

PG&E Response to Data Request No.1
Humboldt Bay-Humboldt #1 60 kV Reconductoring Project (A.19-02-004)
August 9, 2019

Below are responses to the list of questions received from the California Public Utilities Commission (CPUC) in Data Request No.1 dated July 18, 2019, and the question received by email from the CPUC's consultant on August 2, 2019. Each CPUC data request is set forth in italics and followed by PG&E's response.

- 1. Will the existing Humboldt Bay-Humboldt #1 line stay in service until the new line is completely built?*

PG&E Response: The project involves the replacement of structures along the Humboldt Bay-Humboldt #1 60 kV Power Line (HB-H #1) and does not include construction of a 'new line'. As indicated in the Proponent's Environmental Assessment (PEA) in Sections 2.8.6 and 2.8.6.1, PG&E will temporarily take the HB-H #1, as well as specific sections of distribution lines that cross the power line or are co-located on the power line poles, out of service (also known as "taking clearances") during construction. Clearances will be taken along short sections of the line where work is occurring, and not the entire line at one time. Certain project activities, including installing the four lattice steel towers and auguring new pole holes, can be performed in advance of taking a clearance thereby minimizing the duration of clearances along the line. Conductor replacement will occur in sections when seasonal restrictions, clearances, and crew scheduling permit. The existing conductors will be moved from the old structures to the new structures during the line clearances. Installation phases may occur concurrently along different portions of the power line.

- 2. The Project proposes to replace existing wood poles with new wood poles and some light-duty steel (LDS) poles with wood poles. One of the reasons discussed for using wood poles rather than LDS poles was due to the presence of a natural gas line which prohibits the use of metal poles. Are there other reasons to use wood poles in certain situations rather than LDS? Why are poles that are currently LDS being replaced with wood?*

PG&E Response: In addition to the proximity of underground metal pipelines, PG&E would need to use wood poles rather than LDS due to the presence of transformers on the pole or other conductive objects embedded in and extending above ground within eight feet of the pole that could affect the integrity of the structure.

PG&E updated its internal standard for engineering designs in 2017 regarding the use of LDS poles in areas with conductive objects, as described above. Some of the poles that are currently LDS will be replaced with wood structures to be consistent with the updated 2017 standard.

- 3. Provide an estimate for the total amount of land disturbance required for the Project in terms of acres disturbed as well as cubic yards excavated and/or backfilled.*

PG&E Response: As indicated in Section 2.8.1 of the PEA, limited land disturbance will be required in construction work areas. Many portions of the project are in urban areas, and as such, many of the temporary work areas are paved or partially paved. The work areas shown in the GIS data for the project are approximate, rectangular, and typically centered around a pole to provide a conservative estimate of the maximum area that may be used. If a pole is located adjacent to a

paved area, PG&E will set up the equipment on the paved area, to the extent feasible, rather than cause land disturbance to unpaved areas. Additionally, most of the work areas within undeveloped areas will not involve ground disturbance, but will involve the placement of equipment, vehicle access, and staging, etc. For these reasons, the total acreage of temporary work areas shown on the GIS data does not equate to the actual amount of land disturbance. It is estimated that approximately one acre along the entire project alignment will require grading, blading, or some level of ground disturbance. This will generally consist of blading in a confined area to level a work area.

As indicated in Section 2.8.4 of the PEA, the total estimated volume of soil to be excavated is approximately 445 cubic yards (not including micropiling). The excavated soil will be used to backfill the holes left by the removal of the existing wood and LDS poles. Micropiling of the lattice steel tower (LST) foundations would generate approximately 10 cubic yards of soil per structure, which will be directed by a discharge hose into a dumpster for off-site disposal.

4. *The PEA mentions that water would be required for construction activities including during auguring and for dust control. How much water is expected to be used during Project construction and operation?*

PG&E Response: As indicated in the response to question 21 in PG&E's response to the CPUC's Deficiency Letter issued March 8, 2019 (PG&E Deficiency Response), any water needed for the project will be supplied by a water truck with a capacity of approximately 4,000 gallons. The water truck will typically be filled once a week, which equates to a conservative estimate of approximately 128,000 gallons over the anticipated construction period of approximately 8 months. There will be no change in water use during operation from the existing baseline.

