Response to Data Request #1

Below are the requests for data submitted by the Public Utilities Commission on December 23, 2009 and the associated responses. As indicated below, additional information is provided either in the attached material or on CDs sent separately. All information provided is preliminary and subject to change based on California Public Utilities requirements, final engineering, and other factors.

Project Description

Towers and Poles

1. *Please verify that the Hollister Tower Segment would include removal of 36 of the 38 existing towers within the ROW and installation of 37 new towers, therefore resulting in a total of 39 towers within the Hollister Tower Segment. Please also confirm that Tower 0/05 would be an entirely new tower to be installed as part of the Proposed Project and would not replace an existing tower.*

   Response: This information is correct. Please refer to pole and tower spreadsheet submitted with data response packet for additional details on pole and tower activities.

2. *Paragraph Four on Page 3-4 of the PEA states the following:*

   As noted, approximately17 wood poles are located in the floodplain of the San Benito River (the existing river alignment) (Figures 3-13 and 3-14). These existing wood poles in the floodplain will be "topped" (i.e., shortened by removing the existing power line and cutting down the excess length to the level of the lower distribution line), allowing the existing distribution line to continue to serve nearby customers. Approximately four additional wood poles that are located in the agricultural field west of the river will be topped in a similar manner. Approximately 10 poles will be removed from this segment as part of the project. Approximately 22 new steel poles (both TSPs [4] and LDS poles [18]) will be installed to accommodate the Proposed River Crossing, which is approximately 3,000 feet north of the existing river alignment.

   Regarding this information, please respond to the following:

   a) *Please verify that a total of 17 poles would be topped, 13 of which would be in the floodplain and 4 of which are in agricultural lands.*

   Response: Approximately 17 poles would be topped, 12 of which are located in the floodplain and 5 of which are located in agricultural lands. Please refer to pole and tower spreadsheet submitted with data response packet for additional details on pole and tower activities.

   b) *The text states that 10 poles would be removed from the river crossing segment; however, Figures 3-12 and 3-13 only show 6 poles to be removed from the river crossing segment (Poles 15/11; 15/12; 15/13; 15/14; 15/15; and 16/00). Please verify that only 6 poles would be removed.*

   Response: Approximately 8 poles would be removed from the river crossing segment. Please refer to pole and tower spreadsheet submitted with data response packet for additional details on pole and tower activities.

c) *Given that pole 16/01 of the Proposed River Crossing would replace an existing wood pole, please verify that 21 poles would be installed in new ROW and one existing pole would be replaced for a total of 22 poles in the Proposed River Crossing.*

Response: Approximately 21 poles will be installed in the new ROW. Pole 16/01 is existing and will be replaced but is not considered part of the River Crossing portion of the project. Please refer to pole and tower spreadsheet submitted with data response packet for additional details on pole and tower activities.

Figures 3-3 through 3-19 (Alignment Sheets)

3. *Please verify that there are no existing poles within the Proposed River Crossing and provide updated alignment sheet figures.*

Response: Correct, there are no existing poles within the Proposed River Crossing. Figures have been updated and are included with the other GIS materials sent electronically. Please refer to pole and tower spreadsheet submitted with data response packet for additional details on pole and tower activities and revised Figures 3-11 thru 3-13.

4. *Installation of culverts is shown in Figures 3-3 through 3-19 but is not described in the PEA Project Description. Please provide a detailed description of each culvert to be installed including: materials used to construct the culvert, the culvert diameter, and the amount of cut and fill required to install each culvert. Please describe construction activities that would be required to install culverts and typical construction equipment that would be used. If any soil would be imported or exported as a result of culvert installation, please provide estimated volumes of material import or export. Also, please indicate whether culverts installed on overland travel routes would remain as permanent features.*

Response: PG&E is obtaining this and will provide as soon as possible.

Easement Requirements

5. *What is the anticipated width of the new ROW to be acquired?*

Response: PG&E is obtaining this and will provide as soon as possible.

Access

6. *For 'road improvements' and 'new roads' provide more details describing what construction activities would occur related to preparation of these types of access. For example, grading, vegetation removal, gravel placement, etc.*

Response: No gravel placement is planned. Road construction activities will include blading, minor grading, tree trimming and removal of vegetation.

