

1.13 NOISE

The following discussion evaluates the potential changes in impacts associated with noise and the conclusions from the Proponent’s Environmental Assessment (PEA) with the incorporation of the Proposed Project’s design modifications as described in the redlined version of Chapter 3 – Project Description. The table below summarizes the impact determinations from the PEA and the impact determinations with the incorporation of the design modifications.

Would the project:	PEA Impact Determination	Impact Determination with Design Modifications
a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less-than-Significant Impact	Less-than-Significant Impact
b) Generate excessive groundborne vibration or groundborne noise levels?	Less-than-Significant Impact	Less-than-Significant Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact	No Impact

Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

LSPGC and PG&E Components

Less-than-Significant Impact. Design modifications to the LS Power Grid California, LLC (LSPGC) and Pacific Gas & Electric (PG&E) Proposed Project components would increase vehicle miles traveled (VMT) by approximately 3.1 percent; however, the increase in VMT would be negligible and the increase in ambient noise levels along the roadways would be minimal, as the vehicle trips would be spread throughout the day. The predicted construction noise at the nearest receptor for the proposed PG&E 500 Kilovolt (kV) Transposition Structures and associated work areas is detailed in Table 1.13-1: Predicted Construction Noise Levels at Proposed PG&E 500 kV Transposition Structures. Although the design modifications associated with the proposed PG&E 500 kV Transposition Structures would increase ambient noise levels at the nearest receptors, the increases would be temporary and intermittent, and they would typically occur during daylight hours when elevated noise is more tolerable. PG&E 500 kV Transposition Structures A, B, and C are located within Solano County, while Transposition Structure D is located within Contra Costa County. Construction of the proposed PG&E 500 kV Transposition Structures A, B, and C would not conflict with the Solano County Noise

Ordinance as any activity preempted by state law is exempt from the noise ordinance (Solano County 2017).

Policy HS-P14.7 of Contra Costa County’s General Plan Health and Safety Element encourages noise-generating construction activities to be limited to weekdays and non-holidays and between the hours of 7:30 a.m. to 5:00 p.m. within 1,000 feet of noise-sensitive uses (Contra Costa County 2024). Therefore, construction of the proposed PG&E 500 kV Transposition Structure D would be limited to weekdays and non-holidays and between the hours of 7:30 a.m. to 5:00 p.m. If construction during those hours is not feasible, PG&E would pursue a variance with Contra Costa County. As a result, construction of the proposed PG&E 500 kV Transposition Structures would not conflict with local general plans or noise ordinances.

Table 1.13-1: Predicted Construction Noise Levels at Proposed PG&E 500 kV Transposition Structures

Proposed PG&E 500 kV Transposition Structure	Noise Level at Nearest Sensitive Receptor (A-weighted decibels)	Approximate Distance to Nearest Sensitive Receptor (feet, direction)
A	55 to 59	1,475, east
B	62 to 66	670, west
C	52 to 56	2,000, north
D	68 to 72	330, west

Design modifications to the remaining LSPGC and PG&E Proposed Project components would be located in close proximity to the original component locations and would not change the predicted construction noise levels at the nearest sensitive receptors previously evaluated in the PEA. As a result, and consistent with the PEA, impacts would continue to be less than significant.

Operations and Maintenance

LSPGC and PG&E Components

Less-than-Significant Impact. The proposed PG&E 500 kV Transposition Structures would be located along the existing PG&E Vaca Dixon-Tesla 500 kV Transmission Line. Corona-generated audible noise from the existing PG&E Vaca Dixon-Tesla 500 kV Transmission Line would be considered part of the Proposed Project’s baseline condition. Because the addition of the proposed PG&E 500 kV Transposition Structures would not change the voltage of the existing PG&E Vaca Dixon-Tesla 500 kV Transmission Line or the general proximity of conductors to sensitive receptors, the existing corona noise levels in the area would not change. Therefore, the proposed PG&E 500 kV Transposition Structures would not increase the ambient noise levels in the Proposed Project area. Design modifications to the remaining LSPGC and PG&E Proposed Project components would occur in close proximity to the original component locations and would not change the predicted corona noise levels previously evaluated in the PEA.

