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April 29, 2025

Tharon Wright
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California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
VIA EMAIL

RE: CPUC Data Request #8 for PG&E's Moraga to Oakland X 115 Kilovolt Rebuild Project (A.24-11 -005)

Dear Ms. Wright,

This letter is in reply to your April 10th, 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.

Permit to Construct Application and PTC Application Exhibit D (Preliminary EMF Field Management Plan)

PTC-1 The Preliminary EMF Field Management Plan (FMP; page 1) states that the project cost will be $440 million. The PTC Application (page 2) says it will be $276.8 million. Please explain which figure is correct. Please also explain whether the correct cost has any effect on the approach to EMF Mitigation defined in PTC Exhibit D.

PG&E's Response

As cited in the footnote on page 1 of the Preliminary EMF Field Management Plan, $440 million represents the "worst case" for total project cost. The worst case would realize all project risks. The expected project cost at completion, which incorporates some level of risk, is $276.8 million. This is the cost used in the PTC Application on page 2.

The estimated cost for EMF mitigation, as discussed in the Preliminary EMF Field Management Plan, is compliant with EMF rulemaking in CPUC Decision D.06-01-042. EMF mitigation cost would be less than 4 percent (the benchmark for low-cost mitigation) of both the worst case project cost and the expected project cost. Therefore, the approach to EMF mitigation defined in PTC Exhibit D would not change based on the project cost estimate used.

PTC-2 There appears to be an error in the conclusion paragraph below Table 4 (page 6) in PTC Exhibit D. Please confirm that the total estimated cost for raising height of structures ten feet should be $360,000 ($320,000+$40,000) and not $3,492,000.

PG&E's Response

The last sentence in the conclusion paragraph below Table 4 (page 6) in PTC Exhibit D should read, *The estimated cost of this mitigation is ~~$3,492,000~~360,000.*

PTC-3 In the Preliminary EMF FMP Section B.1, Table 3 (low-cost mitigation of increased structure height), PG&E proposes to increase structure height by 10 feet per structure (for 36 structures). This reduces EMF by 38.5%. These taller structures may create more severe visual impacts. Is it possible to define a tower height increase that would result in a 15% reduction in EMF (the guideline target reduction)? If so, this may be considered as an option in the EIR's impact analysis.

PG&E's Response

For low cost EMF mitigation, a 15% reduction in EMF at the edge of the right of way is the minimum to achieve a significant reduction, not a target to be met, as discussed in PTC Exhibit D. PG&E typically increases 115 kV structure height by 10 feet for low cost EMF mitigation to ensure substantial reduction along the entirety of spans between structures. The variation in EMF reduction can be substantial along the line because each point on a span has a different height above ground and distance to the edge of the right-of-way. PG&E used accepted modeling approaches to calculate the expected EMF reduction from the additional 10 feet in height. Based on the modeling, increasing tower heights by 10 feet as EMF mitigation will meet and exceed the 15% minimum. Therefore, no additional studies were completed to determine if a lower tower height increase would result in a 15% reduction in EMF. PG&E can perform additional modeling to find a reduced height increase that achieves a theoretical 15% reduction. The preliminary EMF analysis can be updated with this consideration when finalizing engineering design and the final FMP.

PEA Chapter 3, Project Description

PD-15 In the Preliminary EMF FMP Section B.2, Undergrounding (Table 6), PG&E proposes that the EMF low-cost mitigation would require that the trench be 5 feet deeper along the entire underground segment where there are school or residences. Given the locations of these receptors, Table 6 shows that the trenching for all but 0.2 miles of the 1.27-mile underground segment would be 5 feet deeper than proposed.

The PEA (Section 3.5.6.2) states that the trenched underground segments would be 5 feet deep "on average." All of the PEA graphics illustrate the 5-foot trench depth. It appears that the PEA does not take into account the EMF mitigation with a 10-foot trench depth. Our questions are as follows:

1. Will either or both trenches along Park Boulevard and Park Boulevard Way be 10 feet deep for 1.07 miles (as shown in EMF FMP Table 6)?

2. If so, please identify the changes to the PEA that result from the deeper trench (from 5 to 10 feet). In particular, please address the volume of fill removed, whether the construction vehicle emissions would require changes, whether the construction schedule needs to be modified, and any other changes that would arise.

PG&E's Response

1. Yes, trench depth may be up to 10 feet deep in the underground portion. However, the depth of up to 10 feet is not directly correlated with EMF low-cost mitigation. For example, a depth greater than the average may occur because of other factors such as separation from other buried utilities.

   The EMF low-cost mitigation described in PTC Exhibit D represents an approach for the worst-case scenario (up to 10 feet) that is not anticipated to occur. PTC Exhibit D Section IV.A.2 describes the proposed use of Triplex (twisted triangular) underground cable configuration which will also reduce magnetic fields beyond the targeted guideline of 15%.

The preliminary EMF analysis will be updated based on final potholing, final engineering design, and other factors to finalize the FMP. If mitigation beyond the proposed Triplex (twisted triangular) underground cable configuration is determined to be necessary, other approaches to EMF mitigation, such as moving the trench closer to the road median and away from the edge of right of way, may be used.

2. No changes to the PEA are needed. The approximate average trench depth of 5 feet (PEA at page 3-43) includes the anticipated trench depth variation where some locations are less than 5 feet and some locations are up to 10 feet.

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:
Michelle Wilson, CPUC CEQA Unit
Erica Schlemer, PG&E Law Department
Colleen Taylor, Jacobs
Hedy Koczwara, Aspen Environmental Group