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August 28, 2018

Michael Rosauer
Project Manager
Energy Division, CEQA Unit
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298

RE: Vierra Reinforcement Project. A.18-06-004
Responses to Deficiency Report #1

Dear Mr. Rosauer:

Please find attached responses to the CPUC's Deficiency Report #1. Supporting documentation is being delivered to the CPUC on a CD, with confidential data on a separately-marked CD, supported by the enclosed declaration. Note that any GIS or project design and construction information provided is approximate and based on preliminary project design and/or current conditions, which may change.

Please note that, in responding to an inquiry from a landowner on the microwave facilities, the plan for Mount Oso has been updated; the current plan is to install three antennas on the existing microwave tower rather than one microwave dish.

Sincerely,

Janet Liver
Project Manager

cc: Lonn Maier, Supervisor
Mary Jo Borak, Supervisor
Molly Sterkel, Program Manager
Robert Donovan, PG&E Land Planner
Jo Lynn Lambert, PG&E Permitting Attorney

DEFICIENCY REPORT #1 FOR THE PG&E VIERRA REINFORCEMENT PROJECT APPLICATION (A. 18-06-004)

PG&E responses are provided in italics following the CPUC-identified deficiencies (presented via PEA Checklist numbering).

Chapter 1 PEA Summary

The PEA Summary should include, but not be limited to, any areas of controversy and any major issues that must be resolved. The PEA concludes that no areas of controversy exist. Please provide additional information on all public comments that were received as part of the public and community outreach effort described in 1.3.3, including comment letters received.

PG&E Response: *A summary of the public comments received during project planning is included below. The four formal comment letters received are provided on the CD entitled "Non-Confidential Supporting Documentation."*

- *PG&E met several times with the **City of Lathrop.** During the initial meeting, City staff provided general feedback on potential route locations based on current and future development in the area. The City indicated that there were no plans for residential development within the project area and recommended that PG&E look at the railroad easement. The City also asked that PG&E take into consideration the Lathrop Gateway Business Park Specific Plan. During subsequent meetings, the City provided information about various projects in the area and expressed their preference for the Christopher Way route or Nestle Option because the routes did not impact any current or future use of the land. The City also noted that commercial development is planned for the parcel on the east side of Guthmiller Road, and that Yosemite Avenue and Guthmiller Road will have street widening projects that would impact the Guthmiller Road Route and Guthmiller Road 120 Option. Finally, the City staff members stated their preference that PG&E not pursue the West Gateway Route because it would limit use of the surrounding land. In December 2017, the City provided PG&E a formal letter expressing their support for the proposed project route (Christopher Way Route with Nestle Option). PG&E has continued to work closely with the City of Lathrop on pole locations within the percolation basin, landscaping requirements, and outreach to stakeholders in the area.*

- *The **City of Manteca** provided information about plans for approved developments that would impact a project route along McKinley Avenue.*

- *PG&E received a letter from **Union Pacific Railroad** objecting to any route that runs parallel to and within three hundred feet of its railroad right of way based upon the lack of detailed information to fully understand the project and the impact a high voltage line may have upon railroad signals. PG&E continued to keep Union Pacific informed during subsequent phases of outreach prior to submittal of the application.*

- ***Buzz Oates Properties:** Beginning in January 2017, PG&E worked directly with Buzz Oates Development Project Manager Cybil Bryant to introduce the project and provide*

details of the project through the phases of outreach. On, August 11, 2017, Cybil Bryant indicated by email that Buzz Oates would prefer the Guthmiller or West Gate Route over the Christopher Way route. PG&E requested that Buzz Oates provide specific comments and concerns as to the Christopher Way route. PG&E made numerous attempts through email, direct mail and telephone to request and provide more information on locating the power line along this route. On September 8, 2017, PG&E sent a certified letter to Cybil Bryant, indicating the selection of the proposed route and requesting detailed feedback. PG&E did not receive any comments or formal response from Buzz Oates. In an effort to make sure that Buss Oates was fully informed of the final proposed route and to solicit comments, PG&E made a final notification to Buzz Oates on October 30, 2017, sending nine certified letters to notify Buzz Oates representatives and Lee & Associates (Realtor) of the proposed route. PG&E has been informed by the City that the building owned by Buzz Oates (a warehouse facility) has been leased to Tesla Motors.