7. *Please provide details on the assumptions used to determine the temporary and permanent access road disturbance areas.*

Response: For areas identified as road improvements, it was assumed that all road improvements would occur within the existing access road and that there would be no additional vegetation removal. Activities would include minor grading. There would be no temporary or permanent impacts as a result of the road improvements.

For areas identified as new roads, it was assumed that new access roads would be 15 feet wide and that all of the vegetation within the road corridor would be cleared. This would be accomplished using a dozer or scraper. The impact of constructing the new road would be a permanent impact.

For all of the roads, it was assumed that there would be no placement of gravel.

8. *Page 3-5 of the PEA indicates that there are 7.94 miles of existing access roads that would not require upgrades, 2.4 miles of existing roads that would require upgrades and 0.39 miles of new permanent access roads that would be constructed as part of the Proposed Project. This data is inconsistent with information presented in Table 3-1 (found on page 3-6 of the PEA). Please verify the correct amount of access roads required.*

Response: The data found in Table 3-1 is correct and is attached. There are approximately 9.17 miles of existing roads that do not require upgrade, 1.59 miles or existing roads that will be upgraded, and 0.36 miles of new permanent access roads that will be constructed.

Construction of Hollister Tower and Pole Segments

9. *Regarding Table 3-4 (found on page 3-11 of the PEA and shown below), please respond to the following:*

   a) *The table states that 142 poles would be replaced within the Hollister Pole Segment. However, assuming that 164 poles would be installed, 21 of which would be entirely new and would not replace an existing pole (see Data Request 2a above), there would be a total of 143 replacement poles rather than 142. Please verify that there would be 143 replacement poles and provide updated temporary and permanent disturbance numbers based on this revision.*

Response: Approximately 145 poles will be removed and replaced. Approximately 21 new poles will be installed. Revised impacts are provided on the attached tables. Please refer to pole and tower spreadsheet submitted with data response packet for additional details on pole and tower activities.

   b) *The note found at the bottom of the table states that "Because the majority of towers and poles already exist and are being replaced in kind, the only new permanent disturbance is associated with the Proposed River Crossing". However, as noted in Data Request item1, above, there would be permanent disturbance associated with installation of a new tower. Please confirm.*

Response: Please see the attached table for the most current permanent disturbance acres; the footnote has been updated.

   c) *Which elements described as construction areas are included in the permanent disturbance calculation for the Hollister Tower Segment?*

Response: Construction areas include lay down (staging) areas, pull sites, helicopter landing zones, work areas, overland travel routes, new access roads, and vegetation clearing sites.

d) *Footnote c of Table 3-4 refers to Table 3-5 for detailed information on temporary disturbance for construction activities. However, disturbance estimates for the Hollister Tower Segment and Hollister Pole Segment as shown in Table 3-5 are 28.12 acres and 34.3 acres respectively. These numbers are not consistent with those shown in Table 3-4 below. Please update the tables to be consistent with each other.*

Table 3-4. *Estimates of Approximate Temporary and Permanent Disturbance*

Project Activity	***Approximate Temporary Disturbance[a] (acres)***	***Approximate Permanent Disturbance[b] (acres)***
Replacing towers and poles		
Hollister Tower Segment (37 towers)	*1.84*	*0.33*
Hollister Pole Segment (142 poles)	*5.84*	*0.11*
Subtotal towers and poles	*7.68*	*0.44*
Construction areas (includes lay down [staging] areas, pull sites, and helicopter landing zones, tower removal work areas and work area overland travel route)		
Hollister Tower Segment	*35.42*	*5.1*
Hollister Pole Segment	*36.6*	*0.0*
Subtotal construction areas	*72.02*	*5.1*
Access roads	*3.76*	*4.28*
Project total	***83.46***	***9.82***

Note: Estimated disturbance acreages are based on the following assumptions: temporary disturbance for the Hollister Tower Segment is 2,500 square feet per tower, and permanent disturbance is 400 square feet per tower. Temporary disturbance for the Hollister Pole Segment is 1,600 square feet, and permanent disturbance is 30 square feet per pole. Because the majority of towers and poles already exist and are being replaced in kind, the only new permanent disturbance is associated with the Proposed River Crossing.