5. *How much construction waste is expected to be generated by the Project?*

PG&E Response: As indicated in the response to question 22 in the PG&E Deficiency Response, it is estimated that construction waste will result in approximately one 40-CY dumpster twice a month. This conservative estimate amounts to 640 cubic yards of construction waste over the anticipated construction period of approximately 8 months.

6. *Provide GIS data for the temporary and permanent disturbance areas.*

PG&E Response: PG&E is currently finalizing updated GIS data to accurately reflect slightly revised project components and anticipates filing the revised confidential GIS data with the CPUC by August 20, 2019. The updated GIS data will identify temporary and permanent disturbance areas. As indicated on the existing confidential GIS data (and the future corrected GIS package), temporary work areas consist of pole and tower work areas, pull and tension sites, access roads, guard structure locations, and staging and helicopter landing zones.

As indicated above in the response to question 3, several of the temporary work areas are either entirely paved or partially paved, minimizing the potential for actual ground disturbance. Additionally, many work areas will not require any specific ground disturbance, but will be used for placing equipment, driving access, and the movement of construction vehicles. As stated

above, one acre of grading or ground disturbance is anticipated along the entire project alignment.

The only permanent disturbance associated with the project is the footprint of replacement structures, which is identified on the existing confidential GIS (and the corrected future GIS Package delivered next week) as a ‘replacement structure’ and includes tubular steel poles (TSPs) wood and LDS poles, and LSTs. With the exception of two poles, all replacement tubular steel poles (TSPs) and wood and LDS poles will be placed within approximately 5 to 10 feet of the existing poles. The two replacement poles that will not be within 10 feet of the existing pole are poles 18 and 30, which will be located approximately 40 and 60 feet, respectively, from the existing poles within the alignment to provide adequate distance from natural gas pipelines (see additional detail below under ‘Project Description Updates’). The exact location of pole replacements within each work area will be based on field conditions at the time of construction.

7. *Provide archeological/architectural resource GIS data from the Cultural Resources Inventory, Survey, and Evaluation Report.*

PG&E Response: The PG&E Cultural Resources Specialist submitted the requested cultural GIS data directly to the CPUC Cultural Resources Specialist by email on August 1, 2019, to preserve the confidentiality of this information.

8. *Describe how drilling fluids are disposed using a “mud recycler”? How will the use of a mud recycler ensure that there is no contamination from drilling fluids?*

PG&E Response: As indicated in Section 2.8.5.1 of the PEA, drilling fluids will be disposed of using a mud recycler and excess spoils will be hauled off-site for disposal or used elsewhere on the project as fill, as appropriate, and in compliance with all regulatory requirements. The mud recycler will separate solids from the drilling fluid such that the drilling fluid can be re-used during the micropiling process. The separated solids will be disposed of based either on generator knowledge or tested as appropriate to confirm disposal methods in compliance with state and federal regulatory requirements.

9. *Provide a more detailed description of potential dewatering activities associated with drilled pier foundations.*

PG&E Response: As indicated in Section 2.8.5.1 of the PEA, if dewatering is necessary during excavation of a drilled pier or auger hole for structure installation, water will be discharged to the surface in compliance with applicable regulations or discharged to a portable tank or other container and disposed off-site in compliance with any applicable state and federal regulatory standards.

10. *The PEA states that LDS poles have a flange located at the base and they may be cut off below the ground surface, leaving the flange and remaining pole in the ground. How many LDS poles would be left in the ground in this manner?*

PG&E Response: Approximately eight existing LDS poles will be removed as part of the project. Poles that are accessible by a vacuum truck will be completely removed, including the flange and

the entire pole, by vacuuming around the flange at the base of the pole. Where poles are inaccessible by a vacuum truck, the initial two feet around the pole will be dug out, the pole will be cut with a torch, and the hole backfilled. Given current ground conditions, PG&E anticipates that approximately six of the eight poles will be cut below ground, leaving the flange in place, and approximately two of the eight poles will be completely removed.