- *PG&E conducted outreach to **J.R. Simplot** at the local and corporate levels beginning in October 2016. Simplot did not provide any formal comments on any of the potential route options during the first two phases of outreach. In March 2018, PG&E met with six Simplot representatives to discuss the proposed route. During that meeting, PG&E presented maps and simulations and discussed matters related to easements and the current land use. The Simplot representatives expressed a willingness to work with PG&E and indicated they understood the need for the project to support their plant operations.*

- *Outreach to **South Lathrop LLC** began in November 2016. Feedback received focused on planned developments in potential identified route areas, specifically around the Guthmiller 120 and West Gateway routes. South Lathrop LLC provided PG&E with a formal written comment endorsing any potential route except the West Gateway Route. The comment stated that the West Gateway Route could further hinder the use of its property, where there is already a 115 kV line. PG&E continued to keep South Lathrop LLC informed about the project.*

- *PG&E began outreach to **Tuff Boy Properties** in January 2017. As part of this outreach, PG&E conducted a site visit to tour the property. During this meeting, Tuff Boy Properties' representative expressed a preference for the Christopher Way Route and requested that any route running through the property should be located as close to the property line as possible. On May 30, 2017, Tuff Boy Properties provided a formal comment stating that 1) any routes running along the property on Guthmiller Road or Yosemite Avenue should consider property values, public safety and future land uses; 2) PG&E should consider planned improvements to the Guthmiller/Highway 120 interchange, as well as construction of the ACE light rail transit system; 3) the alignment should not divide any portion of the four contiguous parcels; and 4) impacts in the Lathrop Gateway and South Lathrop areas should be limited.*

- *PG&E conducted outreach to **Crossroads Commerce Center Owners Association**'s Association Manager beginning in August 2017. PG&E provided information about the potential routes, which was distributed to the Association's members in July 2017. Two members responded with questions about their respective properties' proximity to the potential routes. PG&E responded that, while these properties were located within the project area, they were not adjacent to any potential routes. No additional questions or comments were received. In addition, PG&E worked closely with the Association Manager regarding the future coordination of construction activities around a rail spur located on the Association's property. In December 2017, when PG&E provided more details about the proposed project, Crossroads Commerce Center Owners Association's members did not relay any questions or comments in response.*

2.1 Overview

Provide an explanation of why the breaker-and-a-half bus configuration is necessary and whether a low-profile, more compact substation could provide necessary reliability needs.

Please provide a list of technical reports and surveys including GIS files that will be submitted to the CPUC and expected delivery date of those files and reports.

To meet the intent of CEQA to provide full disclosure of the project and its feature locations, please provide GIS data layers for all project facilities and disturbance areas including the existing and proposed ROWs, and detailed information for the, substation and pole/tower locations. For elements related to construction include: all proposed and possible extra work areas (e.g., staging areas, lay-down areas, work areas at and around specific pole/tower sites, parking areas, pull and tension sites, and temporary, permanent, and existing access roads), areas where special construction methods may need to be employed, helicopter landing areas, airport landing areas, all permanent and temporary disturbance areas, underground installation areas, horizontal directional drilling areas, etc.

PG&E Response: *The Breaker-And-A-Half (BAAH) configuration was selected due to its advantages with reliability, flexibility and access for maintenance. With the BAAH bus configuration, each bay will have two elements (line or transformer connections) connected to three 115 kV circuit breakers. Using this configuration, only two breakers per BAAH bay are used at one time, allowing one breaker to be taken out of service without taking either of the two lines out of service. A special compact BAAH configuration will be installed at Vierra Substation. The compact BAAH footprint is smaller than either a standard BAAH or Ring Bus configuration.*

Technical reports, GIS data and surveys including GIS files are identified and provided on the enclosed CDs. Reports and figures containing confidential information and confidential GIS data are provided separately.

2.2 Project Purpose, Need, and Objectives

On page 2.0-4 the PEA indicates that due to the limitation of the four existing transmission paths between Tesla and Manteca substations there is a high potential for overload leading to overlapping outages (NERC P6 event) or a need for rolling blackouts. Please identify any outages on the four transmission paths that have occurred historically and any corrective action taken to alleviate the outage.

Indicate what "preliminary calculations" were utilized to develop the 164 MW estimate of improved system reliability and increased capacity.

