April 4, 2025 VIA EMAIL

Dustin Joseph
LS Power
6701 Kroll Center Parkway, Suite 250
Pleasanton, CA 94566

Re: CPUC Review of Amended Proponent's Environmental Assessment for LS Power's Power Santa Clara Valley Project (Application 24-04-017)

Dear Mr. Joseph:

On November 12, 2024, the California Independent System Operator (CAISO) approved a modified version of the Power Santa Clara Valley Project (project). These modifications necessitated an amendment to LS Power's certificate of public convenience and necessity (CPCN) Application 24-04-017 filed on April 29, 2024 (original application) and deemed complete on June 27, 2024. LS Power filed this amended application for a Certificate of Public Convenience and Necessity Authorizing construction of the Power Santa Clara Valley Project (amended application) on March 7, 2025.

The California Public Utilities Commission (CPUC) Energy Division, CEQA and Energy Permitting Unit, has reviewed the amended application, which includes updated versions of the Proponent's Environmental Assessment (PEA) and other attachments. Based on this review, the Energy Division finds that the amended application contains sufficient information to satisfy the requirements of the Commissions Information and Criteria List, and therefore deems the amended application complete.

We acknowledge that, following CAISO's approved project modifications, but prior to the submittal of the amended application, LS Power submitted responses to several data requests issued by the Energy Division which further developed certain details of the project description (i.e., Response to Project Description Data Request No.1 on November 22, 2024; Response No. 2 to Project Description Data Request No. 1 on December 5, 2024; Response No. 3 to Project Description Data Request No. 1 on January 13, 2025; Response to Project Description Data Request No. 2 on February 11, 2025). These refinements are not reflected in the amended application but are considered part of the project pursuant to the California Environmental Quality Act (CEQA). Accordingly, the data request responses are appended to this letter as Attachments A through D. Additionally, after LS Power filed this amended application, LS Power provided one response to CPUC's Data Request No. 3 (i.e., Response to Project Description Data Request No. 3) further clarifying details of the project. This response is appended to this letter as Attachment E.

All data requests and responses are accessible to the public on the CPUC's project webpage, and the project refinements will be incorporated into the Commission's draft CEQA document prepared for the project. The information filed with the amended application, as supplemented separately in the data request responses, is sufficient to support the Commissions' CEQA review.

Please do not hesitate to call me at (916) 594-4699 if you have any questions.

Sincerely,

Tharon Wright

Tharon Wright
Project Manager for the Power Santa Clara Valley Project
Energy Division

cc: Michelle Wilson, CPUC Energy Division
Valisa Nez, ESA
Michael Manka, ESA

Attachments:

A. LSPGC Response 1 to Data Request 1
B. LSPGC Response 2 to Data Request 1
C. LSPGC Response 3 to Data Request 1
D. LSPGC Response 1 to Data Request 2
E. LSPGC Response 1 to Data Request 3

Attachment A

LSPGC Response 1 to Data Request 1

November 22, 2024

VIA EMAIL

Ms. Tharon Wright
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Response to Project Description Data Request No. 1 for LS Power Grid California, LLC's Power Santa Clara Valley Project (Application 24-04-017)

Dear Ms. Wright:

As requested by the California Public Utilities Commission, LS Power Grid California, LLC has collected and provided the additional information requested relating to the Draft California Environmental Quality Act, Project Description Data Request No. 1 (DR-1) for the Power Santa Clara Valley Project (Project). This letter includes the following enclosure:

- DR-1 Response Table providing the additional Project information requested.

Please contact me at (925) 808-0291 or djoseph@lspower.com with any questions regarding this information.

Sincerely,

Dustin Joseph

Dustin Joseph
Director of Environmental Permitting

Enclosure

cc: Jacob Diermann (LS Power)
Casey Carroll (LS Power)
Lucy Marton (LS Power)
David Wilson (LS Power)
Roxanne Henriquez (CPUC)
Valisa Nez (ESA)
Michael Manka (ESA)

