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April 21, 2025

Tharon Wright
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505 Van Ness Avenue
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VIA EMAIL

RE: CPUC Data Request #6 for PG&E's Moraga to Oakland X 115 Kilovolt Rebuild Project (A.24-11-005) – Part A Response

Dear Ms. Wright,

This letter is in reply to your March 17, 2025, letter in which you request certain additional information regarding Pacific Gas and Electric Company's (PG&E's) application (A.24-11-005) for a Permit to Construct (PTC) and Proponent's Environmental Assessment (PEA) for the Moraga-Oakland X 115 kilovolt (kV) Rebuild Project (project). The original text for each data request item from the California Public Utilities Commission (CPUC) is included, followed by PG&E's response.

PG&E plans to submit a second response letter with PG&E's responses to Data Request #6 ALT-1 items.

PEA Chapter 3, Project Description

PD-9 **Timeline and Process for Underground Construction Activities:** PEA Table 3.3-1 states that underground construction is scheduled to occur from 2028 Q3 through 2030 Q1. Table 3.6-3 is more specific, stating "July 2028 thru Feb 2030."

PEA Section 3.5.3.2 states: Trenching work generally is expected to progress at an average of 40 to 100 linear feet per day per crew depending on soil conditions, existing utilities, and other considerations. Daily progress is expected to be 300 to 400 feet per workday. In general, closure of one travel lane and one parking lane is expected during the underground line construction, with one lane remaining open to allow through traffic. Approximately 100 to 300 feet of trench will be open at any one time.

Table 3.3-2 states that for each pair of circuits, 5 to 10 splice vaults will be required, and each vault also requires an adjacent telecommunication vault.

PEA Section 3.5.3.2 (Work Area Disturbance) states that each vault will take 2 weeks to install. When the vaults are installed, the workspace for open trenching operations to install the duct bank between the vaults typically may extend up to approximately 1,500 feet long by 24 feet wide.

In order to understand potential impacts of underground construction on residents, businesses, schools, and churches along Park Boulevard, please expand on the information summarized above.

a. Provide an approximate timeline showing each construction activity required for both of the 2-circuit duct banks, showing sequential construction of the first 2 circuits and then the second 2 circuits. We understand that these activities will move along Park Boulevard as the trench is dug and filled, but it would be helpful to see the most detailed timeline possible. For each set of 2-circuit duct banks, describe the most likely activities ongoing during each of the 20 months defined in Table 3.6-3, including an overall timeline for the following activities: trenching, soil hauling, shoring, duct bank installation, vault installation, fill, cable splicing, installation of cables, repaving, and lane striping.

PG&E has provided information responsive to this question in PEA Chapter 3 and PEA Appendix A, Emissions Calculations.

- Chapter 3 provides descriptions of the underground construction activities and typical pace.
- Appendix A provides worksheets for a linear schedule view of expected approximate duration of underground construction activities by type in Table A5.3-3, Preliminary Construction Schedule and Table A5.3-6 Phase/Activity #2 – Emissions for Rebuild Western Extent of Lines as Underground – West of Estates Dr

The following table lists underground construction activities for each double-circuit duct bank including the approximate pace and approximate duration pulled from the above referenced sections of the PEA, and references to additional information contained within the PEA. The pace and durations are approximate and may change depending on final engineering, field conditions, or other factors. Please note, the active working days, weeks, or months required to complete the activity listed may not occur continuously or sequentially, active working days may be spread out over a longer period of time.

Underground Activity for Two Circuits (in a double-circuit duct bank)	**Approximate Pace**	**Approximate Duration**	**PEA Reference – Description and Timeline**
Vault Excavation *(includes shoring and soil hauling)* and Installation *(includes backfill)*	2 weeks for each vault.	3 months, 60 workdays	PEA at page 3-28, Appendix A, 3 Schedule worksheet rows 21-22, and 6 Ph 2 UG Lines rows 22-32.
Duct Bank Trenching (includes shoring and soil hauling) and Conduit Installation (includes backfill)	40-100 feet/day per crew. 2-3 crews working may be 300-400 feet/day.	6 months, 120 workdays (2-3 crews)	PEA at page 3-28, Appendix A, 3 Schedule worksheet rows 23-24, and 6 Ph 2 UG Lines rows 33-49.
Cable Pulling through Conduit Installation and Cable Splicing	6 days to pull cable between adjacent vaults, and 20 days for splicing at a vault.	5 months, 90 days (2 crews)	PEA at page 3-45, Appendix A, 3 Schedule worksheet rows 25-28, and 6 Ph 2 UG Lines rows 50-58.
Repaving (includes lane striping)	Refer to APM AIR-1: All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.	15 workdays	PEA at page 3-67, Appendix A, 3 Schedule worksheet row 30, and 6 Ph 2 UG Lines rows 63-73.

