STATE OF CALIFORNIA Gavin Newsom., Governor

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

April 4, 2019

Jo Lynn Lambert
Attorney at Law
Pacific Gas & Electric Co.
300 E. State Street, Suite 600
Redlands, California 92373

Re: Data Request Set No. 4 for the PG&E Vierra Reinforcement Project, Application No. 18-06-004

Dear Ms. Lambert:

The California Public Utilities Commission's (CPUC) Energy Division reviewed the updated Vierra Project Description (project refinement) recently provided for review to the California Energy Commission. The project refinements are relatively extensive, despite their concentration at the Howland Road Substation. They include a 600 foot trench, five feet wide and five feet deep requiring the movement of 507 (525 new total – 18 previous toital) cubic yards of dirt via trick trips not previously contemplated. Several technical sections will have to be augmented to account for this new feature. It is but one example of a new project component whose analysis reaches across several areas of analysis.

Due to the scale of the refinements, additional data requests are now necessary in order to better understand and analyze the potential environmental impacts across the individual sections that comprise the environmental document. Every section must account for the new project component; with several requiring additional information and explanation in order that comprehensive analysis occur.

We would appreciate your prompt responses to the following data requests, which were developed upon receipt of the refined Project Description. Because our current schedule was negatively impacted by the delay in receiving the modifications, we have forgone the formal data request route, and are submitting these questions to you informally (with copies sent to Mike Roasauer at the CPUC). Importantly, we need your help to assist us in completing the Administrative Draft of the environmental document by quickly answering the attached data request questions. As you know, it is impossible to complete the Administrative Draft until we receive responses to the attached questions. Accordingly, we request that responses to as many items as possible be provided to us within one week of submittal of this document (by April 11, 2019). Please transmit the responses directly to me at Mike.Monasmith@energy.ca.gov and copy Mike Rosauer at the CPUC. As always, questions on the overall project should be directed to Mike Rosauer at (415) 703-2579 or Michael.Rosauer@cpuc.ca.gov.

Sincerely,

Mike Monasmith
Project Manager, California Energy Commission
Vierra Reinforcement Project

cc: Michael Roasauer, California Public Utilities Commission

Vierra Reinforcement Project
Data Request Set No. 4

Vierra Data Request No. 4 includes questions for the following technical areas:

- Air Quality
- Cultural and Tribal Cultural Resources
- Project Description
- Wildfire

Air Quality

AQ-16 The Project Description refinements (updates to the project description) state that the modifications to be performed at Howland Road Substation would include: installation of a new antenna, circuit switcher (to replace 115 kV fuses), voltage transformer, 600-foot-long conduit for a duct bank, and updating automation equipment in the control room. Please provide estimates of vehicle trips and construction equipment use for the proposed modifications at Howland Road Substation. Please provide Air Quality and Greenhouse Gas emissions estimates for the modifications proposed for Howland Road Substation.

Construction of upgrades at the Howland Road Substation will include construction equipment as shown in the Table 1 below. Table 1 is formatted so that the Howland Road substation construction equipment can be added to PEA Table 2.0.3. Additional equipment details will be included with the Air Quality and GHG emissions input files, which is forthcoming. Civil construction activities (i.e., trenching and foundation construction) will include the import and export of soils, sands, and road base (gravel) totaling approximately 1,020 cubic yards (cy). Consistent with PG&E's response to Data Request No. 1, Question AQ-6, haul trucks with a capacity of 25 cy will be used. Therefore, an estimated 41 haul trips will be required during the civil construction phase at Howland Substation. The Civil construction phase is anticipated to last 30 working days. These haul trips will occur throughout this duration, on an as-needed basis.

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Table 1: Howland Road Substation Typical Construction Equipment and Duration of Use

Activity	Total Number of On-Site Workers[1]	Estimated Type and Quantity of Equipment		Estimated Days per Week of Operation	Estimated Hours per Day of Operation	Estimated Duration of Use (weeks)
Civil Construction	5-10	1	Auger	3	10	1
		1	Excavator	6	10	5
		3	Concrete Truck	2	10	1
		2	Loader	6	10	5
		6	Work Trucks (pick-up and line trucks)	6	10	5
		1	Water Truck	6	2	5
		N/A	Dump/ Haul Trucks	*See table note # 2*		
Equipment Installation and Outdoor Electrical Construction	5	1	Bucket truck	5	10	3
		1	Water truck	5	2	3
		1	Backhoe	5	10	2
		1	Forklift	5	10	1
		6	Worker trucks (pick-up)	5	10	3
Indoor Electrical Construction and Testing	5	1	Forklift	5	10	1
		6	Work Trucks (pick-up and line trucks)	5	10	3

Notes:

[1] The range of workers on site for the combined Howland Road Substation would be 5 – 10 workers. This could occur during civil work, or during overlap of civil construction and equipment installation and outdoor electrical construction.