PG&E Response: *From January 2007- July 2018, the Tesla-Salado-Manteca 115 kV Line experienced 16 sustained outages with an average duration of approximately 275 hours per outage. In February 2017, the Tesla-Salado-Manteca 115 kV Line had two steel structures damaged and the path was unavailable until August 2017. In June 2017, PG&E Operations was prepared to drop load in the area to prevent any overloads should the second outage occur – this was the only corrective action available. Fortunately, a second outage did not occur.*

For the same period, the Tesla-Schulte-Kasson-Manteca transmission path experienced 4 sustained outages with an average duration of approximately 9 hours per outage, the Tesla-Schulte-Lammers-Kasson transmission path experienced 12 sustained outages with an average duration of approximately 13 hours per outage, and the Tesla-Tracy-Kasson-Vierra-Manteca Path experienced 15 sustained outages with an average duration of approximately 92 hours per outage. The corrective action available to address these outages is to complete the proposed project or drop customer load to prevent overloads in the event two lines sustain outages.

The increased capacity of 164 MW was determined by performing power flow simulations with pre-project and post-project system models. In each case, limiting facilities were identified for various outages while increasing the area load. The increase in capacity represents the change in system capacity from the pre-project system model to the post-project system model.

2.5.1 Power Line

On page 2.0-12 of the PEA the second paragraph describes the basic design of the TSPs and indicates that the design will meet "raptor safety requirements". Please describe how TSP design ensures safety of raptor bird species, and identify which design features specifically provide measures to prevent harm to raptor species.

PG&E Response: *The TSPs are designed with 13-foot phase spacing and utilize an 8-foot crossarm to support phase conductors. This design provides a conductor separation distance that meets the specifications in the guidance document entitled "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006," published by the Avian Power Line Interaction Committee.*

2.5.2 Substation Modifications

Page 2.0-14 indicates that substation modifications will include the installation of "battery buildings." Please provide additional details on the capacity and purpose of these units – does this component provide battery storage resource? Does the anticipated increase in capacity to 164 MW take into consideration the on-site battery storage facility? If so, please indicate how the storage resource will be utilized.

In addition, on page 2.0-14 of the PEA, it is stated that portable generators may be used to provide power during the construction phase. Please provide an estimate of the type of generator to be utilized and the number of hours they will run, as a basis for calculating potential air quality emissions.

PG&E Response: *The battery building at the substation provides backup power for the substation facilities during a power outage (e.g. to switchgear), and also provides power to communication and control equipment. The battery does not contribute power to the electrical grid or contribute to the 164 MV increase in capacity of the electrical grid.*

Battery storage (also called energy storage) does not appear to be a viable option to address the overload issues in the Vierra Substation area. According to the load profile for the area, the typical summer peak loading window lasts over 6 hours, exceeding the 4 hour maximum durations generally available with current energy storage systems. Additionally, the severe overloads for overlapping outages would require a large amount of energy storage. The costs for the energy storage, including potential land acquisition and interconnection, would be less cost-effective than the proposed project.

There is a 20 MW energy storage project at Manteca Substation that has recently been initiated, but it is currently only in the study phase. This project could help address some overloads but would not address all overloads that are being addressed by the proposed project.

Typically, a Honda 2500 or similar type of portable generator would be used during construction. Use of this type of generator is specified in Table 2.0-3: Typical Construction Equipment and Duration of Use. (See second last entry in table on page 2.0-28.) This table was the basis for calculating potential air quality emissions, which thus included emissions from the use of portable generators.

2.5.4.1 Telecommunications

The microwave tower located at Vierra will be approximately 100 feet tall. Please provide an explanation why a shorter monopole tower is not sufficient.

PG&E Response: *The proposed microwave radio paths at Vierra Substation to support the Vierra Reinforcement Project are as follows:*

- *Vierra Substation to Tracy Substation (Licensed MW Radio Path)*
- *Vierra Substation to Mt. Oso (Licensed MW Radio Path)*

Both of these microwave paths require direct line of sight to operate reliably and to meet design standards for microwave radio transmission set by WECC. The Vierra Substation to Tracy Substation path is considered as "Low to Low" where both end locations are low elevation sites and the path traverses over industrial areas with large buildings and some farm land with overgrown trees. In order to maintain the required line of sight for the new microwave radio paths and to minimize issues from obstructions (i.e., trees, buildings, etc.), we have estimated that an approximately 100' tall tower will be needed at Vierra Substation. A Microwave Radio Path Survey will be conducted to verify the line of sight for each radio path and determine the actual height needed for the proposed tower. That survey is expected to be completed by the end of the year.

