

Data Request 1
Plainfield Substation Upgrade Project CEQA Evaluation

1. CHAPTER 2, INTRODUCTION

- Section 2.2.1: Provide detailed information on all pre-filing consultation and public outreach, including presentation slides, outcome notes, mailed notices, and other materials from PG&E's pre-filing outreach.
- Section 2.2.2: Provide contact information, notification materials, meeting dates and materials, meeting notes, and records of communication organized by entity.

Response:

Landowner Communication

There are 8 landowners within 1,000 feet of the project. PG&E called landowners within 1,000 feet of the project prior to performing fieldwork; landowners were contacted by phone on 6 June 2023, and 17 February 2024.

The landowner for the proposed substation expansion area was contacted in July and September 2022 in advance of geotech borings.

Yolo County Communication

As indicated in Section 2.2.1 of the PEA, Pre-Filing Consultation and Public Outreach, PG&E met with Yolo County on three occasions and had one meeting with the Yolo County Farm Bureau. The slide deck used during the meetings with the County is provided in Attachment A. Additional information on these meetings is provided below.

PG&E met with Yolo County staff three times; each time the same PowerPoint presentation was used (see Attachment A).

January 11, 2024 - PG&E met with and presented a project overview via Zoom virtual conferencing with Gerardo Pinedo (Yolo County Chief Administrative Officer) and Mary Vixie Sandy (Yolo County District 3 Supervisor). The purpose and need for the project was reviewed, along with the proposed scope of work, results of landowner notification, and construction timing. Questions posed by the County included whether the project would result in increased capacity and if there would be impacts to traffic when the conductor is replaced across County Road 27. The County asked to be kept informed of any concerns raised by landowners or the public.

January 17, 2024 - PG&E met with and presented a project overview via Zoom virtual conferencing with Todd Riddiough (Yolo County Director of Public Works), Mark Christison (Yolo County Civil Engineer), Jair Bautista (Yolo County Public Works Systems Engineer), and Dean Becker (Yolo County Construction Inspector). The County enquired about proposed stormwater discharge and indicated that PG&E will need to maintain the stormwater discharge outlet in the roadside ditch and the County will not be responsible for damage to the stormwater pipe when the County cleans the roadside ditch. PG&E addressed questions from the County about the existing and proposed size of the roadside ditch culverts, traffic control along County Road 27, acreage to be developed, activity at the substation post-construction, whether PG&E is subject to local regulations regarding mitigation for loss of agricultural land, and timing of encroachment permit application.

January 24, 2024 - PG&E met with and presented a project overview via Zoom virtual conferencing with Todd Riddiough (Yolo County Director of Public Works) and Stephanie Cormier (Yolo County Planning Manager). PG&E responded to questions

from the County about public noticing, CEQA process, applicability of Yolo County HCP, accounting for future growth, whether the project is in a flood zone, why PG&E's existing deed extends into County Road 27, traffic impacts during construction, and configuration of substation entrances.

Yolo Farm Bureau Communication

January 19, 2024 - PG&E sent project details by email to the Yolo County Farm Bureau. After reviewing the proposed project information, the Yolo County Farm Bureau's board expressed no concerns about the project and indicated to PG&E that board members did not feel the need for a formal meeting to discuss the project. On February 22, 2024, the Farm Bureau reconfirmed their initial stance and asked to be informed of project updates as needed.

2. CHAPTER 3, PROJECT DESCRIPTION:

- Section 3.1: Provide an updated version of the project overview first sentence to clarify this is not an "upgrade" of the two 5 MVAR cap banks, but rather the addition of two 5 MVAR cap banks.

Response:

PG&E's Plainfield Substation Upgrade Project (project) proposes to expand PG&E's existing Plainfield Substation in Yolo County to accommodate installation of two 5 megavolt ampere reactive power (MVAR) shunt capacitor banks and related equipment. The upgraded substation will address current low voltage concerns in the 60 kilovolt (kV) transmission system and help maintain electric transmission system reliability in the cities of Woodland and Davis, and the surrounding, largely-agricultural areas in Yolo County. The expanded substation property will be able to accommodate future upgrades when warranted by forecasted load growth in the region.

- Section 3.2.1: How many circuits are there (per transformer)? What is the total current peak load supported by the 12 kV distribution circuits?

Response:

There are three 12 kV feeders; one feeder on Bank 1, and two feeders on Bank 2. The historical peak load of all three 12 kV circuits is approximately 27 MVA.

- Section 3.2.1: What is the age of the existing transformers? Are there any plans for replacement during the upgrade period?

Response:

The existing transformers, Bank 1 and Bank 2, have been in service for 64.5 and 16.5 years respectively. Currently there are no plans to replace the existing transformers. Annual maintenance inspections will dictate timing of replacement.

