

1.3 AIR QUALITY

The following discussion evaluates the potential changes in impacts associated with air quality 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) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less-than-Significant Impact	Less-than-Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less-than-Significant Impact	Less-than-Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less-than-Significant Impact	Less-than-Significant Impact

Would the project conflict with or obstruct implementation of the applicable air quality plan?

Construction

LSPGC and PG&E Components

No Impact. Consistent with the analysis in the PEA, a project would be considered inconsistent with an air quality plan or applicable attainment plan if it could cause population and/or employment growth or growth in vehicle miles traveled in excess of the growth forecasts included in an applicable air quality plan or attainment plan. Design modifications to the LS Power Grid California, LLC (LSPGC) and Pacific Gas and Electric Company (PG&E) Proposed Project components would not directly or indirectly induce substantial unplanned permanent population growth. Construction of the proposed PG&E 500 Kilovolt (kV) Transposition Structures would require up to 30 additional construction crew members per day, and design modifications to the remaining LSPGC and PG&E Proposed Project components would require up to 20 additional construction crew members per day. Although LSPGC and PG&E Proposed Project design modifications would require additional construction crew members, the increase would be temporary and would not induce permanent population growth.

In addition, design modifications for the proposed LSPGC 230 kV Submarine Segment would reduce the number of cables to be installed, which would reduce the duration that temporary construction workers would be located in the Proposed Project area. Because the design modifications would not induce permanent population growth, they would not conflict with the growth projections used in the development of the applicable air quality plans.

Construction of the Proposed Project with the design modifications incorporated would continue to comply with applicable air district rules and regulations, be temporary, and represent a small fraction of the regional emission inventories included in the applicable air quality plans. Therefore, the Proposed Project-related annual emissions would not conflict with or obstruct implementation of the applicable air quality plans. As a result, and consistent with the PEA, no impacts would occur.

Operations and Maintenance

LSPGC and PG&E Components.

No Impact. The proposed LSPGC 230 kV onshore riser structures would be included in the Operation & Maintenance (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 PG&E's existing 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, no impact would occur.

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Construction

LSPGC Components

Less-than-Significant Impact. Design modifications to the LSPGC Proposed Project components would not change the type of equipment used for construction of the Proposed Project; however, the quantity and duration of use for certain equipment would change. Design modifications for the proposed LSPGC 230 kV Submarine Segment would occur within the Sacramento Metropolitan Air Quality Management District (SMAQMD) and Bay Area Air Quality Management District (BAAQMD), while design modifications to the remaining LSPGC Proposed Project components would occur only within the BAAQMD. Consistent with the PEA and as shown in Table 1.3-1: BAAQMD Average Daily Construction Emissions with Design Modifications, uncontrolled average daily emissions would continue to exceed applicable thresholds for nitrogen oxides (NO_x) during construction with the incorporation of the design modifications. All other emissions would continue to be below applicable thresholds. Attachment 1.3-A: Updated Air Quality and GHG Calculations documents the methods used to quantify the anticipated emissions with the design modifications incorporated.

LSPGC's applicant-proposed measure (APM) AIR-1 and PG&E's Construction Measure (CM) AIR-1 would continue to be implemented to reduce construction emissions. As summarized in Table 1.3-1: BAAQMD Average Daily Construction Emissions with Design Modifications, controlled construction emissions from both the LSPGC and PG&E Proposed Project components with the design modifications incorporated would not exceed the significance threshold for any criteria air pollutants (CAPs). Therefore, the design modifications would not cause the LSPGC Proposed Project components within the BAAQMD to result in a cumulatively considerable net increase of CAPs.