11. How many truck trips (e.g., materials, equipment, concrete, and water delivery; debris removal) would occur on an average day, and how many would occur during maximum conditions taking into consideration overlapping activities? (Question sent by email from Cory Barringhaus, August 2, 2019.)

PG&E Response: Based on the information provided in the PEA, as described below, PG&E anticipates that approximately 16 truck trips would occur on an average day during construction activities taking into consideration overlapping activities. This estimate is based on the following assumptions:

- The project will involve the quantities and vehicles identified in PEA Table 2.8-3
- On-road vehicles include: pickup truck, semi-truck, water truck, flatbed, line truck, tractor trailer, crew-cab truck, bucket truck, vacuum truck, truck crane, truck drill, dump truck, boom truck, concrete truck
- 192 construction work days (8 months at 6 days/week)

Approximately 50 truck trips per day would occur during peak construction. A maximum of five truck trips are anticipated for each pole site (PEA 2.8.5.3; Page 2.0-24). At the peak of construction, there may be as many as 10 crews during day clearances to install the conductors and to minimize the length and number of line clearances (PEA 2.8.8; Page 2.0-28).

Project Description Updates

Enclosed with this Data Response is the CPUC's Draft Project Description with PG&E's proposed edits reflected in tracked changes. PG&E's proposed edits involve slight corrections to match the Permit to Construct (PTC) Application as well as information provided in PG&E's response to the CPUC's Deficiency Request, dated April 8, 2019. In addition, we note the following clarifications and slight revisions to the Project Description:

1. Three wood poles that initial engineering had identified would be replaced with wood poles will now be replaced with LDS poles. They are:
 - a. Pole 14, as will be indicated in the updated confidential GIS package to be submitted by August 20, 2019, will be replaced with an LDS pole approximately 10 feet west of the existing pole and within the existing alignment, providing adequate separation distance from a metal fence.
 - b. Pole 18 will be replaced with an LDS pole approximately 40 feet west of the existing pole and within the existing alignment, providing adequate distance from a gas pipeline.

- c. Pole 30 will be replaced with an LDS pole approximately 60 feet north of the existing pole and within the existing alignment, providing adequate distance from a gas pipeline.

The approximate locations for replacement poles 14, 18, and 30 and the respective temporary workspaces will be accurately reflected in the updated confidential GIS data to be submitted to the CPUC by August 20, 2019. No changes to access requirements are needed.

- 2. **CPUC Website Background and Project Overview.** The CPUC website for the project provides a summary “Background and Project Overview.” In this summary, HB-H # 1 is described as “a critical back tie between the Humboldt Bay Power Plant and the Humboldt Substation” and as connecting “the Humboldt Bay Power Plant to the Humboldt Substation”. Please note that the Humboldt Bay-Humboldt # 1 60 kV Power Line connects Humboldt Bay Substation to Humboldt Substation and not the Humboldt Bay Power Plant. The Humboldt Bay Power Plant, a nuclear facility, was decommissioned starting in 2009. The Humboldt Bay Generating Station, a natural gas-fired facility, is located adjacent to Humboldt Bay Substation.

The Background and Project Overview also describe only the reconductoring of the 7.8 miles of the HB-H #1 and does not include reconductoring of the initial approximately 0.6-mile of the Humboldt Bay-Eureka 60 kV Power Line, which will be co-located with the HB-H #1 line on the four new LSTs.

Updated GIS

As referenced above, PG&E will be sending to the CPUC next week a revised, confidential GIS package, by email and CD, that contains the updated locations of all project components based on current design and conservative estimates. This revised package should replace the previous confidential GIS layers provided for the project components with the PTC application, filed February 7, 2019. The updated confidential GIS layers will include the project clarifications identified above as well as more accurate locations for the existing HB-H #1 line, the HB-H #2 60 kV Power Line, and the Humboldt Bay-Eureka 60 kV Power Line. PG&E will send the updated confidential GIS layers to the CPUC by no later than August 20, 2019.