2.6 Right of Way Requirements

This section describes new easements along Christopher Way and Nestle Way to be acquired of varying widths. Please provide the specific easement widths and/ or other land requirements necessary for the project. If possible, provide a table and/or diagram illustrating all new easement requirements associated with the project.

PG&E Response: *Land rights issues are generally determined after CPUC approval, since they are not within CPUC jurisdiction. (See Delta MND at B-6, A.05-08-022.) Nevertheless, a table and diagram illustrating anticipated easement requirements with approximate widths are provided on the CD entitled "Non-Confidential Supporting Documentation." The precise measurements will be determined after project approval.*

2.7.1 Staging Areas

Describe any new potential staging areas, pull sites and helicopter landing zones identified.

PG&E Response: *The PEA lists the three staging areas of west of the substation, north side of Howland Road, and west side of D'Arcy. These staging areas are anticipated to be available during construction and no new potential staging areas or LZs have been identified. Should the proposed staging areas and LZs not be available prior to or at the time of construction, alternate locations within disturbed areas with similar land uses will be proposed to the CPUC for approval.*

2.7.6 Substation Construction

Approximately 10,000 yard of fill will be required to bring the new portion of the substation to grade. Describe the composition of the fill, where will it come from, and how many truck trips will be required to transport it.

PG&E Response: *The PG&E specification for the composition of fill for the substation expansion requires that the fill material, whether native soil or engineering fill, be free of organic matter, deleterious substances, and rock or lumps over 3 inches in diameter, and contain no material subject to excessive swelling or shrinkage. All import fill material is subject to acceptance by PG&E prior to its use for filling and backfilling.*

PG&E will not know where the fill will be acquired from until just prior to construction, since the fill will be sourced based on availability at that time. PG&E generally attempts to find fill in close proximity to the work site and anticipates it will likely be within a ten-mile radius of the project location. Typically, a truck will hold approximately 18 yards of fill, which equates to approximately 555 truck trips.

2.7.9 Construction at other Substations

Describe the minor modifications proposed to existing equipment at each substation.

PG&E Response: *Section 2.7.8 Construction at other Substations states that it "will consist of minor modifications to existing equipment within substation yards." The minor modifications to be performed at each substation include:*

- *Tesla Substation: Upgrade/Replace line relays*
- *Kasson Substation: Upgrade/Replace line relays*
- *Tracy Substation: Upgrade/Replace line relays; add Communication processor*
- *Manteca Substation: Upgrade/Replace line relays; add Communication processor*
- *Howland Road Substation: Replace Transformer #1 protection relays, upgrade line relays; install coupling-capacitor voltage transformers (CCTV)*
- *Ripon Substation: Replace line relaying communication device*

3.1.3.2 Project Viewshed and Representative Views

Provide photographic visual simulation for each of the representative views contained in the PEA. Additionally, provide a photograph of the existing substation and a visual simulation of the expanded substation to enable evaluation of the aesthetic impact of the expanded substation. Finally, provide a visual simulation of the proposed microwave tower.

PG&E Response: *Representative photos are provided to convey a general sense of the landscape character found in the project vicinity. The number of representative photos provided and the selection of photos for simulations for a project varies depending on the landscape context, visual setting, and project complexity. The proposed project is in a primarily industrial area and consists of a substation expansion and a new power line supported by 16 structures. It is not standard practice to provide a simulation of the proposed project for each representative*

photograph provided. However, PG&E's visual experts are preparing an additional visual simulation of the expanded substation and PG&E suggests having a site meeting to determine what additional simulations would be appropriate for this project.

PEA Figure 3.1-3b portrays the new telecommunication tower within the expanded substation. A discussion of the change and potential impact is included in Section 3.1.4.3 of the PEA Aesthetics Chapter under the Operation and Maintenance discussion of CEQA Question "C."

3.4 Biological Resources

Describe how possible tree removal habitat loss could impact the white-tailed kite, Swainson's hawk other nesting raptors.

PG&E Response: *Tree removal will not impact the white-tailed kite, Swainson's hawk, or other nesting raptors. In July 2018, PG&E Vegetation Management determined there are currently 35 newly-planted trees that will need to be relocated or removed because the tree species is incompatible with the power line. The trees are all container stock landscaping planted in 2017 or later. None of the trees are of sufficient size to support raptor nests. PG&E is working with the City of Lathrop to ensure replacement and future landscaping that will be compatible with the power line.*

3.5 – Cultural Resources

Please provide a copy of the cultural resources report which documents the results of literature search, pedestrian survey, and Native American consultation. Include a map with mileposts as applicable and the boundaries of all survey areas along with the GIS data files. Provide copies of all records found in literature search and documentation of Native American outreach and consultation activities.

