> definition: Significant paleontological resources are fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).</p> <p>The results of the evaluation will be submitted to the CPUC, and the CPUC must determine whether or not the resource is unique. The CPUC must respond in writing within seven days stating whether the resource is unique and provide reasoning if it disagrees with the conclusion. If the resource is determined not to be unique, work</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>may commence in the area. If the resource is significant and can be avoided and thus not impacted, PG&E shall document the resource in accordance with professional standards, continue to flag the area for avoidance during construction, and take no further action. Preservation in place, i.e., avoidance, is the preferred method of mitigation for impacts to unique paleontological resources. However, if the resource is unique and cannot feasibly be avoided, PG&E shall consult with the CPUC to determine appropriate mitigation measures. Mitigation methods may include ensuring that fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. Methods of recovery, testing, and evaluation shall adhere to current professional standards for recovery, preparation, identification, analysis, and curation, such as the 2010 Society of Vertebrate Paleontology <i>Standard Procedures for the Assessment of Adverse Impacts to Paleontological Resources</i>. Work may commence after data recovery (if undertaken) and upon approval by the CPUC.</p>			
MM CUL-4	<p>Paleontological Resources Monitoring and Mitigation Plan (supersedes APM PAL-3). A qualified professional paleontologist shall prepare</p>	<p>Prior to construction – prepare, submit, and obtain approval of PRMMP</p>	<p>PG&E submitted a revised Paleontological Resources Monitoring and Mitigation</p>	<p>Parsons, SWCA</p>

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) for the project before the onset of ground disturbing activities. The PRMMP shall be submitted to the CPUC for review and approval at least 30 days prior to the start of any excavation to 5 feet below ground surface. PG&E’s CPUC-approved paleontological resource specialist shall direct implementation of the PRMMP.</p> <p>The PRMMP shall include full-time monitoring of excavations extending more than 5 feet deep and auguring/boring extending to more than 5 feet deep and more than 3 feet in diameter, or in lieu of full-time monitoring, the PRMMP shall include the following requirements:</p> <p><u>Initial Monitoring:</u></p> <ol style="list-style-type: none"> 1. Prior to the start of construction, PG&E’s CPUC-approved paleontological resource specialist shall identify a minimum number and array of excavation types (i.e. TSP foundation drilling, grading, retention pond) extending more than 5 feet deep and auguring/boring extending to more than 5 feet deep and more than 3 feet in diameter sufficient to obtain data to determine whether the project area is likely to yield significant paleontological resources. The 	<p>The PRMMP is prepared by PG&E, reviewed by CPUC, and implemented by PG&E</p>	<p>Plan (PRMMP) to CPUC for review 9/12/18. The CPUC comments back to PG&E on 10/1/18. PG&E resubmitted the Plan on 10/10/18, and CPUC approved the Plan on 10/10/18.</p>	

