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March 18, 2016

GIS Data is Confidential Per PUC Section 583

Lisa Orsaba, Project Manager Infrastructure Permitting & CEQA, Energy Division California Public Utilities Commission

Re: Fulton-Fitch Mountain Reconductoring Project (A.15-12-005) Response to Deficiency Report #2

Dear Ms. Orsaba:

Enclosed are PG&E's Response to Deficiency Report #2 and a CD containing confidential GIS information submitted in response to Deficiency Report #2. TRC will also provide a link to TRC's Sharefile site from which you can download the confidential GIS information. We are submitting the GIS data layers pursuant to Public Utilities Code Section 583. As such, they must remain confidential unless you are notified otherwise by PG&E. The Response itself is not confidential.

Thank you for your assistance in retaining the confidentiality of the GIS data. Please let me know if you have any questions.

Very truly yours,

JU/LYNN/LAMBERT Attorney for Pacific Gas and Electric Company

cc: David Kraska, PG&E Law Department (w/o encl.) Aaron Lui, Environmental Scientist, Panorama Environmental, Inc. (w/ encl.)

DEFICIENCY REPORT #2 FOR THE PG&E FULTON-FITCH MOUNTAIN RECONDUCTORING PROJECT – APPLICATION NO. A.15-12-005

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) identified deficiencies in Pacific Gas and Electric Company's (PG&E) Application (A.15-12-005) and Proponent's Environmental Assessment (PEA) for a Permit to Construct (PTC) the Fulton-Fitch Mountain Reconductoring Project (project). Deficiencies were identified using the CPUC PEA Checklist (November 2008) and the CPUC Information and Criteria List (July 2008). CPUC provided PG&E with Deficiency Report (DR) #1 on December 23, 2015. PG&E submitted written responses to deficiencies identified in DR #1 on January 22, 2016, and provided additional information to supplement the project Application and PEA on January 22, January 25, January 29, and February 6, 2016.

The CPUC has reviewed the information provided by PG&E in response to DR #1 and identified deficiencies that have not been adequately addressed, as well as additional deficiencies with the supplemental material provided. Table 1 identifies the portions of the application found to be deficient.

ID	PEA Requirement References	Applicant References	Issue	Deficiencies	PG&E Response
Project	Project Description (PD)				
PD- 01	PEA Checklist: 3.4 Proposed Project 3.5.2 Poles/Towers 3.7.1.1 Staging Areas 3.7.1.2 Work Areas 3.7.1.5 Vegetation Clearance	PEA: 00c Index to CPUC PEA Requirements 2.7.1 Staging Areas 2.7.2 Work Areas 2.7.5 Erosion and Sediment Control and Pollution Prevention	Construction work area boundaries PG&E provided several GIS data layers in response to DR #1, including point data for temporary project work areas; however, the boundaries of proposed temporary work areas have not been identified. The boundaries of work areas are needed to determine the project's area of potential effect, soil disturbance, and proximity	 a. Provide polygon GIS data layers for the following project temporary work areas. The GIS data should identify the extent of all proposed work areas for the project, as well as alternative work areas, should the preferred work areas become unavailable for project use. Staging areas, as well as any material laydown areas that may be located outside of staging areas Helicopter landing zones and touch down areas (also see PD-03 for additional details regarding helicopter touch down areas) 	 a. GIS data layers will be provided confidentially under PUC Section 583. The GIS data layers have identified larger areas within which the temporary work areas and helicopter landing zones are proposed to be located, and the preliminary locations currently identified within those larger areas for those temporary work areas and landing zones. The temporary work areas and landing zones may be moved within the larger areas if ground conditions suggest there are preferable locations at the time of construction. Alternate work areas and landing zones will be similarly identified. Please see response to PD-03 for helicopter touch down areas. Preliminary access information has been previously provided. Turnaround areas are being provided, as well as additional, alternate access proposals. Open areas through which overland access routes could proceed are provided. In general, PG&E assumes that overland access roads

Table 1 PG&E Fulton-Fitch Mountain Reconductoring Project Application Deficiencies