[a] *Temporary disturbance represents construction activities associated with installation and removal of towers and poles.*

[b] *Permanent disturbance represents the overall footprint area under each tower; limited access remains under each tower (e.g., for cattle grazing).*

[c] *Table 3-5 contains the details of the acreage to be temporarily disturbed by construction areas.*

[d] *Table 3-1 shows preliminary estimates of access routes.*

Response: Table 3-4 has been updated and is attached.

10. Please update Table 3-5 (found on page 3-12 of the PEA) to show that TP-1 would be located between Towers 37/232 and 0/3A (the text currently states that TP-1 would be located between Towers 37/231B and 37/232).

Response: Table 3-5 has been updated and is attached.

11. Table 3-6 (found on page 3-15 of the PEA) states that 159 wood poles would be removed and replaced with 135 LDS poles and 29 TPSs (for a total of 164 new poles). However, assuming 143 existing poles would be replaced with new poles and an additional six (6) poles would be removed from the floodplain, the resulting number of poles to be removed would be 149 rather than 159. Please confirm that 149 poles would be removed rather than 159.

Response: Approximately 154 poles will be removed. Approximately 166 poles are proposed to be installed -- 137 LDS poles and 29 TSP poles. Please refer to pole and tower spreadsheet submitted with data response packet for additional details on pole and tower activities.

12. For tower installation, please provide the estimated depth of excavation required for tower footings.

Response: Tower footing depths are approximately 12 to 15 feet.

13. Please specify the construction methodology should groundwater be encountered during excavation of the holes which may be likely encountered while augering holes close to flood plains.

Response: When ground water is encountered, PG&E's response will depend on the type of soil. If the soil is firm and not much water is encountered, the hole will be kept full of water while excavating, and the concrete will be placed using the "Tremie" method (pour the concrete through a 12" pipe from the bottom up forcing the water out of the excavation as the concrete is placed). The water is usually pumped away from the site and allowed to be absorbed back into the ground. If there is a water body in the area, to avoid water flowing into the water body, the water is pumped into a Baker Tank and disposed of properly off site. If the ground is unstable and will not hold up during excavation, a corrugated metal pipe (corrugated shield) is placed into the hole as the hole is dug, then the water is either pumped out prior to pouring the concrete or the "Tremie" method is used. The corrugated shield would remain in the hole. In situations where water is not substantial, PG&E may be able to dig, set and pour the foundation before water becomes an issue. In this case, the concrete is poured into the water and the water is allowed to dissipate as the concrete is poured.

14. For conductor and cable installation, please confirm that the only locations where guard structures would be required are at SR 156, San Juan Highway, San Justo Road, and the Union Pacific Railroad crossing.

Response: Yes, the locations stated in this question would most likely be the only locations requiring guard structures. However, there are other, more lightly-traveled ways, and the placement of line trucks would likely be used in these instances to protect the roadways during construction. Examples of such crossings would be at two road crossings in the Rancho Larios subdivision and one at Wright Road just east of Hwy 156 and Buena Vista Road intersection. Line trucks with extended booms would be placed at these locations when the conductor lines are being pulled. This is apparently a

common approach on lightly travelled roads in this area, but if the local jurisdiction requires PG&E to install guard structures / netting as part of its encroachment permit, PG&E will do so.

15. *The fourth paragraph on page 3-19 appears to be incomplete. The text states that "…Steel, wire, and hardware [requires set-up project recovery processes] please re-phrase in English – will be recycled? Sorted and disposed of somewhere?]." Please provide revised text that states where steel, wire, and hardware will be disposed.*

Response: All steel, wire, and hardware material will be returned to the appropriate PG&E yard. The material will be processed and the re-usable material will be collected for use on future projects. If material is not re-usable, it will be separated by material type (e.g. copper and steel) and sent to a recycler.

16. *Paragraph five on page 3-16 of the PEA states the following:*

> *While the Hollister Tower Segment and the Hollister Pole Segment are being constructed, the existing Watsonville–Salinas 60 kV power line, which parallels the Hollister Tower Segment northerly to the Hollister Pole Segment, will be temporarily upgraded to 115 kV and serve as the 115 kV feed to the Hollister Substation. To connect the Watsonville–Salinas 60 kV power line to the 115 kV system, PG&E will temporarily install three wood poles at the southerly end and one wood pole at the northerly end of the Hollister Tower Segment.*

Regarding this statement, please respond to the following:

a) Please confirm that the existing Watsonville-Salinas 60 kV power line is currently configured with insulators that can support 115 kV.