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>placement of the locations requiring monitor will be developed by the paleontologist in consultation with PG&E’s construction team, and will focus on volume of soil to be disturbed to produce a representative sample. The PRMMP shall identify the methods used (e.g., microscopic examination of matrix samples, visual examination of excavated material) to make the determination.</p> <p>2. At all sites identified by PG&E’s CPUC-approved paleontological resource specialist, a CPUC-approved paleontological field monitor shall monitor the excavation and auguring during the initial stages of construction (i.e., from the beginning of construction until a determination is made after initial monitoring as described in this item) to determine whether the project area is likely to yield significant paleontological resources.</p> <p><u>Subsequent Monitoring:</u> The results of initial monitoring shall be described in a memo, to be submitted to CPUC for review and approval. CPUC will review and either request revisions or approve the memo within 2 business days of submittal by PG&E. PG&E shall not reduce or stop monitoring until CPUC approves the memo. Based on the results of initial monitoring, the following</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>measures shall be required and described in the PRMMP:</p> <ul style="list-style-type: none"> • If PG&E’s CPUC-approved paleontological resource specialist determines that no part of the project area is likely to yield significant paleontological resources, further monitoring shall not be required. PG&E must still make available the paleontological resource specialist and paleontological field monitor (available to go to the work site as needed). Training provided pursuant to APM PAL-1 will enable work crews to identify likely fossils, and inform the appropriate parties if such deposits are identified. • If PG&E’s CPUC-approved paleontological resource specialist discovers significant paleontological resources or determines the project area is likely to yield significant paleontological resources, then continued monitoring shall be required as deemed appropriate by the paleontological resource specialist, in consultation with the CPUC and PG&E’s construction team, based on the nature, location, and geologic context of the fossil(s), as well as the potential for further disturbance. <p>If a paleontological resource is discovered at any time during initial monitoring, continued</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	monitoring, or unmonitored construction, PG&E shall notify the CPUC immediately and the paleontological resource specialist will inspect the matrix for fossils. If a paleontological resource is discovered, MM CUL-3 shall be implemented.			
	Geology, Soils and Mineral Resources			
APM GEO-2/APM WQ-1	<p>Development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). Because the project involves more than an acre of soil disturbance, a SWPPP will be prepared for the project as required by the state National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Stormwater Associated with Construction Activity. This plan will be prepared in accordance with the Water Board guidelines and other applicable erosion and sediment control Best Management Practices (BMPs). Implementation of the plan will help stabilize disturbed areas and will reduce erosion and sedimentation. The SWPPP will designate BMPs that will be followed during and after construction of the project. Examples of erosion-minimizing measures that may be identified in the SWPPP include:</p> <ul style="list-style-type: none"> • Using drainage control structures (e.g., straw wattles or silt fencing) to direct surface runoff away from disturbed areas. 	<p>Prior to construction – obtain NPDES General Permit and prepare SWPPP</p> <p>PG&E prepares and submits SWPPP to RWQCB; CPUC verifies that PG&E submits SWPPP and implements proper BMPs.</p>	<p>A project-specific SWPPP was developed by PG&E and submitted to the RWQCB. The SWPPP was approved by the Board in October 2018. The SWPPP WDID number is 5F10C384810 and was issued on 10/9/18.</p>	PG&E

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<ul style="list-style-type: none"> • Strictly controlling vehicular traffic. • Implementing a dust-control program during construction. • Restricting access to sensitive areas. • Using vehicle mats in wet areas. • Revegetating disturbed areas, where applicable, following construction. <p>In areas where soils are to be temporarily stockpiled, soils will be placed in a controlled area and will be managed with similar erosion control techniques. Where construction activities occur near a surface waterbody or drainage channel and drainage from these areas flows towards a waterbody or wetland, stockpiles will be placed at least 100 feet from the waterbody or will be properly contained (such as berming or covering to minimize risk of sediment transport to the drainage). Mulching or other suitable stabilization measures will be used to protect exposed areas during and after construction activities. Erosion-control measures will be installed, as necessary, before any clearing during the wet season and before the onset of winter rains. Temporary measures, such as silt fences or wattles intended to minimize erosion from temporarily disturbed areas, will remain in place until disturbed areas have stabilized.</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	The SWPPP will be designed specifically for the hydrologic setting of the project.			
	Greenhouse Gases			
APM GHG-1	<p>Minimize GHG emissions.</p> <ul style="list-style-type: none"> Minimize unnecessary construction vehicle idling time. The ability to limit construction vehicle idling time will depend on the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm-up times following start-up that limit their availability for use following start-up. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a “common sense” approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes allowed by California law; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will include briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a “common sense” approach to vehicle use. 	<p>Prior to construction – verify training of workers</p> <p>CPUC-designated environmental monitor verifies that PG&E minimizes vehicle idling time, construction equipment is kept in proper working condition, and low-emission or electrical equipment is used where feasible. CPUC verifies that PG&E trains workers on vehicle use.</p>	<p>The Environmental Awareness Training Program includes information on Greenhouse Gases (GHG), and includes all training elements as described.</p>	<p>PG&E, SWCA, Parsons</p>