ID	PEA Requirement References	Applicant References	Issue	Deficiencies	PG&E Response
	3.7.2.1 Pull and Tension Sites 3.7.1.6 Erosion and Sediment Control and Pollution Prevention during Construction Information and Criteria List: Section V(11)	during Construction Other: Responses to DR#1 (PD-06, PD-11, PD-13, and PD-15)	to adjacent resources and sensitive receptors, which are necessary for an adequate CEQA analysis. The GIS point data provided by PG&E identifies 6 undefined work areas (one north of Lavell Rd, one east of Fraught Rd, and 4 in the Shiloh Ranch Regional Park). These points were later labeled as "Preliminary Additional Work Areas" on maps submitted to CPUC on January 29, 2016. The work area points are located between approximately 10- 300 feet from the project conductor. A detailed description of activities that would occur at these work areas is needed, including their boundaries and a description of any proposed vegetation clearing or grading.	 Pole access, installation, removal areas Pull sites Guard structures (i.e., space for temporary pole installation or positioning a boom truck) Turnaround areas Provide a description of activities that would occur at the 6 undefined work areas identified in GIS data and maps provided by PG&E. 	to pole or work sites that avoids sensitive resources and hazards. Preliminary work areas around the poles are approximately 0.2 acres per LDS pole, 0.4 acres per TSP, and 0.06 acres per guard structure; GIS provides existing and preliminary new pole and guard structure locations but the pole work areas will shift with conditions on the ground. No ground disturbance is anticipated at the guard structures mounted on boom trucks. Preliminary pull site locations are being provided. b. Two undefined work areas are located along the Fulton-Shiloh segment alignment. These work areas may be used for parking of vehicles and equipment, for staging of a crane for reconductoring, as a meeting area for project management and work crews, or to store construction equipment and materials. The remaining four work areas are located along the Shiloh-Fitch segment in Shiloh Ranch Regional Park. Two of these work areas (WS- A05 and WS-A06) are located at flat, open areas on Big Leaf Trail and are preliminarily identified for vehicle parking and compressor staging. The other two work areas (WS-27 and WS-28) are approximately 0.4- acre work sites at pole sites 27 and 28. PG&E preliminarily plans to replace the existing wood poles in these locations with light duty steel poles. As described in the PEA in Section 2.7.2.1, Pole Work Areas, LDS poles typically require an approximately 0.2-acre work area. However, because of topographic constraints in the park, these poles each require an approximately 0.4-acre work site to ensure a large enough work area to assemble the poles, insulators, and hardware. Site preparation, including mowing, fabric, and rock may occur at any or all work areas.
PD- 02	PEA Checklist: 3.6 Right-of- Way Requirements	PEA: 2.6 Right-of- Way Requirements Other: Responses to DR#1 (PD-10)	Right-of-way (ROW) requirements The Project Description states that the existing PG&E easement for the Fulton- Shiloh Segment varies in width from 42 to 82 feet, and no width is specified for the	 a. Provide the existing ROW width range for the Shiloh to Fitch Segment b. Describe, by segment, the additional ROW widths that may be needed and if it could encroach on any buildings or structures. 	a. PG&E's existing easement specifies a route for the pole line, and does not specify an easement width. PG&E believes that it has adequate existing rights to construct the project along the existing alignment of the Shiloh -Fitch Segment, as PG&E's existing centerline easement provides secondary rights for access, maintenance and modernization of the existing utility line. Even though these rights may be legally sufficient, PG&E may choose to perfect, modify, clarify or upgrade its existing easements to bring them into conformance with

ID	PEA Requirement References	Applicant References	Issue	Deficiencies	PG&E Response
			Shiloh-Fitch Segment easement. In response to DR #1 (PD-10), PG&E stated "PG&E's land rights along the existing line are being reviewed to determine if any additional rights will be obtained." PG&E has not stated if the existing land rights are sufficient to construct, operate, and maintain the project, nor has PG&E defined any changes in the ROW that may be necessary. CPUC understands that PG&E would pursue any land right expansions following the decision by CPUC on the PTC application; however, at a minimum the CPUC requires a description of the width for the existing ROW for both segments of the project alignment, and any changes that would be needed to construct, operate, and maintain the project. This information is needed to determine if existing structures adjacent to the existing ROW would be impacted from building		current practices, to discourage encroachments or for other reasons. b. While PG&E has not yet determined whether easement modifications will be sought, there is no building or structure located next to the easement that would be affected by any such modifications.
			restrictions (e.g., land use		