PG&E Response: *The following cultural resources reports were prepared in support of the project:*

- *Cultural Resources Constraints Memorandum, Vierra Loop Siting Project, San Joaquin County, California, prepared by Resource Sciences and Planning (May 2016). A full copy of this report is provided on the CD "Confidential Technical Reports and GIS Data", and a copy of the report with confidential information removed is provided on the CD "Non-Confidential Supporting Documentation."*
- *Archeological Survey Report for the Pacific Gas and Electric Company Vierra Reinforcement Project, Lathrop, San Joaquin County, California (December 5, 2017). A full copy of this report is provided on the CD entitled "Non-Confidential Supporting Documentation."*

Documentation of Native American outreach is provided on the CD entitled "Non-Confidential Supporting Documentation." The cultural resources records found in the literature search are confidential under California Historical Resources Information System (CHRIS) rules and can only be sent directly to the CPUC's qualified cultural consultant. PG&E's cultural specialist will provide the records upon receipt of the necessary contact information.

3.7 – Greenhouse Gas

Please provide the detailed construction emission calculations referenced in this section.

PG&E Response: *The detailed emission calculations are provided on the enclosed CD entitled "Non-Confidential Supporting Documentation."*

3.8 Hazards and Hazardous Materials

As noted on page 3.8-6 in Section 3.8.3.3-Existing Hazardous Materials/Sites, it is noted that a limited soil investigation was conducted and soil was analyzed for metals and it was determined that arsenic exceeded screening levels, although within naturally occurring background concentrations. The PEA states that additional testing will be performed to determine if groundwater determination is present on the site. Please indicate if this testing has been conducted, what results, if any, were determined and the plan for remediation if needed. Pursuant to CEQA, the Energy Division (as lead agency) must have an accurate and complete understanding of the baseline conditions of the site prior to evaluating the project impacts.

PG&E Response: *Groundwater testing has not been performed. PG&E conducted a Phase I Environmental Assessment (ESA) on the site of the proposed substation expansion, which identified an adjacent parcel (16777 south Howland Road) being listed as "active assessment" for groundwater contamination from nitrate, sulfate and ammonium associated with fertilizer production and discharge settling ponds. The plume of contamination related to the release associated with the settling ponds extends southward.*

The agricultural land between Vierra Road and the settling ponds has been farmed and irrigated using onsite well water, of which one of the wells is located within 300 feet of a settling pond used by J.R. Simplot since the early 1980s. PG&E sampled and analyzed onsite soil to determine whether irrigation water from the adjacent parcel had negatively impacted the soil within the planned expansion area. No evidence of the plume contaminants was identified in the samples. Based on the soil test report and the fact that the adjacent site is currently under a remediation and monitoring program, the results of the testing concluded that the risk for groundwater contamination within the expansion area is low. As such, PG&E proposes that APM HM-4 (Soil testing and disposal) be updated to reflect the facts that the soil testing has been performed, that the risk for groundwater contamination is low, and that groundwater testing is only required should groundwater be encountered at the time of construction.

APM HM-4: Soil and Groundwater Testing and Disposal

~~*Soil and groundwater sampling will be performed in the area of the substation expansion prior to construction. The sampling will extend to the maximum depth of construction excavation. Analysis of soil, and groundwater if encountered, will determine if any special handling is required during excavation or disposal of soil and groundwater during construction.*~~

~~*In other areas of the project, i*~~*In the event soils suspected of being contaminated (on the basis of visual, olfactory, or other evidence) are removed during site grading or excavation activities, the excavated soil will be tested, and if measured above hazardous waste levels,*

will be contained and disposed of at a licensed waste facility. The presence of known or suspected contaminated soil will require testing and investigation procedures to be supervised by a qualified person, as appropriate, to meet state and federal regulations.

In the event groundwater is encountered during construction, the groundwater will be tested prior to being discharged over land or removed from the site. Testing of groundwater will be supervised by a qualified person, as appropriate, to meet state and federal regulations.

3.9 Hydrology and Water Quality

Describe the design, capacity and function of the storm water retention pond.