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<ul style="list-style-type: none"> • Maintain construction equipment in proper working conditions in accordance with PG&E standards. • Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible. Portable diesel fueled construction equipment with engines 50 hp or larger and manufactured in 2000 or later will be registered under the CARB Statewide Portable Equipment Registration Program. • Minimize welding and cutting by using compression of mechanical applications where practical and within standards. • Encourage use of natural gas powered vehicles for passenger cars and light-duty trucks where feasible and available. • Encourage the recycling of construction waste where feasible. 			
	Hazards and Hazardous Materials			
APM HAZ-1	Spill Prevention, Control, and Countermeasures (SPCC). In the event of an accidental spill, the substation is equipped with a retention basin that meets SPCC Guidelines (40 CFR 112). The retention basin will be sufficiently sized to accommodate the accidental spill of all mineral oil from the largest transformer located at the	Prior to construction – prepare SPCC Plan and submit to CPUC for review and approval. The site-specific SPCC Plan will be prepared by PG&E,	An active SPCC Plan is currently in use at the existing Sanger Substation and will be utilized for work under NTP#1. The existing SPCC plan was	PG&E

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>substation. The substation will also be equipped with lead-acid batteries to provide backup power for monitoring, alarm, protective relaying, instrumentation and control, and emergency lighting during power outages. Containment will be constructed around and under the battery racks, and the SPCC will address containment from a battery leak.</p> <p>A site-specific SPCC Plan will be prepared prior to the initiation of construction.</p>	<p>approved by CPUC, and implemented by PG&E. CPUC will verify that PG&E implements the SPCC, including inspection of required measures by CPUC-designated environmental monitor.</p>	<p>submitted to the CPUC on 9/5/18</p>	
<p>APM HAZ-3</p>	<p>APM HAZ-3: Shock hazard. All authorized personnel working on site, during either construction or maintenance and operation, will be trained according to PG&E standards. To minimize potential exposure of the public to electric shock hazards, an 8-foot-tall chain link fence topped with 1 foot of barbed wire will extend around the perimeter of the expanded substation for a total of approximately 9 feet, thus restricting site access. Warning signs will be posted to alert persons of potential electrical hazards. All electric power lines will be designed in accordance with CPUC General Order 95 Guidelines for safe ground clearances established to protect the public from electric shock.</p>	<p>Prior to construction – verify training of workers</p> <p>CPUC verifies that PG&E installs fences and signs, and that PG&E designs electrical power lines in accordance with CPUC General Order 95 Guidelines.</p>	<p>The Environmental Awareness Training Program includes information on Shock Hazards, and includes all training elements as described in this measure.</p>	<p>PG&E, Parsons, SWCA</p>

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
MM HAZ-1	<p>Hazardous Materials Management Plan (supersedes APM HAZ-2 and APM HAZ-4). Prior to construction, the applicant shall prepare a Hazardous Materials Management Plan, which shall be implemented during construction to prevent the release of hazardous materials and hazardous waste. The plan shall include the following requirements and procedures:</p> <ol style="list-style-type: none"> 1. Training requirements for construction workers in appropriate work practices, including spill prevention and response measures. Additional training requirements for those performing excavation activities shall be required and shall include training on types of contamination and contaminants (e.g., petroleum hydrocarbons, asbestos, and hazardous materials [as defined by the California HSC]) and identifying potentially hazardous contamination (e.g., stained or discolored soil and odor). 2. Contain all hazardous materials at work sites and properly dispose of all such materials. <ol style="list-style-type: none"> a. Hazardous materials shall be stored on pallets within fenced and secured areas and protected from exposure to weather and further contamination. b. Fuels and lubricants shall be stored only at designated staging areas. 	<p>Prior to construction – prepare, submit, and obtain approval of HMMP and conduct training</p> <p>HMMP is prepared by PG&E and submitted to CPUC for review and approval; CPUC verifies that PG&E trains workers by reviewing training logs. CPUC-designated environmental verifies that PG&E implements HMMP by inspecting construction sites for presence of spill kits and other required materials, inspection of construction vehicles for leaks, and proper handling of any hazardous materials</p>	<p>PG&E submitted the revised Hazardous Materials Management Plan (HMMP) to CPUC for review on 9/25/18. The plan was approved by the CPUC on 10/1/18.</p> <p>The Environmental Awareness Training Program includes information on Hazardous Materials, and includes all training elements as described in this measure.</p>	PG&E, Parsons, SWCA