ID	PEA Boguiromont	Applicant References	Issue	Deficiencies	PG&E Response
	References	References			
			impacts per CEQA).		
PD- 03	PEA Checklist: 3.7.1.4 Helicopter Access Information and Criteria List: Section V(11)	PEA: 2.7.1 Staging Areas 2.7.2.4 Helicopter Landing Zones Other: Responses to DR#1 (PD-13 and TT-04)	Helicopter access and work areas In response to DR #1 (PD-13), PG&E stated that helicopter touch down may occur in open and level spaces along the alignment and vegetation clearing or site development would not be needed. PG&E also stated that helicopter touch down would occur within the study area and the disturbance footprint analyzed in the PEA; however, the boundaries of disturbance areas (i.e., work areas boundaries) are not identified in the PEA (see deficiency PD-01). The specific locations and boundaries of helicopter touch down areas are needed to determine the potential for impacts associated with helicopter activities, including but not limited to noise, air quality, hazards, nesting bird disturbance. The PEA Project Description stated "PG&E plans to use helicopters to replace the	 a. Provide polygon GIS data with the boundaries of helicopter touch down locations. If touch down areas would only be located entirely within other identified temporary work areas for the project (e.g., pull sits and structure installation or removal areas), provide a statement describing their use for helicopter activities. b. Provide a draft helicopter use plan for the project that addresses preliminary flight paths and estimated operating durations (e.g., days per week and hours per day). The difference in helicopter activities between each project segment should be addressed, and helicopter activities proposed in the Fulton-Shiloh Segment, where residential developments are located, should be described in detail, such as operations at the helicopter landing zone proposed north of US 101, and material transportation and reconductoring along the Fulton-Shiloh Segment. Any considerations regarding the timing of helicopter use and noise impacts should be addressed. 	 a. GIS data layers will be provided confidentially under PUC Section 583. The GIS data layers have identified larger areas of open areas in which a helicopter may touch down where it is safe to do so. As described in the PEA, helicopters may touch down in any area that is flat and open, and not otherwise constrained (e.g., having protected biological or cultural resources). No ground or vegetation disturbance takes place as a result of a touchdown. b. PG&E is preparing a draft Helicopter Use Plan and will submit it as soon as it is available. General Response: Impacts to noise from helicopter use were addressed in PEA Section 3.12.5.3(a). As stated in this section, construction activities will be short term at each pole location, temporary, and limited to daytime hours; in addition, PG&E will notify nearby sensitive receptors and advise them of the nature and timing of helicopter use. Impacts to air quality from helicopter use were provided in response to DR #1 AQ/GHG-01. To model maximum potential emissions from helicopter operations, the air quality model conservatively assumed a ten-hour daily use cycle with three landing and take-off cycles and no idle time (page 4, Project AQ Emission Summary and Calcs 10162015.pdf). Impacts to hazards from helicopter use were addressed in PEA Section 3.8.4.3 Potential Impacts, helicopter fueling will occur at landing zones or hangars where spills. FG&E will adhere to avoid impacts resulting from accidental fuel spills. PG&E will adhere to avoid impacts resulting from accidental fuel spills. PG&E will adhere to avoid in response to negative receptor and cordinate helicopter operations where spill kits are available to avoid impacts resulting from accidental fuel spills. PG&E will adhere to avoid impacts resulting from Accidental fuel spills. PG&E will adhere to all aviation rules and regulations. PG&E's helicopter subcontractor will submit a "Congested Area Plan" to the FAA (14 CFR part 13.33). If required by FAA regulations, PG