Response: Yes, consistent with PG&E's current standard for 60 kV lines, this line is configured with insulators and other appurtenances that would support 115kV voltage.

b) Please describe what would happen to the existing 60 kV feed when the Watsonville-Salinas power line would be temporarily upgraded to 115 kV?

Response: The portion of the 60kV that will NOT be temporarily upgraded to 115kV will remain in operation as a 60kV line.

Existing System

17. *The Project Description indicates that the existing single-circuit 115 kV power line within the Hollister Pole Segment would be reconstructed as a double-circuit 115 kV power line. Please clarify how/why a second circuit would be added to this segment when the Hollister Tower Segment would continue to support only two circuits (i.e., one of the Hollister Tower 115 kV circuits would continue north and the Hollister No. 2 line and the other 115 kV circuit would go east as the Hollister No. 1 line).*

Based on the Project Description and other information in the PEA (e.g., visual simulations and the EMF field report), it does not appear that the position for the second circuit is proposed to be vacant

for a future upgrade. Therefore, please indicate why the new facility is proposed to be double circuit and how the proposed new Hollister Pole Segment circuit would be configured at Anzar Junction.

Response: There are two existing circuits on the Hollister Tower Segment as shown in Figure 3-1. At the existing double circuit tower 6/40A, the proposed double circuit 115kV pole segment will connect to the tower line. This proposed double-circuit pole line replaces the existing single-circuit Hollister Pole Segment line and (with the exception of the rerouting of the line in the vicinity of the river [see figures 3-11 through 3-13]) will follow the existing route as shown in Figure 3-1. The additional circuit on the pole line will provide the primary back-up to the existing line on the same poles, which will also be improved by replacing the old copper conductor; together they will provide increased capacity to serve Hollister Substation. The existing Hollister No. 2 line, which extends further north on another set of poles and will not be touched as part of this project, will remain constrained by older conductor but will be an additional, less robust, back-up line. NOTE: Anzar Junction is part of the existing Watsonville-Salinas 60kV power line and is not part of the Hollister project's 115kV tower or pole segments. Because Anzar Junction is near the pole segment and tower segment meeting point and there are no other identifying features in the immediate area, it was used as the dividing line for ease of reference in the PEA. (See revised figures in the CD provided by ICF.)

18. *The Project Description indicates that the two existing 115 kV circuits along the Hollister Tower Segment would be replaced with 477 kcmil SSAC conductors. Since the Hollister No. 2 line would not be upgraded to 477 kcmil SSAC conductors, is there potential that the Hollister No. 2 line could be overloaded if the Hollister No. 1 line would go down? If not, please indicate the normal and emergency rating of the Hollister No 2 line.*

Response: This project proposes to place both 115kV circuits #1 & #2 on a pole line in the existing Hollister No. 1 alignment. Essentially, Hollister No. 1 will become two lines. In the event of an emergency, the Hollister load will be fully served by either of the two circuits on this pole line. The existing Hollister No. 2 pole line will remain "as is" for further emergency backup and future operations.

19. *Please revise PEA Figure 3-1 to clearly indicate the configuration/names of lines, substations and voltages of the lines in the project area.*

Response: For security reasons, this information cannot be made available to the general public. CPUC Energy Division has previously acknowledged this concern and agreed not to require PG&E to provide this information.

Aesthetics

20. *Figure 4.2-1 appears to identify the historical path of State Route 156 including the local route through Hollister. This figure should be updated to include the 1997 bypass that heads in a northeasterly direct due west of Hollister near Union Road, see: http://www.dot.ca.gov/dist05/planning/sys_plan_docs/fact_sheets/san_benito_sr156.pdf. According to CalTrans, the old routing through town is still signed as State Route 156.*

Response: See revised Figure 4.2-1 included in the GIS data provided.

Air Quality

21. *Please provide detailed emissions calculation sheets showing emission factors, equipment types and numbers, engine horsepower, maximum daily hours of operation, etc., as well as all other assumptions used to estimate the criteria pollutant and greenhouse gas emissions that would be associated with the project.*

Response: See Air Quality tables provided on the CD provided ICF. (Helicopter Emission Calculation and References; Hollister Construction Emission Summary; Hollister Preliminary Construction Estimations; and Hollister Urbemis Files).