b. Provide a hypothetical timeline for all construction activities occurring in front of a single address on Park Boulevard, assuming installation of a vault within 100 feet, including each of the following tasks: trenching, shoring, duct bank installation, vault installation, fill, repaving, and lane striping.

Refer to PD-9a response and statement that the pace and durations are approximate and may not be specific depending on final engineering, field conditions, or other factors. Additionally, the days, weeks, or months are not necessarily continuous or sequential. At a single address on Park Boulevard, assuming a vault within 100 feet, the following timeline of construction activities is anticipated:

- Vault (excavation, shoring, soil hauling, installation, and backfill) will take approximately 2 weeks.
- Duct bank (trenching, shoring, soil hauling, conduit installation, and backfill) will take approximately 6 days of active construction progressing at minimum of 40 feet/day, nonconsecutive days expected.
- Cable pulling installation at a vault will take approximately 12 days (6 days in each direction to the adjacent vault).
- Cable splicing at a vault will take approximately 20 days.
- Repaving and lane striping will take approximately 2 days.

c. Vaults: The PEA states that as many as 10 vaults will be required for each pair of circuits and that each vault requires a nearby communications vault. Please confirm that this means that there could be as many as 20 total vaults installed on each side of Park Boulevard (10 splice vaults and 10 communications vaults). Please also confirm that the requirements for communications vault installation would be the same as that described in Section 3.5.3.2 for splice vaults.

Yes, up to 10 power line vaults may be required for each double-circuit duct bank, and up to 10 telecommunication vaults will be installed to access the telecommunication line in each double-circuit duct bank.

Approximately 1,500 square feet of workspace for a power line vault described in the PEA at page 3-28 is inclusive of the smaller, nearby telecommunication vault. Refer to PEA Figure 3.3-6 for dimensions of telecommunication vaults.

d. Vault Cranes: While PEA Section 3.5.3.2 states that one lane of traffic will be left open during construction, please verify whether this can be done during vault installation. Section 3.5.6.1 states that vaults require cranes for installation. Where would the cranes be located in order to allow vault installation, while still allowing traffic flow?

Yes, at least one lane of traffic in each direction is expected to remain open during vault installation. A crane will be located within the vault work area (approximately 1,500 square feet, up to approximately 24 feet wide). Each direction of Park Boulevard has approximately the equivalent space of three lanes in each direction. A lane width is typically 10 to 12 feet. The portion of the roadway not being utilized for construction, on both sides of Park Boulevard, is anticipated to be sufficient to accommodate at least one lane of traffic in either direction. PG&E will apply for an encroachment permit from the City of Oakland or the City of Piedmont as appropriate. The City will review the application and include permit conditions as it deems appropriate.

PD-10 **Accommodations for Residents, Businesses, School Personnel and Children**. Given the timelines and locations of the underground construction defined in PD-9 above, please explain how PG&E would accommodate the needs of residents, businesses, school staff, and school children during construction. Specifically:

a. How will PG&E ensure that access to businesses will be maintained during construction?

PG&E will send advanced notification per APM NOI-1 and APM TRA-1 and post signage in advance of construction identifying areas where typical access will be temporarily prohibited for safe construction and public safety. Business access will be maintained by communicating with local businesses to develop an access plan during preparation for construction in areas where access may be impacted. For example, signage will identify detours around construction areas enabling business access.

b. Would alternative parking be provided for people typically parking on Park Boulevard during the day or overnight?