ID PEA Requireme References	Applicant nt References	lssue	Deficiencies	PG&E Response
		conductor on the Shiloh- Fitch segment." In the PEA Noise section, PG&E states that helicopter work could occur at any point along the lines, and as close as approximately 100 feet to any noise-sensitive area. PG&E stated that helicopter use at any one location will be brief. The duration of work at each pole is described as 1 or 2 days; however, the duration of conductor removal and installation is not addressed nor is the duration of helicopter use during construction each activity. In response to DR #1 (TT-04), PG&E stated "Information on proposed flight paths is not yet available and will not be available until construction. In general, the path of the helicopter will follow existing utility line alignments to the extent possible and will avoid flying over residences." The CPUC understands that the location of flight paths is dependent on the location of helicopter landing zones and other temporary work areas that may be refined		complete a Helicopter Lift Plan for the operation of a helicopter within 1,500 feet of residential buildings (Section 3.16.2.1). As described in Section 3.16.4.3(c), helicopters carrying equipment or construction materials will not pass over either major highways or habitable structures. Helicopter impacts to nesting birds will be avoided through implementation of APM BIO-2, Avoid Impacts on Nesting Birds. As described in this APM, a qualified biologist will conduct nest surveys within 15 days prior to the start of work activities; if active nests are found, the biologist will establish a species-specific nest buffer as defined in Appendix E of the PEA.

ID	PEA Requirement References	Applicant References	lssue	Deficiencies	PG&E Response
			engineering; however, preliminary flight paths and areas where helicopter activities would be concentrated are required to determine potential noise impacts and aerial lift hazards that may require residences to temporarily vacate structures. The CPUC requires additional details on the use of helicopters. Without specific detail, a worst-case scenario may need to be established, which could result in significant and unavoidable impacts from temporary construction noise and aerial lift hazards.		
PD- 04	PEA Checklist: 3.7.5 Construction Workforce and Equipment	PEA: 2.7.7.5 Construction Workforce and Equipment Other: Responses to DR#1 (PD-16)	Construction workforce and equipment In response to DR #1 (PD-16), PG&E provided a revised version of Table 2.0-2 in the PEA Project Description with estimated durations of operation, daily vehicle trips, and the number of crews needed for several project activities; however, the following activities were not addressed as requested: Control building replacement for the Fitch Mountain	 a. Provide a revised version of Table 2.0-2 submitted in response to DR #1 (PD-16) that addresses the following project construction activities: Control building replacement for the Fitch Mountain Substation Equipment maintenance and refueling Helicopter support teams and refueling Work area stabilization (e.g., gravel installation and removal, and grading/blading) 	 A further revised Table 2.0-2 is attached to this deficiency response. Control building replacement for the Fitch Mountain Substation was included in Table 2.0-2 under <u>Circuit Breaker Installation (includes structure and conductor replacement)</u> Equipment maintenance or refueling; Helicopter support teams and refueling. No additional crews or equipment are required beyond those identified in Table 2.0-2. Work area stabilization (e.g., gravel installation and removal, and grading/blading) was included in Table 2.0-2 under <u>Access Road Improvements and Reestablishment</u>

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			 Substation Equipment maintenance and refueling Helicopter support teams and refueling Work area stabilization (e.g., gravel installation and removal, and grading/blading) This information is needed to determine the workforce and equipment needed to construct the project, and to determine potential impacts for traffic, noise, air quality, and greenhouse gases. Also see AQ/GHG-01 for additional information on air quality emission calculations. 		
Biologi	ical Resources (B	R)			
BR-01	PEA Checklist: 5.4 Biological Resources Information and Criteria List: Section V(14)	PEA: OOC Index to CPUC PEA Requirements 3.4 Biological Resources Other: Responses to DR#1 (BR-01)	Jurisdictional delineation and water feature crossings In response to DR #1 (BR-01), PG&E provided a report titled Water Crossing Mapping (GANDA 2016). This report surveyed a total of 23 access road crossing locations that occur in the vicinity of wetland or riparian areas. Table 1 of the GANDA report identifies 4 crossings where permits (i.e., 404, 401, and 1602) "will" be required,	 a. Provide a formal delineation report for water features that could be impacted by the project, including but not limited to features that would be crossed during construction using fiberglass mats, steel plates, and/or temporary bridges, or "Arizona" low-water crossing, or that overlap a proposed work area boundary. b. Confirm the total number of water crossing for the project, and identify any missing water crossings that were not included with the GANDA 2016 report. 	 a. An updated wetlands delineation report will be submitted on or before April 15, 2016. b. Twenty-four water crossings have been identified, including one (FFX-24) that was not identified in the GANDA 2016 report. FFX-24 will be formally delineated in the revised wetlands delineation report.