- Section 3.2.2: What is the basis or forecast for identifying the three 115 kV, 45 MVA banks in Alternative 1? Is it anticipated that such a future expansion will require a 60 kV bus upgrade and/or new 115 kV bussing?

Response:

Currently there is not sufficient forecasted load growth in the next 5 to 10 years to

justify the ultimate buildout of three 115/12 kV, 45 MVA transformers; however, it is anticipated that the buildout will eventually be required for three reasons:

1. Woodland Substation to the north and Davis Substation to the south supply the bulk of distribution power in the area. Both substations currently operate at above 90 percent of their capability during peak load conditions, and are already built out with no room for expansion. As such, Plainfield Substation will play a pivotal role in offloading the Woodland and Davis substations as the demand in the nearby areas increases.
2. There is existing interest in expanding industrial, commercial, and residential loads in the Woodland/Davis area that could accelerate load growth and demand. The City of Woodland has confirmed that an area near highway CA-113 and County Road 25A is being rezoned as industrial to accommodate the Woodland Research and Technology Park, which has an expected demand load of approximately 8-10 MW within the next 5-10 years. Also, the University of California, Davis has mentioned growing the student and faculty housing facilities towards the west side of campus connected to PG&E's distribution grid.
3. From a capacity planning perspective, the cities of Woodland and Davis and surrounding areas will likely see a continued steady rate of high growth, especially given the amount of real estate available for development.

Based on these factors and the current timelines for designing and constructing large-scale transmission and distribution work, it is prudent to incorporate plans that will facilitate a prompt increase in the capacity of the substation when needed. Given the forecasted growth described above, the new transmission bus will be rated for 115 kV to accommodate a future conversion from 60 kV to 115 kV.

- Section 3.3.1: Provide preliminary design drawings for project features.
 - Figures 3-2 and 3-4 through 3-6 provide good information but are hard to read at the resolutions provided. Please provide higher resolution versions of these figures, or the 60% preliminary design and engineering drawings.

Response:

See Attachment B for JPEG files of Figures 3-2 and 3-4 through 3-6.

- Figure 3-5 (Substation Plan): Is the 60 kV bus and breaker configuration a Breaker & ½ scheme or Ring bus arrangement?

Response:

The 60kV bus and breaker configuration is a ring bus arrangement.

- Figure 3-7 (Project Components): For clarity, identify the location(s) of the new cap banks in the proposed expanded plan drawing. Will any of the infrastructure be built to 115 kV standards and operated at 60 kV?

Response:

The new capacitor banks will be located to the south side of the existing substation equipment; the location of the new capacitor banks has been added to

Figure 3-7. The infrastructure serving the 60kV capacitor banks (two breakers, associated switches, and structures) will be rated for 60kV. The ring bus portion of the station (five breakers, associated switches, and structures) will be rated for 115kV but operated at 60kV. The updated Figure 3-7 is provided in Attachment C.

- Section 3.3.3.1: Clarify the 115x60 kV/30 MVA transformer bank is a dual winding or optional voltage connection.

Response:

The 115x60 kV/30 MVA transformer bank is dual winding.

- Section 3.3.3.2: Verify current power line conductors are 715.5 kmil. The 2016 Operating Diagrams indicate 1/0, 2/0, or 3/0 (depending on the segment). Was there a recent reconductor?

Response:

Existing power line conductors are rated 715.5 kmil (715 AAC). A reconductoring was completed in 2010.

- Section 3.12.4: Please provide the pole heights and conductor sizes in a GIS attribute table.

Response:

Approximate pole heights and conductor sizes in a GIS attribute table are provided in Attachment E.

- Provide any updated project description information that has become available since filing.

Response:

There are no changes to the project description information after filing.

3. SECTION 5.3, AIR QUALITY

- Section 5.3.4.2: Provide an applicant-proposed measure (APM) that requires all equipment over 50 horsepower to be Tier 4 Final to support the emissions model provided in the PEA.

Response:

In initial emissions calculations using CalEEMod, an assumption that all equipment would be Tier 4 was necessary to reduce estimated emissions to below the threshold of 80 lb/day. Emission estimates subsequently recalculated for the final PEA that addressed corrections to the equipment list and schedule resulted in a decrease in emissions that are below emissions thresholds even without the use of Tier 4 equipment. Assuming all equipment is Tier 4 results in estimated PM10 emissions at 49.5 lb/day; assuming Tier 4 equipment is not used, PM10 emissions are estimated to be 50.9 lb/day. Therefore, Tier 4 equipment is not required to mitigate emissions to below the threshold of 80 lb/day. Nevertheless, starting in 2020, CARB started requiring all off-road diesel construction equipment produced in California to be Tier 4, with over one third of the total equipment being Tier 4 Final. In 2022, CARB implemented additional amendments to the off-road

regulation which expanded requirements that any added vehicles be cleaner, and accelerated phase-out of older, higher-emitting engines from existing fleets. In effect, only Tier 4 Final or cleaner engines may be added to large and medium fleets starting January 1, 2024. As such, Tier 4 equipment is a regular occurrence and found on typical construction sites at rates exceeding 30 percent. The CalEEMod output table is provided in Attachment D.