[2] A total of 41 haul loads are estimated for import and export of materail associated with trenching and foundation excavation activities. These 41 (2-way) haul trips would be spread throughout the 30-day construction, as needed.

Cultural and Tribal Cultural Resources

CR-4 The Project Description refinements did not include details about the date of construction or modifications of the substation, that would allow staff to determine whether the facility is of historic age, and therefore a potential historical resource which could be impacted by these "minor modifications". Power plants and substations in the early 20th century often featured buildings of architectural merit, designed to convey a "corporate image of permanence, utility and beauty in the public mind" (Baker 2003:14). In addition, it is necessary for the cultural resources analysis to take into consideration potential impacts to historical resources within the footprint and in the vicinity of the Howland Road Substation, as well as assessing the potential for encountering as-yet unknown buried archaeological resources. Please provide the following information for the Howland Road Substation location:

1. Dates of construction and subsequent modifications of the Howland Road Substation, including a general description of the facility, including any on-site buildings, and of the setting including but not limited to: rural setting, commercial/industrial setting, inclusion of or adjacency to any historic structures or districts.
   a. If the substation is over 45 years old:
      - A DPR 523a Primary Record evaluation and related 523 forms (for example, 523j and 523l) are needed for the substation. Include a description of the substation, including any on-site buildings.
2. A pedestrian archaeological survey of the area proposed for trenching and ground disturbance. The survey should be conducted by a Secretary of the Interior qualified archaeologist. Survey results should be submitted as a technical report submitted with the results of the survey that adheres to the standards of ARMR (OHP 1990).
3. Results of a literature search with a 0.5-mile radius from the boundary of the substation performed at the Central California Information Center at CSU Stanislaus. Submit the results of record search including the site forms and reports.
4. A geotechnical or other documentation that describes the depth of fill at the substation in general and specifically at locations where the trench will be placed. Include a description of how the proposed trench could impact intact native soils.

Please see attached Cultural Resources Constraints Report, which assumes that the area of potential impact is the entire Howland Road Substation.

Baker 2003 – Cindy L. Baker. The Lights Went On All At Once: The History of Electricity in California. Prepared for the California Energy Commission. February 2003.

OHP 1990 – Office of Historic Preservation. Archaeological Resource Management Reports (ARMR): Recommended Contents and Format. February 1990. Electronic resource available at http://ohp.parks.ca.gov/pages/1054/files/armr.pdf (accessed April 2, 2019).

Geology and Soils

GEO-2 Please provide a geologic map showing the geologic units and faulting in the vicinity of Howland Road Substation.

GEO-3 Please provide a map showing the soil types at the Howland Road Substation

GEO-4 Please provide any geotechnical data or reports that have been completed for proposed construction at the Howland Road Substation.

Preliminary design data for Howland Road Substation has been based on soil information collected for the nearby Vierra Substation. Geotechnical data will be obtained prior to the final design completion and will be provided to the CPUC.

Hydrology and Water Quality

HYDRO-8 Please discuss whether there are any 'Recognized Environmental Conditions' (as defined in a Phase I Environmental Assessment) where excavations will be conducted for the Howland Road Substation.

HYDRO-9 Please describe whether groundwater could be encountered in excavations and if so, how it will be managed.

Groundwater will be treated the same at Howland as the expanded Vierra Substation.

Project Description

PD-16 Several project modifications are proposed at Howland Road Substation, including a large 600' circuit trench that could stretch across much of the substation footprint. To understand the placement of the modifications in Howland Road Substation and to properly account for their placement and organization within the fence line of the substation, please provide a site map denoting all new project components (modifications), their dimensions, relative distances and any other information that would help staff analyze this component of the overall Vierra Reinforcement Project. Several dimensions of the modifications did not include a depth measurement. Please ensure the length, width and depth for all modifications in Howland Road Substation is provided, including depth of profile above grade (projection above grade). Please confirm whether the measurements for the three-pier foundation for the new circuit switcher (approximately 12.5 feet by 4 feet diameter) is for each pier or all three piers combined. Please confirm no new permanent or temporary right-of-way or land lease would be necessary to accommodate the modifications.

The dimensions are for each pier. All work will be done within land that PG&E's leases from JR Simplot Company. No additional land rights will be needed.

Work at Howland Road Substation requires an approximately 600-foot long by 5-foot deep, 5-foot wide conduit trench, three 12-foot deep by 4-foot diameter piers to support the circuit switcher foundation and one approximately 9-foot deep by 2-foot diameter voltage transformer single pier foundation. No additional areas of ground disturbance are anticipated. Work would be covered under the project's SWPPP.

We will have a site map for the Howland Road Substation work by the end of the week.