Where PG&E expects a work area to encroach on designated city parking, PG&E will apply for an encroachment permit from the appropriate jurisdiction. The jurisdiction will review the application and include permit conditions as it deems appropriate.

Residents may also plan their parking needs upon receiving advanced notification of temporary parking restrictions per APM NOI-1 and APM TRA-1. Additionally, signage will be placed in advance of construction identifying areas where on-street parking will be temporarily prohibited to enable public safety and a safe construction work area. Residents will be able to plan for alternate parking options such as parking across the street, on a nearby street, or off the street as available.

c. Would all open trenches be plated overnight and on weekends to allow access to all driveways and street parking areas? At what hour would plates be in place and at what hour would they be removed?

Yes, all open trenches will be plated outside of work hours which would allow access to driveways and street parking areas. Refer to the PEA at page 3-65 for hours when plating activities are expected to occur: *Construction typically will occur Monday through Saturday between 7:00 a.m. and 8:00 p.m. or during times that will be set through coordination with relevant jurisdictions and property owners.*

d. If residents or businesses require access to their homes or businesses during construction and an open trench blocks their driveways, would temporary plating be available upon request?

Yes, temporary plating will be available upon request, when there is no active work in that section of the trench and it is safe to plate the trench. Refer to APM TRA-1 for the safe transport option for residents proposed by PG&E, which will include situations where personal vehicles cannot safely traverse a driveway.

e. Would alternative drop-off and pick up arrangements be required for the large schools along the route (Corpus Christi and Edna Brewer schools) affected by construction? Please describe specific plans or options.

Refer to response PD-9c where construction workday times will be set through typical construction coordination with relevant property owners, which will include coordination with schools and consideration of access to the schools.

f. Will construction activities block delivery services (USPS or parcels), or trash pick-up from access to businesses or residences? If so, what accommodations will be made?

Refer to response PD-9c where construction workday times will be set through typical construction coordination with relevant property owners which will include consideration of access to the business or residences.

PD-10 **Construction in Park Boulevard Way**: Section 3.1, Project Overview, states that "Each underground double-circuit line will turn onto Park Boulevard Way to reach the Oakland X Substation property." Please explain the construction process in detail, specific to this short road segment. This road has entrances to several multi-family buildings, and is only 35 to 45 feet wide. Specifically, please describe:

a. For how many weeks will construction be active on this street?

Refer to PD-9a response and statement that the pace and durations are approximate and may not be specific depending on final design, field conditions, or other factors. Additionally, the days, weeks, or months are not necessarily continuous or sequential workdays. For the construction on Park Boulevard Way, assuming two vaults in the roadway near the southeast corner of the Oakland X Substation parcel, the following timeline of construction activities is anticipated:

- Vault (excavation, shoring, soil hauling, installation, and backfill) will take approximately 2 weeks for each vault.
- Duct bank (trenching, shoring, soil hauling, conduit installation, and backfill) will take approximately l12 days of active construction progressing at minimum of 40 feet/day, nonconsecutive days expected with the double-circuit duct banks being installed at separate times.
- Cable pulling installation at the two vaults will take approximately 24 days.
- Cable splicing at the two vaults will take approximately 40 days.
- Repaving and lane striping will take approximately 2 days.

The work area for these vaults only will disrupt access temporarily to the garage driveway of 3739 Park Boulevard Way. This is the only driveway on Park Boulevard Way's northeastern bend.

b. Will all 4 circuits be installed in a single duct bank, or will there be 2 separate duct banks installed in this street?

Two double-circuit duct banks, meaning each duct bank has two circuits, will be installed in Park Boulevard Way.

c. Please describe whether all 4 circuits will be installed at the same time, or if the circuit pairs will be installed at different times (as they will be in Park Boulevard). If the circuit pairs will be installed at different times, will the road be open during installation of each pair of circuits? Or will it be fully closed during installation of each pair of circuits?