PG&E Response: *As described on page 3.9-7, the retention pond will capture stormwater runoff from the newly created impervious surfaces within the substation and prevent excess stormwater runoff and any accidental spills or releases, such as mineral oil, from entering groundwater to ensure that water quality standards and waste discharge requirements are not violated.*

The proposed design of the storm water retention pond is in accordance with the City of Lathrop requirements. The design capacity is to contain the stormwater runoff of twice the amount of a 10-year storm at 24-hour duration from the new created impervious surfaces. There is no storm drain system available in the project site area. Currently the pond is proposed to be concrete all-around at the slopes for erosion control with natural soil base for percolation purposes. As described in Section 2.5.2 Substation Modifications, the storm water retention pond will be constructed within the expanded substation, measuring approximately 300 feet long by 40 feet wide by 3 feet deep, with a maximum capacity of approximately 36,000 cubic feet. These plans are preliminary and may be modified with final project design.

3.12.3.1 Noise

Describe the potential noise impacts to the Sensitive Receptors— primarily the five residences located along the south side of Vierra Road and impacts to Light of the World Christian Center.

PG&E Response: *Section 3.12.3.1 of the PEA indicates that the five residences located on the south side of Vierra Road across from the existing substation are between approximately 100 and 275 feet from the expansion area of the substation, and the Light of the World Christian Center on Yosemite Avenue is approximately 500 feet south of the substation. The substation and the sensitive receptors are all located on commercial- and industrial-zoned properties. Traditionally, much of the area – including the substation expansion area – has been farmed, and therefore these sensitive receptors have experienced occasional noise from existing substation uses, nearby construction, and farming machinery.*

The two tables below—Table 1: Noise Levels from Common Construction Equipment, and Table 2: Standard Construction Equipment Aggregate Noise Emission Values—provide examples of typical noise levels during construction. The loudest potential noise during power line construction will be from use of a helicopter during stringing of the line, which is approximately

84 dbA at a distance of 100 feet. Helicopter activities will occur for an estimated three hours on two days. The loudest potential noise during substation construction will occur during grading activities, which is approximately 83 dbA for aggregate equipment noise at a distance of 100 feet (see Table 3: Sensitive Receptors (Residential) Near Proposed Project Area). Grading activities will occur over a longer period of time, but intermittently and in different locations on the project site; all construction activities are temporary in nature. And although local noise requirements are not applicable, PG&E will typically be limiting construction hours to those specified for construction in residential zones under Section 8.20.110 of the Lathrop Municipal Code (APM NOI-1). Additionally, PG&E will be implementing APMs NOI-2 through APM NOI-6, to further minimize temporary impacts related to construction equipment noise. Table 3: Sensitive Receptors (Residential) Near Proposed Project Area identifies the estimated maximum noise at each of the sensitive receptors.

Table 1: Noise Levels from Common Construction Equipment

Equipment	Typical Sound Pressure Level (L_{max}) at 50 Feet (dBA)
Helicopter	84 (at 100 feet)
Crane	85
Pickup truck	75
Air compressor	80

Source: FHWA 2006, TRC 2001.

Table 2: Standard Construction Equipment Aggregate Noise Emission Values

Typical Construction Phase	Aggregate Equipment Sound Pressure Level at 50 Feet (dBA)
Site clearing	84
Excavation	89
Foundation	77
Building	84
Finishing	89

Source: USEPA 1971

Table 3: Sensitive Receptors (Residential) Near Proposed Project Area

Sensitive Receptor ID	Nearest Project Component	Approximate Distance from the Project Component (feet)	Estimated Maximum Aggregate Equipment Noise (dBA)	Estimated Maximum Noise From Individual Equipment (dBA)
Residence	Substation Expansion	100	83	84
Residence	Substation Expansion	110	82	84
Residence	Substation Expansion	255	75	76
Residence	Substation Expansion	260	75	76
Residence	Substation Expansion	275	74	76
Christian Center	Substation Expansion	500	69	71

References:

TRC Environmental. 2001. Mill Pond Project.

U.S. Environmental Protection Agency (USEPA). 1971. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances. December 31, 1971*. Prepared by Bolt, Beranek and Newman under Contract 68-04-0047.

3.16 Transportation and Traffic

Section 3.16.4.3 of the PEA determines that construction traffic associated with the proposed project would have a less-than-significant impact on existing roadway segment and intersection levels-of-service, however the number of vehicle and truck trips during peak periods is not provided. The Energy Division requests a detailed estimate of trip generation during construction and operation of the proposed project to confirm the PEA's conclusion. In addition, please consult with local and state agencies to determine what traffic and roadway improvements may be scheduled in the near future that may be a cumulative consideration for the project.