Operation and maintenance (O&M) activities associated with the proposed PG&E 500 kV Transposition Structures would be included in routine inspections of the existing PG&E Vaca Dixon-Tesla 500 kV Transmission Line. The proposed LSPGC 230 kV onshore riser structures would be included in the proposed O&M activities for the proposed LSPGC 230 kV Overhead Segment. The design modifications associated with the remaining LSPGC and PG&E Proposed Project components would not affect the O&M activities described in the PEA. As a result, and consistent with the PEA, impacts would continue to be less than significant.

Would the project generate excessive groundborne vibration or groundborne noise levels?

Construction

LSPGC and PG&E Components

Less-than-Significant Impact. As discussed in the PEA, the California Department of Transportation (Caltrans) vibration threshold for building damage (older residential structures) is 0.3 peak particle velocity (PPV) inch per second; vibration from construction equipment would attenuate to below this level within 50 feet of the source. No residential structures are within 50 feet of the proposed PG&E 500 kV Transposition Structures. Therefore, the vibration from construction equipment associated with the proposed PG&E 500 kV Transposition Structures would not cause any cosmetic or structural damage to the nearest residential structures. The Caltrans threshold for human annoyance at residential uses is 0.01 inch per second. For construction of the proposed PG&E 500 kV Transposition Structures, a large bulldozer is most likely to create substantial vibration but would attenuate to below the vibration annoyance criterion (0.01 PPV inch per second) within 107 feet of the source. No sensitive receptors are within 107 feet of the proposed PG&E 500 kV Transposition Structures and associated work areas. Therefore, the proposed PG&E 500 kV Transposition Structures would not generate significant groundborne vibration or noise at the nearest receptors.

Design modifications to the remaining LSPGC and PG&E Proposed Project components would be located in close proximity to the original component locations and would not change the Proposed Project's potential to generate groundborne vibration or noise levels previously evaluated in the PEA. As a result, and consistent with the PEA, impacts would continue to be less than significant.

Operations and Maintenance

LSPGC and PG&E Components

No Impact. The proposed LSPGC 230 kV onshore riser structures would be included in the proposed O&M activities for the proposed LSPGC 230 kV Overhead Segment. O&M activities associated with the proposed PG&E 500 kV Transposition Structures would be included in routine inspections of the existing PG&E Vaca Dixon-Tesla 500 kV Transmission Line. The design modifications associated with the remaining LSPGC and PG&E Proposed Project components would not affect the O&M activities described in the PEA. As a result, and consistent with the PEA, impacts would continue to be less than significant.

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

Construction, Operations and Maintenance

LSPGC and PG&E Components

No Impact. The proposed PG&E 500 kV Transposition Structure A would be located approximately 6,864 feet north of the northeast edge of the Travis Air Force Base runway. Given the distance from the runway, construction workers would not be exposed to excessive noise levels generated by the runway. The noise generated by construction equipment would be the dominant noise source for construction workers in the area. As a result, construction workers would not be exposed to excessive noise levels during construction of the proposed PG&E 500 kV Transposition Structure A.

Design modifications to the remaining LSPGC and PG&E Proposed Project components would not occur within 2 miles of any public airport or public use airport. In addition, design modifications would not involve the construction of any residences. As a result, and consistent with the PEA, no impact would occur.

References

Contra Costa County. 2024. General Plan Health and Safety Element. Online.
<https://www.contracosta.ca.gov/4732/General-Plan>. Site visited February 2025.

Solano County. 2017. Draft Final Solano County Noise Ordinance. Online.
<https://solanocounty.com/civicax/filebank/blobdload.aspx?blobid=26267>. Site visited February 2025.