PD-17 CPUC Staff needs more detailed information on the Howland Road Substation modifications. Please provide a one-line diagrams showing the following:

- New voltage transformer primary and secondary side voltages and how it is connected in the Howland Road Substation.
- Indicate where the new proposed circuit switch is located in the one-line diagram.
- Provide a duct bank design configuration and how it is routed to the control room.

Provide the conductor type, size, and current carrying capacity of the existing Howland Road line.

Attached is a single-line diagram of modified connections at the Howland Station).

PD-18 Please describe what standards will be used for design and construction of the proposed structures at the Howland Road Substation

The circuit switcher will be designed according to PG&E Utility Standard 073133 (attached).

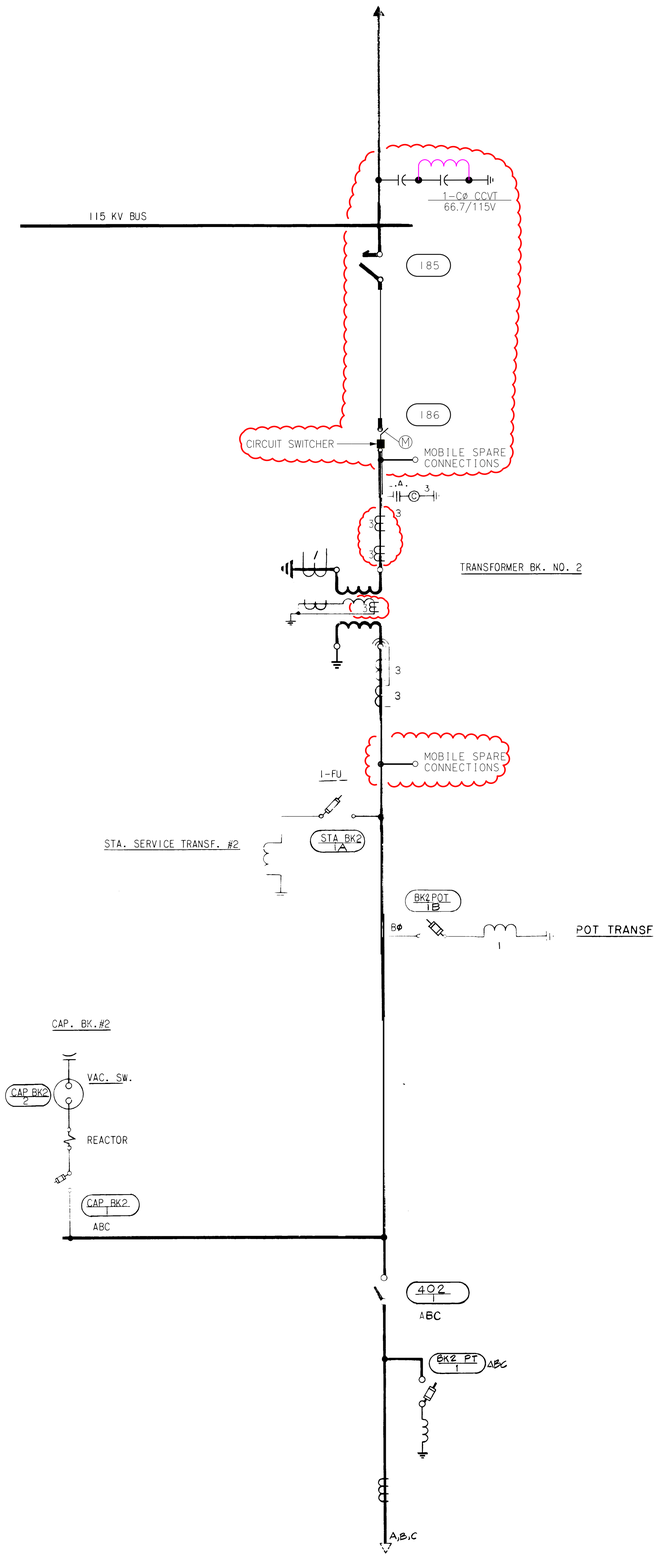
Wildfire

W-1 Please describe whether Howland Road Substation is in or near state responsibility areas or lands classified as very high fire hazard severity zones.

No, Howland Road Substation is not in or near a state responsibility area (SRA) or lands classified as very high fire hazard severity zones.

W-2 Please describe whether Howland Road Substation is in a Tier 2 or 3 fire hazard area based on the CPUC Fire-Threat Map where enhanced fire safety regulations found in Decision 17-12-024 would apply.

Howland Road Substation is not located within a Tier 2 or 3 high fire hazard area based on the CPUC Fire – Threat Map.



REV	DESCRIPTION	DATE	DRAWN	ENGINEER

HOWLAND ROAD SINGLE LINE SKETCH