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>3. Maintain hazardous material spill kits for small spills at all active work sites and staging areas. Thoroughly clean up all spills as soon as they occur.</p> <p>4. Store sorbent and barrier materials at all construction staging areas, including staging areas used during activities for decommissioning. Sorbent and barrier materials will be used to contain runoff from contaminated areas and from accidental releases of oil or other potentially hazardous materials.</p> <p>5. Perform all routine equipment maintenance at a shop or at the staging area and recover and dispose of wastes in an appropriate manner.</p> <p>6. Monitor and remove vehicles used for construction-related activities with chronic or continuous leaks from use and complete repairs before returning them to operation.</p> <p>7. Store shovels and drums at the staging areas. If small quantities of soil become contaminated, use shovels to collect the soil and store in drums before proper offsite disposal. Large quantities of contaminated soil may be collected using heavy equipment and stored in drums or other suitable containers prior to disposal. Should contamination occur adjacent to staging areas because of runoff, shovels and/or heavy</p>			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>equipment shall be used to collect the contaminated material. Only trained construction workers shall handle hazardous, and potentially hazardous, materials.</p> <p>8. Transporting, shipping, and disposal procedures for hazardous waste.</p> <p>9. Procedures for notifying applicant and agency personnel in the event of the discovery of contaminated soil and/or groundwater. Contact information for federal, regional, and local agencies, the applicant’s environmental coordinator(s) responsible for the cleanup of contaminated soil or groundwater, and licensed disposal facilities and haulers.</p> <p>This plan will be submitted to the CPUC for review and approval at least 30 days prior to the start of construction of the proposed project.</p>			
MM HAZ-2	<p>Fire Control Measures. PG&E shall implement the following measures prior to and during work at the Fence Meadow Repeater Station:</p> <p>1. As part of the Worker Training Program, workers will be trained in fire prevention and response practices to be implemented to minimize the risk of fire, and in the event of fire, trained to provide immediate response. At minimum, construction personnel shall be trained in fire reporting and incipient-stage fire</p>	<p>Prior to construction – verify training of workers</p> <p>CPUC-designated environmental monitor verifies that PG&E prohibits smoking outside an appropriate designated area and provides required fire extinguishers.</p> <p>CPUC verifies that PG&E trains</p>	<p>The Environmental Awareness Training Program includes information on Fire Control Measures, and includes all training elements as described in this measure.</p>	<p>PG&E, Parsons, SWCA</p>

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	prevention, control, and extinguishing (i.e., the fire can be controlled or extinguished by portable fire extinguishers, small hose systems, or portable water supplies without the need for protective clothing or breathing apparatus.) 2. Prohibit smoking at the worksites other than in designated areas chosen that are free of ignitable material. Require disposal of cigarette butts in a way that will not ignite vegetation or other materials. 3. Ensuring an appropriate fire extinguisher is present before initiating and during each hot-work activity (e/g/, welding, brazing, soldering, grinding, and arc cutting). 4. Preventing vehicles with hot exhaust manifolds from idling on roads with combustible vegetation under the vehicles. 5. Do not park vehicles in areas with vegetation prone to ignition. 6. Equip all vehicles with a fire extinguisher.	workers on fire prevention and response by reviewing training logs.		
	Traffic and Transportation			
MM TRAN-1	Traffic Management Plan (supersedes APM TRAN-1). A Traffic Management Plan shall be prepared upon determination of the final construction schedule and precise locations and durations of lane closures and other project	Prior to construction – prepare a Traffic Management Plan and document pre-project road conditions.	PG&E developed a Traffic Management Plan that was submitted to CPUC on 10/31/18. A revised version of the plan was submitted to CPUC on	PG&E