All four circuits (or two double-circuit duct banks) may be under construction at the same time. PG&E does not anticipate that installation of all four circuits at the same time will result in a complete road closure of Park Boulevard at any point during construction. As noted in PD 9d, the approximately 24-foot wide construction areas allow one lane of traffic in either direction to remain open during active construction. The roadway will remain open to emergency vehicles at all times. Final engineering and

field conditions will inform the location of each duct bank, which may influence the exact location of the work area and open lane within the roadway. Refer to APM TRA-1 for the safe transport option for residents proposed by PG&E, which includes situations where vehicles cannot safely access a driveway.

d. Will the road be closed during construction, or will there be room for vehicles to pass when trenches are open?

Refer to response PD-10c. A work area with a approximately 24-foot width will be sufficient to allow a single lane of traffic, which will be traffic-controlled one-way travel, while the trenches are open. Final engineering and field conditions will inform the location of each duct bank and trenches, which may influence the location of the work area and open lane within the roadway. Refer to APM TRA-1 for the safe transport option for residents proposed by PG&E, which includes situations where vehicles cannot safely access a driveway.

e. If the road will be closed at any point, please define in detail how PG&E will ensure that the residents with driveways and entrances facing this street will access their homes.

Refer to APM TRA-1 for the safe transport option for residents proposed by PG&E, which includes situations where vehicles cannot safely access a driveway.

f. How will parking needs for residents who normally park on the street be accommodated during construction on Park Boulevard Way?

Where PG&E expects a work area to encroach on a designated city parking, PG&E will apply for an encroachment permit from the City of Oakland. The jurisdiction will review the application and include permit conditions as it deems appropriate.

Residents may also plan their parking needs upon receiving advanced notification per APM NOI-1 and APM TRA-1 of temporary parking restrictions. Additionally, signage will be placed in advance of construction identifying areas where on-street parking will be temporarily prohibited to enable public safety and a safe construction work area. Residents will be able to plan for alternate parking options such as parking across the street, on a nearby street, or off the street as available.

PD-11 **PEA 3.5.4.4 and Table 3.5-5, Tree Removal in Park Boulevard.** This section states that approximately 71 trees are expected to be removed from Park Boulevard's central median and along Park Boulevard Way where the underground portion is in adjacent lanes. It further states that "Conservatively, all trees in the central median are identified for potential removal given the early design phase." Please explain whether APM-AES-1, which commits to revegetating of disturbed areas, would apply to the trees removed from Park Boulevard. Describe the specific plan for replanting of these trees.

Yes. Refer PEA at page 3-67:

> *Vegetated areas disturbed by project activities will be restored to conditions equal to or better than preconstruction conditions. These may include limited street or landscaped areas that will be replanted according to an agreement with the city or property owner. PG&E will work with the city to replace landscape-affected properties with vegetation that is compatible with the rebuilt PG&E facilities.*

PD-12 **PEA Section 3.5.4.3, Vegetation Clearing and Tree Trimming.** We have heard public concerns about wildfire risk along the proposed overhead Moraga-Oakland X line segments. Table 3.5-5 describes vegetation management and tree trimming or removal.

a. Please explain how the need for tree trimming is defined by PG&E for the existing and proposed overhead segments. Is there a minimum distance from conductors within which there may be no vegetation that could contact the conductors?

A tree needs to be trimmed or removed when it is determined to be incompatible with the safe and reliable operation and maintenance of a PG&E facility or is, or will become, out of compliance with vegetation to conductor clearance requirements established by relevant regulations. PG&E determines

the need to trim a tree through its vegetation management inspection programs. Where tree trimming is needed, it will be applied consistently for the existing and proposed overhead lines.

The minimum distance between conductors and vegetation to avoid vegetation coming in contact with the conductors is set by the CPUC GO 95. For 115 kV lines outside of an elevated fire threat district, the radial clearance is 10 feet between bare line conductors and tree branches or foliage. Within an elevated fire threat district, the radial clearance is 30 feet. PG&E implements vegetation management initiatives and programs to go beyond the minimum required distances, considering a wide variety of other factors. PG&E summarizes this information and provides fact sheets the minimum distance and zones around distribution and transmission lines at https://www.pge.com/en/outages-and-safety/safety/vegetation-management.html#tree-work-near-distribution-transmission-lines.