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			and numerous other crossings where permits "may" be required. The report also surveyed a total of 23 work areas that occur in the vicinity of wetland or riparian areas. Nine work areas were identified that overlap with a wetland/riparian feature. In addition, PG&E provided a Jurisdictional Delineation Report (TRC 2015). This report formally delineates two features (SW1 and SW3); the report states that PG&E determined these were the only features that could not be avoided. The Biological Resources Technical Report (GANDA 2012) addresses jurisdictional habitats, but does not include a formal delineation of any jurisdictional areas. A total of 78 wetland/waters features were identified by the GANDA (2012) and TRC (2015) reports. According to the TRC (2015) report 76 of these features will be avoided, but this information conflicts with the findings of the more recent Water Crossing Mapping (GANDA 2016). A formal jurisdictional		

ID	PEA Requirement References	Applicant References	Issue	Deficiencies	PG&E Response
			delineation has not been completed for all jurisdictional features that could be impacted by the project, such as those that would be crossed during construction using fiberglass mats, steel plates, and/or temporary bridges, or "Arizona" low-water crossing. The jurisdictional delineation report (TRC 2015) only formally delineates two features, while the most current information regarding impacts to jurisdictional habitats (GANDA 2016) indicates that numerous other jurisdictional features will or may be impacted. A jurisdictional delineation report should be prepared that addresses all jurisdictional features that will or may be impacted by the proposed project. The GANDA 2016 report identifies 23 crossings; however, Table 2 PD-04a provided with PG&E's response to DR #1 (PD-04) included a list of 24 crossings. The report does not address crossing FFX24 identified in the table.		

ID	PEA Requirement References	Applicant References	lssue	Deficiencies	PG&E Response
Culture	Il/Paleontologico	al Resources (C/	PR)		
C/PR- 01	PEA Checklist: n/a Information and Criteria List: Section V(12)	PEA: 2.10 Applicant Proposed Measures 3.5 Cultural Resources Other: Responses to DR#1 (C/PR- 01)	Evaluation of potentially eligible cultural resources Applicant proposed measure (APM) CR-1 states that cultural resources P-49- 001179 (CA-SON-1256) was never formally evaluated for listing on the California Register of Historic Resources (CRHR). After the court decision from Madera Oversight Coalition v. County of Madera (2011), the CPUC has required that all cultural resources that may be affected by a project be fully evaluated for CRHR eligibility. In addition, APM CR-1 states that the resource would be avoided through the development of a protective zone; however, two guard structure points have been identified within the boundary of the resource.	 a. Provide an eligibility evaluation for cultural resource P-49-1179 (CA-SON-1256) to determine whether the resource is eligible for listing on the CRHR. b. Provide the eligibility testing report that contains a conclusion regarding the eligibility of cultural resource P-49-1179 (CA-SON-1256). c. Clarify the development of a protective zone that would achieve avoidance of the feature addressed in APM CR-1, and how the proposed guard structures would not conflict with the projective zone. 	 a, b. Although the resource is within the APE, no soil or other disturbance is planned within the resource boundary. Because the resource will not be affected, it does not require formal evaluation under the cited authority. Nevertheless, for purposes of resource protection, PG&E is using common professional practice in California and assuming that the site could be eligible for the CRHR. While there are no anticipated impacts to the site, PG&E is implementing avoidance measures to protect the resource. c. Boom trucks staged on either side of the road are preliminarily proposed for use as guard structures at this location. The boom trucks will be staged on either side of Leslie Road. No soil disturbing activities are currently proposed along Leslie Road. Should project plans change to require installation of guard structures that may cause site disturbance, PG&E will have a qualified archaeologist formally evaluate the site for eligibility to the CRHR prior to any ground disturbing activities within the site boundary and report the findings to the CPUC. Should the site be found eligible, PG&E will consult with the CPUC project team regarding appropriate treatment/mitigation measures prior to any construction activities within the site boundary.