PG&E Response: *Peak period will occur when trucks are hauling fill for the substation pad. Precise details will not be available until the time of construction as the truck trips per day will depend on where the fill is sourced from. However, at most it is likely there will be approximately 5 trucks hauling approximately 5 loads a day per truck, which equates to 25 return truck trips a day. Additionally, there will be approximately 5 pickups for the construction crew.*

PG&E has contacted Caltrans District 10 and the City of Lathrop requesting an update regarding the scheduling of the Guthmiller Interchange project and Vierra Road improvements. On August

23, 2018, Caltrans' assigned project manager for the Guthmiller Interchange project responded by email, stating the project is tentatively planned for construction to start at the end of 2020, although the project is not yet funded and is at a very early stage of project development. PG&E spoke with the City of Lathrop's Director of Economic Development by telephone on August 23, 2018. The City indicated that a study report is being conducted for the Guthmiller Interchange project and should be completed within six months. According to the City, ramp improvements are expected to be completed within one year, and larger improvements will be completed within two years. Additionally, the City indicated that there is no current schedule for the Vierra Road widening and no additional information available at this time.

3.17 – Utilities and Service Systems

The PEA describes the proposed project's impact on local water supply as "No Impact." Provide information detailing how much water will be used during construction and operation of the project and where water for those activities will come from. The PEA states that that water will be used for dust control and worker needs during construction, and that the existing water supplies will be sufficient to serve the project's needs. PG&E does not expect to need new or expanded entitlements. Provide more information regarding the project's water needs including:

- Potential sources of water in addition to the City of Lathrop
- How water will be transported to the project site
- A commitment letter from the local water authority or well owner confirming their ability to meet the project's water needs.

PG&E Response: *No other potential sources of water are anticipated to be needed in addition to the City of Lathrop.*

The source of water will be hydrants along the project route – specifically, the hydrant on the north side of Vierra Road adjacent to the substation, the hydrant at the western end of Vierra Road on the north side of the cul-de-sac, and the hydrant on the north side of South Howland Road near the intersection with D'Arcy Parkway. Water will be transported to the project site using a water truck. Landscaping planted outside of the substation wall will be drought-resistant and will not require long-term watering.

A commitment letter from the City of Lathrop for use of water during the project is included the CD entitled "Non-Confidential Supporting Documentation." Use of City water from hydrants is administered by way of a permit application and fee process.

3.18 Cumulative Impacts

Describe in greater detail the cumulative impacts analysis including updates to the Lathrop Gateway Business Park Specific Plan and the ACE Forward Final EIR.

PG&E Response:

On August 23, 2018, PG&E spoke by telephone with the City of Lathrop's Director of Economic Development, who stated that the City is currently processing the Lathrop Gateway Business Park project application. A Planning Commission hearing on the project is expected to occur in October 2018, with construction beginning in early 2019. The City also noted during this conversation that the South Lathrop Project is currently under construction. The project includes three 1.3 million-square foot buildings on 350 acres.

PG&E contacted the Director of Operations, Brian Schmidt, at ACE Rail on August 24, 2018. Brian stated that there would be no overlap on the ACEforward project and PG&E's proposed Vierra Reinforcement Project. He indicated that there is a new station being constructed at the Sharpe Army Depot.

PG&E also discussed the ACEforward project with the City of Lathrop's Director of Economic Development on August 23, 2018. The City stated that, based on the latest information received, discussions about a station near Gateway have been postponed indefinitely. Instead, project planners are looking at the possibility of building a new station at the intersection of Lathrop Road and McKinley Avenue, near Sharpe Army Depot.

Appendix B - Mailing List

Please provide the GIS data of all parcels within 300 feet of the Proposed Project with the following data: APN numbers, mailing addresses, and parcel's physical address. The PEA includes a list and Excel spreadsheet containing the data. Additionally, given the height of poles and telecommunication facilities, additional coverage beyond 300-feet may be required for Land Use or Visual Resource analysis notification.

PG&E Response: *PG&E is unable to provide the GIS data used to identify parcels within 300 feet of the project because the data is proprietary and, according to the licensing agreement with the provider of the GIS data, sharing of the data is prohibited.*