Biological Resources

22. *Please provide an electronic version of Exhibit 1, Suitable Habitat for California Red-Legged Frog, California Tiger Salamander, Western Burrowing Owl, and San Joaquin Kit Fox. If available, please also submit the GIS data layer for the 'Suitable Habitat' overlay shown in Exhibit 1.*

Response: This data is included in GIS data provided as part of the data request response packet.

23. *Appendix F, The Preliminary Delineation of Wetlands and Other Waters of the United States for the Hollister 115 kV Power Line Reconductoring Project is missing its figures as well as Appendices A through C. Please provide the associated figures and Appendices A through C.*

Response: This data is included in GIS data provided as part of the data request response packet.

Geology, Soils and Seismicity

24. *Pages 4.6-5 and 4.6-6 describe geologic features within the vicinity of the Proposed Project. Please verify which mapped geologic formations the Proposed Project alignment would actually traverse (Pages 4.6-5 and 4.6-6).*

Response: The proposed project alignment traverses the following geologic units: Gabbro of Logan Quarry (Jurassic), unnamed granitic rocks (Cretaceous), San Juan Bautista Formation (Paleogene), Vaqueros Sandstone and unnamed red-beds (Oligocene), unnamed volcanic rocks (Miocene), Etchegoin Formation (Miocene – Pliocene), unnamed continental mudstone (Pliocene), unnamed continental deposits (other than mudstone) (Plio-Pleistocene), and various alluvial, fluvial, terrace, and aeolian deposits of Quaternary age.

25. *With regard to Table 4.6-1 (found on page 4.6-8 of the PEA), please provide the following information:*

a) What measure of erosion potential is used in the table?

Response: Erosion potential is expressed as a non-quantitative assessment based on standard Soil Conservation Service (now Natural Resources Conservation Service) soil unit description format.

b) What is the unit for permeability?

Response: Permeability values are given in inches per hour.

c) Why is corrosion to steel provided over that for concrete?

Response: Potential for corrosion to concrete is not assessed in the San Benito County Soil Survey.

Hazards and Hazardous Materials

26. *The first paragraph on PEA page 4.7-17 indicates that PG&E has designed a lighting system for poles 22/00 and 22/01 to comply with Federal Aviation Administration (FAA) recommendations, as stated in an aeronautical study prepared for the project. However, the PEA does not include any further information about the proposed lighting system. Please provide details about PG&E's proposed lighting system for poles 22/00 and 22/01. In addition, please provide a copy of the aeronautical study that was prepared by the FAA for the project.*

Response: See the attached FAA letter of determination with study findings and requirements. The FAA did not provide a copy of its aeronautical study.

Hydrology and Water Quality

27. *Text on page 4.8-9 of the PEA states the following:*

> *…Holes for the new towers and poles will be augured to a depth of approximately 12–27 feet and backfilled with concrete or imported material.*

Assuming that 'imported material' refers to soil or other fill, the information presented above appears to be inconsistent with Table 3-3 of the Project Description which indicates that zero cubic yards of soil would be imported/exported from the site during Proposed Project construction. Please verify whether additional material other than concrete would be imported during construction, and if so please provide an estimate of the amount of fill to be imported.

Response: Depending on soil conditions, final engineering and other factors, our assumption is that the only material other than concrete that might be imported would be rock. In some instances, rock may be required to stabilize the newly installed poles. The deciding factor is how solid the soil is. Usually one half a yard of rock is more than adequate for this purpose.

28. *Please provide examples of road design best practices that would be implemented for APM HYDRO-3, particularly for new roads along the tower segment (in sloped terrain).*

Response: Examples of BMPs for a road alignment crossing a drainage:

- Use of an adequately-sized culvert with rock rip-rap at both ends of the culvert for flow dissipation.
- Culverts that allow flow to pass under the road will be designed with capacity to convey the 100-year flow, provide erosion control and energy dissipation on the upstream and downstream end.

- Design of culverts will consider inlet and outlet control as appropriate based on channel slopes upstream and downstream of the culvert.

- In areas of sloped terrain and sheet flow that could overtop the road, swales along the road would be used to redirect flow to a culvert, or absorb sheet flow.

- Swales should include erosion control measures (so high flows in the swale do not damage the swale itself).

- Swales would be sized adequately to ensure the road is not overtopped during storm events.