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>details. Measures to be included in the plan that would allow for:</p> <ul style="list-style-type: none"> • Safe vehicle passage shall adhere to the California Manual on Uniform Traffic Control Devices. • Avoidance of truck queuing on South McCall Avenue of trucks waiting to enter the substation construction site. <p>Potential measures include:</p> <ul style="list-style-type: none"> • Flaggers and/or signage to halt traffic and direct traffic at lane closures and to allow traffic to pass when construction is halted. • Scheduling lane closures at off-peak times. • Notification of emergency services providers of the timing, location, and duration of lane closures. • Requirement that emergency vehicle access is maintained at all times. • Scheduling construction deliveries and employee arrival to be spread out throughout the day. • Implementing traffic control within the substation site to move vehicles to allow arriving vehicles to enter the site. <p>The Traffic Management Plan shall also include the following measures:</p>	<p>CPUC verifies that PG&E posts signage along South McCall Avenue and East Jensen Avenue when there is the possibility of slow trucks exiting the site. Signage shall adhere to the California Manual on Uniform Traffic Control Devices.</p>	<p>11/1/18, and the CPUC approved the TMP on 11/2/18.</p>	

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<ul style="list-style-type: none"> • Limit Vehicle Speeds: Vehicle speeds shall be limited to 15 miles per hour on unpaved roadways used to access the site during construction. PG&E shall notify owners of property on which internal access roads are located at least one week in advance that the internal access road will be used for construction traffic. • Slow Truck Warning: During truck delivery and exit hours, PG&E shall post signage at appropriate locations (e.g., along South McCall and East Jensen Avenues) warning drivers when there is a possibility for slow trucks to exit the substation site onto South McCall Avenue. Signage shall adhere to the California Manual on Uniform Traffic Control Devices. • Road Damage Repair: PG&E shall repair to pre-project conditions any roads damaged by project vehicle traffic. PG&E shall document roadway conditions with photographs prior to project activities along East Jensen Avenue and South McCall Avenue adjacent to the project area and extending 0.25 miles from the project area. PG&E shall also take photographs after the project is completed and after any repairs that document restoration of pre-project pavement conditions. 			

Attachment 1: Notice To Proceed Package #1: Sanger Substation Work.

Pre-Construction Mitigation Measures

Color Codes

Measure In Progress

Measure In CPUC Review

Measure Completed

Measure Does Not Apply to NTP Package #1

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Status	Responsible Party
	<p>• Emergency Service Provider Notification: PG&E shall notify the provider of the location, date, time, and duration of the lane closure. PG&E shall make provisions to maintain emergency vehicle access at all times in coordination with local emergency service providers, such as allowing for bypass of slow vehicle traffic during lane closures.</p> <p>To the extent that compliance with applicable permit requirements, e.g., obtaining the required encroachment permit from Fresno County, would reduce identified significant traffic impact(s) consistent with the performance standards set forth in MM TRAN-1, PG&E may submit such permit(s) in lieu of addressing that impact, subject to review and approval by CPUC prior to the start of construction.</p>			

Table 2: Equipment Anticipated to Be Required for Construction / NTP#1 – Sanger Substation Project (Phases 1-3 and a portion of Phase 5 Combined)

Anticipated Required Equipment

D5 bulldozer
Compactor
Road roller
Water truck
Skid-steer bobcat
Dump trucks (10)
Mechanic truck
Backhoe
Track mounted backhoe
Fuel truck
½-ton pickup truck (2)
¾-ton pickup truck
¾- to 1-ton crew cab truck
Road grader, 6-wheel
Elevating scraper
½-ton pickup truck
Skid steer bobcat
Skid loader
Fork lift
2-ton flatbed trucks
Dump truck (5- to 10-ton)
Air tamper
Mini excavator
Air compressor
Drill rig (self-propelled, 5 ton)
Construction truck and trailer (2- to 60-ton)
Concrete trucks (2)
2-ton flatbed truck
Man lift
Boom truck
Semi-tractor trailer
Rigging truck
Crane (15- to 80-ton)
Concrete trucks
Crawler mounted auger
Dump trucks (4)