Proposed APM: Equipment used during construction will abide by the CARB requirement that only Tier 4 Final or cleaner engines may be added to large and medium fleets starting January 1, 2024.

4. SECTION 5.4, BIOLOGICAL RESOURCES

- Section 5.4.4.1: Impact criterion “g” states that “avian collisions are not a substantial issue at Plainfield Substation as it is not a flyway.” The Central Valley is within the Pacific Flyway. Please provide any evidence, if available, empirically demonstrating that the existing Plainfield Substation has not contributed to avian or bat collision injuries or mortalities (e.g., data from an avian reporting system). If data is not available, please state this in your response.

Response:

PG&E is required to report bird fatalities annually to USFWS. There have been no reports of bird fatalities at Plainfield Substation since tracking began in 2002.

5. SECTION 5.6, ENERGY

- Section 5.6.4.3: Identify the amount of energy (kWh) that would serve the project during construction if temporary power would be obtained from existing distribution transformers at the substation.

Response:

It is estimated that approximately 20 kilowatt hours per day of temporary power from existing distribution transformers at the substation may be required for approximately 412 days, resulting in total usage of 8,240 kilowatt hours of electricity.

6. SECTION 5.10, HYDROLOGY AND WATER QUALITY

- Section 5.10.1.3: Please provide a copy of the 2022 geotechnical investigation referenced in the PEA.

Response:

The 2022 geotechnical investigation is Appendix H to the PEA.

7. SECTION 5.17, TRANSPORTATION

- Section 5.17.4.2: Please provide an Excel spreadsheet with VMT assumptions and model calculations.

Response:

As indicated Response to Comments tracking table for the Draft PEA, Caltrans Guidelines have identified that projects which generate less than 110 trips per day are generally assumed to cause

a less than significant impact. Therefore, because the Plainfield Project's greatest VMT will be an average of 50 trips per day, VMT is not calculated; the project's impact is assumed to be less than significant.

8. SECTION 5.19, UTILITIES AND SERVICE SYSTEMS

- Section 5.19.1.5: Provide the landfill capacity for the Esparto Convenience Center.

Response:

Esparto Convenience Center is a large volume transfer/processing facility, not a landfill. According to the website SWIS Facility/Site Activity Details (ca.gov), it has a maximum permitted capacity of 250 cubic yards.

9. GIS DATA REVIEW:

- Please provide GIS shapefiles for conductor size, pole and tower heights.

Response:

Confidential GIS shapefiles of TSPs are provided as Attachment E. Details about conductor size and pole heights in the confidential shapefiles' attribute tables are approximate, preliminary, and subject to change based on final design, site conditions, and other factors. There are no towers associated with the project.

- Please provide GIS shapefiles for existing, modified, and new rights-of-way or easements.

Response:

GIS shapefiles are provided as Attachment E. The shapefiles for existing, modified, and new easements represent approximate boundaries and are not equivalent to land survey data.

10. ALTERNATIVES:

- **Chapter 4, Description of Alternatives, and Chapter 6, Comparison of Alternatives:** This application completeness determination is contingent upon the assumption that the appropriate CEQA documentation will be a Mitigated Negative Declaration. If an EIR becomes necessary to support adequate environmental review, additional information regarding the proposed alternatives will be required prior to publishing the Notice to Proceed.
- **Section 4.2.2, Rejected Alternatives: Other Alternatives Considered and Rejected:** Regarding the project phasing options, PG&E's transmission planning engineers believe that the substation equipment will need to be further upgraded at some point in the future to support new capacity. However, they also state that ... "there are no current plans for expansion or future phases in the next 10 years." Please reconcile the forecast supporting capacity increases to accommodate three 115 kV/12 kV, 45 MVA transformers and possible timelines.

Response:

These two statements are correct and do not need to be reconciled. As noted above in response 2, Section 3.2.2, currently there is not sufficient forecasted load growth in the

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next 5 to 10 years to support an ultimate buildout of three 115/12 kV, 45 MVA transformers. However, it is anticipated that the buildout will eventually be required due to limitations at Davis and Woodland substations that push load to Plainfield Substation, and for the other reasons listed in response 2.