Activity	Esti	imated Quantity of Equipment	Estimated Days per Week of Operation	Estimated Hours per Day of Operation	Estimated Duration of Use (weeks)	Peak Daily Vehicle Trips	Non-Peak Daily Vehicle Trips	Crew Members Needed
Survey	1	pickup truck	4	8	5	6	2	2
	1-2	Pickup truck	6	10	5	6	2	6-10
Vegetation Removal and	1-2	Bucket truck	6	10	5	6	2	
trimming	1-2	Chipper truck with chipper	6	10	5	6	2	
	1	ASV mower or similar equipment on rubber tracks	2	4	6	6	2	6
Site Improvements	1	D4 Dozer	4	8	7	6	2	
(includes access roads	1	pickup truck	4	8	4	6	2	
and worksites)	1	semi truck with trailer to haul grader	1	4	4	6	2	
	1	water truck	4	6	4	6	2	
Drainage Crossings (includes culverts, "arizona" low-	1	crawler backhoe	4	4	4	6	2	
water crossing, and temporary bridges)	1	pickup truck	4	4	4	6	2	
	1	UTV w/ excavator	5	6	6	6	2	21
Auger LDS Pole	1	pickup truck	5	6	6	6	2	
Holes	1	line truck with auger attachment	5	6	2	6	2	
Pole Delivery	1	Shiflet truck	4	6	2	6	2	
LDS Pole Installation – Aerial Access (includes old pole removal)	1	crew-cab truck – transport to walk-in access point	7	4	4	6	2	

Table 2.0-2 (Revised): Typical Construction Equipment and Duration of Use

Activity	Esti	mated Quantity of Equipment	Estimated Days per Week of Operation	Estimated Hours per Day of Operation	Estimated Duration of Use (weeks)	Peak Daily Vehicle Trips	Non-Peak Daily Vehicle Trips	Crew Members Needed
	2	helicopter (small)	7	10	17	Peak daily and trips for helicop unknown. Helico	non-peak daily oters are copters were	
	1	helicopter (large)	7	10	9	day (i.e. no idle assumed).	assumed to be operational all day (i.e. no idle time was assumed).	
	1	crew-cab truck	7	6	4	6	2	
	1	UTV with worker-lift attachment	5	4	6	6	2	
LDS Pole Installation - Ground Access	1	line truck with trailer	7	6	2	6	2	
(includes old pole removal)	1	UTV mounted with hydraulic jack	4	6	12	6	2	
	1	back hoe	5	6	15	6	2	
	1	jackhammer	4	6	12	6	2	
	1	compressor	5	4	15	6	2	
Auger TSP Holes	1	crawler mounted auger	5	6	5	6	2	
	1	dump truck	5	6	5	6	2	
	1	crane	5	6	6	6	2	
	1	boom truck	5	6	6	6	2	
TSP Installation (includes pole	1	rigging truck (2- ton)	5	6	6	6	2	
removal)	1	crew-cab truck	7	6	6	6	2	
	1	pickup truck	7	6	6	6	2	
	1	cement truck	2	6	3	6	2	
Material,	1	boom truck	7	4	10	6	2	
Equipment, and Supplies Hauled to or from Staging Areas	1	F550 truck	5	2	10	6	2	

Activity	Estimated Quantity of Equipment		Estimated Days per Week of Operation	Estimated Hours per Day of Operation	Estimated Duration of Use (weeks)	Peak Daily Vehicle Trips	Non-Peak Daily Vehicle Trips	Crew Members Needed
Conductor Installation (includes old conductor removal)	3	100 ton cranes	7	5	3	6	2	
	1	wire reel attached to line truck or trailer	7	7	13	6	2	
	3	pickup truck	7	7	15	6	2	
	2	worker lift attached to line truck	7	7	13	6	2	
	1	puller attached to line truck	7	7	13	6	2	
	1	tensioner attached to line truck	7	7	13	6	2	
Right-of-Way Restoration and Cleanup	1	motor grader	5	4	8	6	2	6
	1	D6 dozer	5	4	3	6	2	
	1	semi truck with trailer	5	2	8	6	2	
	1	pickup	5	6	8	6	2	
Circuit Breaker Installation (includes structure – including control building replacement - and conductor replacement)	1	bobcat	4	10	12	6	2	6-8
	1	excavator	4	10	12	6	2	
	1	fork lift	4	10	12	6	2	
	1	crane	4	10	12	6	2	
	1	boom truck	4	10	12	6	2	
	1	man lift	4	10	12	6	2	