GO 95 Rule 35[1] provides additional information on CPUC mandated vegetation management. Finally, PG&E's Wildfire Mitigation Plan (WMP) details PG&E's vegetation management initiatives, standards and procedures. Please access the current WMP version at https://www.pge.com/en/outages-and-safety/safety/community-wildfire-safety-program.html#accordion-99016a73ab-item-4366b98ea7.

b. Table 3.5-5 identifies nearly 100 trees that would be removed, including 7 acacias, 15 California bay laurels, 43 Coast Live Oaks, and 2 Coast redwoods. Would these trees be replaced, or are they required to be removed due to clearance and/or wildfire risk?

The trees for removal in Table 3.5-5 were identified for removal primarily for construction equipment or vehicles access or to provide sufficient space to operate safely within a work area. Trees identified specifically to be removed due to clearance are those between proposed structures RS26 and RS27A & B on the City of Oakland property.

Replacement of trees removed for construction safety will be considered for replacement with trees compatible with nearby PG&E facilities, subject to agreement with the city or property owner. Please refer to the PEA at page 3-67 for additional discussion:

> *Vegetated areas disturbed by project activities will be restored to conditions equal to or better than preconstruction conditions. These may include limited street or landscaped areas that will be replanted according to an agreement with the city or property owner. PG&E will work with the city to replace landscape-affected properties with vegetation that is compatible with the rebuilt PG&E facilities.*

PD-13 **Land Ownership, Rights-of-Way, and Easements.** PEA Section 3.4 states that PG&E's existing rights are not sufficient to accommodate the rebuilt power lines and that "perfected, modified, or new rights-of-way" will be required. Section 3.4.3 and Table 3.4-1 define that approximately 2 new permanent easements and approximately 43 modified easements are expected to be required. In order for the EIR team to understand the extent of the proposed changes to the existing ROW and the process used to make these changes, please provide the information requested.

a. Please explain the timing for the process of easement "perfection" (PEA Section 3.4.3). At what point will property owners be contacted regarding easement changes needed, or informed that their properties are listed in Table 3.4-1 as requiring modified rights?

Please refer to the PEA at 3-22: *When the final project alternative is approved by the CPUC, PG&E will finalize design and develop new or modified easement documents for landowner review and negotiation.*

b. Please confirm that information provided in the PEA about project impacts (e.g., corona noise and vegetation removal) is based on the future line configuration and adjustments of property rights.

Yes. The information provided in the PEA about potential project impacts is based on the proposed line configuration including the necessary right-of-way compliance with CPUC GO 95, GO 128, and GO 165.

c. Are the proposed easement changes required due to the reduced proximity between PG&E facilities and individual residences? If so, please provide details of these changes. Table 3.4-1

[1] https://ia.cpuc.ca.gov/gos/GO95/go_95_appendix_e-guidlines.html

describes changes that are required, but not how the defined changes may change the proximity of facilities to private property improvements or residences.

The proposed design does not locate facilities such that they, at the time of construction, are out of compliance with relevant CPUC requirements. Refer to PEA Section 3.8.1, Regulations and Standards. However, the proposed easement changes are required to maintain safe distances between PG&E facilities and any future encroachments. Some examples of these types of unknown future encroachments include future building additions, newly planted trees, additional utility poles, and flag poles. In some cases, the proposed PG&E facilities will require tree removals to achieve clearance requirements, which will be facilitated through new easements or easement modifications. Refer to response PD-12b and PD-13d.

d. Please confirm whether the vegetation clearing defined in Section 3.5.4.3 is driven by these additional easement requirements or by other factors.

Vegetation clearing defined in PEA Section 3.5.4.3 was primarily focused on establishing safe work areas and access for construction. New easement requirements are driven by needed clearances between facilities and vegetation between proposed structures RS26 and RS27A & B on the City of Oakland property.

Refer to PEA Section 3.8.5 Vegetation Management Program for additional discussion including at page 3-71, *Current ongoing vegetation management programs are sufficient for the powerlines, substations, and access roads, and no additional activities will be required under the proposed project.*

We trust the information provided herein is fully responsive to your requests. However, should you have any further requests, please contact me at **415-990-6001** or **BXLG@pge.com**.

Sincerely,

Brandon Liddell
Principal Land Planner

cc:
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