Table 1.3-1: BAAQMD Average Daily Construction Emissions with Design Modifications

Construction Year	Average Daily Emissions (pounds per day)				
	ROG	NO _x	SO ₂	PM ₁₀ Exhaust	PM _{2.5} Exhaust
Uncontrolled Emissions					
2026	6.1	53.7	0.2	2.7	2.2
2027	15.0	126.3	0.4	6.4	5.3
2028	6.6	59.8	0.2	3.0	2.5
Threshold	54	54	--	82	54
Exceeded?	No	Yes	N/A	No	No
Controlled Emissions					
2026	3.2	24.5	0.2	1.6	1.2
2027	8.1	53.8	0.4	3.8	2.9
2028	3.1	21.1	0.2	1.5	1.2
Threshold	54	54	--	82	54
Exceeded?	No	No	N/A	No	No

Notes:

- Values shown in bold text exceed the applicable threshold. This table accounts for emissions from both LSPGC and PG&E Proposed Project components within the BAAQMD's jurisdiction.
- ROG = reactive organic gas; NO_x = nitrogen oxides; SO₂ = sulfur dioxides; PM₁₀ = particulate matter with a mean diameter of less than 10 microns; PM_{2.5} = particulate matter with a mean diameter of less than 2.5 microns

Design modifications associated with the proposed LSPGC 230 kV Submarine Segment would not alter the daily equipment use in the SMAQMD but would shorten the total length of time in the SMAQMD. As a result, daily emissions would not change; however, total emissions associated with the proposed LSPGC 230 kV Submarine Segment in the SMAQMD would be reduced.

As discussed in the PEA, the BAAQMD does not have a numerical threshold to evaluate fugitive dust emissions from construction projects. Instead, the BAAQMD requires projects to implement all feasible best management practices (BMPs) to reduce fugitive dust emissions. The Proposed Project would continue to implement APM AIR-2, which requires that fugitive dust control measures consistent with BAAQMD requirements be used as needed during construction of the LSPGC Proposed Project components. With the continued implementation of APM AIR-2, fugitive dust in the BAAQMD would continue to be controlled. Therefore, the design modifications to LSPGC Proposed Project components would not cause a cumulatively considerable net increase in emissions to occur within the BAAQMD or SMAQMD. As a result, and consistent with the PEA, impacts would continue to be less than significant.

PG&E Components

Less-than-Significant Impact. Design modifications to PG&E Proposed Project components would be located in the BAAQMD. Incorporation of design modifications for PG&E Proposed Project components would not cause the Proposed Project to exceed additional CAP thresholds in the BAAQMD, as shown in Table 1.3-1: BAAQMD Average Daily Construction Emissions with Design Modifications. Consistent with the PEA, uncontrolled average daily emissions from LSPGC and PG&E components of the Proposed Project would continue to exceed applicable thresholds for NO_x during construction, while all other emissions would be below applicable thresholds. Consistent with the analysis in the PEA, implementation of APM AIR-1 and CM AIR-1 would ensure the LSPGC and PG&E Proposed Project components with design modifications incorporated would not exceed the significance threshold for any CAPs, as shown in Table 1.3-1: BAAQMD Average Daily Construction Emissions with Design Modifications. Therefore, incorporation of the design modifications would not cause the PG&E Proposed Project components to exceed significance thresholds in the BAAQMD. Attachment 1.3-A: Updated Air Quality and GHG Calculations documents the methods used to quantify the anticipated emissions with the design modifications incorporated.

As discussed in the PEA, the BAAQMD does not have a numerical threshold to evaluate fugitive dust emissions from construction projects. Instead, the BAAQMD requires projects to implement all feasible BMPs to reduce fugitive dust emissions. The Proposed Project would continue to implement CM AIR-2, which requires that fugitive dust control measures consistent with BAAQMD requirements be used as needed during construction of the PG&E Proposed Project components. With the continued implementation of CM AIR-2, fugitive dust in the BAAQMD would continue to be controlled. Therefore, the design modifications to PG&E Proposed Project components would not cause a cumulatively considerable net increase in emissions to occur within the BAAQMD. 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 LSPGC 230 kV onshore riser structures would be included in the 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 PG&E's existing 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, O&M emissions resulting from the Proposed Project with design modifications incorporated would remain consistent with the anticipated emissions previously evaluated in the PEA. As a result, and consistent with the PEA, impacts would continue to be less than significant.

Would the project expose sensitive receptors to substantial pollutant concentrations?

Construction

LSPGC Components

Less-than-Significant Impact. Design modifications to LSPGC Proposed Project components would be located in close proximity to the original component locations and within proximity of the same sensitive receptors previously evaluated in the PEA. As shown in Table 1.3-1: BAAQMD Average Daily Construction Emissions with Design Modifications, all emissions would continue to be below applicable significance thresholds. In addition, APMs AIR-1 and AIR-2 would continue to be implemented. Because the design modifications to the LSPGC Proposed Project components would occur in close proximity to the original component locations and all emissions would continue to be below applicable significance thresholds, the design modifications would not expose sensitive receptors to substantial pollutant concentrations. As a result, and consistent with the PEA, impacts would continue to be less than significant.

PG&E Components

Less-than-Significant Impact. Design modifications to the proposed PG&E 500 kV Interconnection would be located in close proximity to the original component locations and within proximity of the same sensitive receptors previously evaluated in the PEA. Proposed PG&E 500 kV Transposition Structures A and C would not be within 0.25 mile of any sensitive receptors. Proposed PG&E 500 kV Transposition Structures B and D would be approximately 670 and 330 feet from the nearest sensitive receptor, respectively. Although sensitive receptors would be within 0.25 mile of these structures, all emissions would continue to be below applicable significance thresholds, as shown in Table 1.3-1: BAAQMD Average Daily Construction Emissions with Design Modifications. Construction would be completed by multiple construction crews dispersed across the Proposed Project; therefore, the actual emissions that would be created at a single site would likely be lower than the overall Proposed Project emissions. In addition, construction at each proposed PG&E 500 kV Transposition Structure site would be limited to approximately 44 days. Due to the limited duration of activities at these locations, implementation of CMs AIR-1 and AIR-2, and emissions below all applicable thresholds, impacts to sensitive receptors would continue to be less than significant.

Operations and Maintenance

LSPGC and PG&E Components

No Impact. O&M activities associated with the proposed PG&E 500 kV Transposition Structures would be included in routine inspections of PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. Therefore, O&M activities already occur in proximity to the nearest sensitive receptors to the proposed PG&E Transposition Structures B and D. The proposed PG&E Transposition Structures B and D would not change the routine O&M activities associated with PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. As a result, O&M emissions resulting from the PG&E Proposed Project components with design modifications incorporated would not change emissions at nearby sensitive receptors.

The proposed LSPGC 230 kV onshore riser structures would be included in the 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, O&M emissions resulting from the Proposed Project with design modifications incorporated would remain consistent with the anticipated emissions previously evaluated in the PEA. As a result, and consistent with the PEA, no impact would occur.

Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

LSPGC and PG&E Components

Less-than-Significant Impact. Design modifications would not cause the Proposed Project to release additional odors not previously evaluated in the PEA; however, the proposed PG&E 500 kV Transposition Structures B and D would be approximately 670 and 330 feet from the nearest sensitive receptor, respectively. Consistent with the analysis in the PEA, construction activities associated with the proposed PG&E 500 kV Transposition Structures B and D may create temporary odors from the combustion of fuel associated with heavy equipment and on-road vehicle use; however, these emissions would not be considered significant due to the highly dispersive nature of diesel exhaust and the short-term nature of construction. No other substantial sources of odor would be present during construction of the proposed PG&E 500 kV Transposition Structures B and D. No additional sensitive receptors were identified within 0.25 mile of the Proposed Project design modifications. 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. O&M activities associated with the proposed PG&E 500 kV Transposition Structures would be included in routine inspections of PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. Therefore, O&M activities already occur in proximity to the nearest sensitive receptors to the proposed PG&E Transposition Structures B and D. The proposed PG&E Transposition Structures B and D would not change the routine O&M activities associated with PG&E's existing Vaca Dixon-Tesla 500 kV Transmission Line. As a result, no new sources of odor would be introduced, and impacts would remain consistent with those previously evaluated in the PEA.

The proposed LSPGC 230 kV onshore riser structures would be included in the 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.

ATTACHMENT 1.3-A: UPDATED AIR QUALITY AND GHG CALCULATIONS