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) Energy Division, California Environmental Quality Act (CEQA) and Energy Permitting Unit, is currently developing a project description for the Power Santa Clara Valley Project (Project) pursuant to CEQA. As the CPUC proceeds with the environmental review for the Proposed Project, we have identified additional information that is needed to adequately conduct the CEQA analysis.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #1		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
Project Description		
1	**Existing Utility System**: Please provide further information about nearby existing substations (e.g., names of other substations) and transmission lines beyond the existing PG&E Metcalf and PG&E San Jose B Substations.	Figure 3-5 of the Proponent's Environmental Assessment (PEA) shows the existing transmission system in proximity to the Project, including substations and transmission lines. Existing substations in electrical proximity to the Project include but are not limited to, San Jose A, FMC, El Patio, Markham, Evergreen, IBM Baily, and IBM Harry Rd.
2	**Existing Transmission Lines**: Please provide details (e.g., count, location) of existing transmission and distribution lines in the Project's vicinity, even if they are not crossed by the Project's alignment. • "The Project would not directly affect any other existing transmission or distribution lines."	The following is based on publicly available data. The Metcalf to Grove transmission line would cross under numerous existing transmission lines outside of the existing Metcalf substation including approximately one 500 kV, three 230 kV, and five 115 kV transmission lines The Grove to Skyline transmission line would be located near existing transmission and lines including: - Crossing under numerous existing transmission lines outside of the existing Metcalf substation including approximately one 500 kV, three 230 kV, and five 115 kV transmission lines. - Paralleling the existing Hummingbird Battery Storage to Metcalf underground 115 kV transmission line in Monterey Road from near the Metcalf substation to just south of State Route 85 with a crossing of this underground transmission line just south of State Route 85. - Paralleling a 60 kV transmission line from approximately Capitol Expressway Street to Umbarger Road with an overhead 60 kV crossing of Monterey Road near Umbarger Road

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Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
		- Paralleling a 115 kV transmission line from approximately Umbarger Road to Phelan Avenue with overhead 115 kV crossings of Monterey Road near Umbarger Road and Phelan Avenue. Numerous existing distribution lines are in the vicinity of the Project, all owned by PG&E. Distribution lines in the vicinity of the Project are generally fed from the following PG&E substations: - San Jose B - San Jose A - Stone - Evergreen - Piercy - Edenvale LSPGC will work closely with PG&E to ensure all required clearances are met.
3	**Skyline Terminal**: Please confirm if the existing PG&E distribution lines are within the 10.6-acre lot for the proposed Skyline terminal, OR if these lines are located within the existing PG&E San Jose B Substation.	PG&E has numerous existing distribution circuits that leave the existing San Jose B substation. Four existing distribution circuits leave the San Jose B substation and cross the 10.6-acre lot for the proposed Skyline terminal in underground duct bank(s) that conflict with PG&E's planned rebuild and expansion of the existing PG&E San Jose B substation. As described in the PEA, these four distribution lines will be relocated to allow the rebuild and expansion of the existing PG&E San José B Substation.
4	**Voltages of existing transmission/distribution lines**: Please provide the voltages of existing transmission/distribution lines in the area.	The voltages of existing distribution and transmission lines in the Project area include 12 kV, 21 kV, 60 kV, 115 kV, 230 kV, and 500 kV.
5	**Oil for Transformers**: Please confirm if the Project would require a total of up to 75,000 gallons for the transformers at each site. • "The maximum amount of oil required for the transformers would be approximately 25,000 for each of the three transformers".	The three energized transformers would be filled with up to approximately 25,000 gallons each. In addition, the on-site spare would also be filled with up to approximately 25,000 gallons. Therefore, each terminal would have up to approximately 100,000 gallons for the transformers at each site.
6	**Enclosure Roofs**: Please confirm if the white finishing for enclosure roofs is designed to reflect sunlight to moderate temperatures within the enclosures. Also, would this have an anti-glare finish?	The white finish for the enclosure roofs is designed to reflect sunlight to be more environmentally friendly and moderate temperatures. This finish is commonly used for commercial buildings of all types (i.e., offices, apartments, large commercial buildings). A low gloss finish would be selected as available to avoid glare.

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	• "Equipment and enclosures at the HVDC terminal sites would be non-reflective as practicable with neutral gray or neutral earth-tone colors. Enclosure roofs would typically be white".	
7	**Other substations**: The following sentence is from the PEA's Project Description (Page 3-3) – please identify the 'other substations': • "There are currently two 115 kV lines that connect the existing PG&E Metcalf and San Jose B substations, with each 115 kV line having intermediate stops at other substations."	Based on publicly available data, one 115 kV line has intermediate stops at both the San Jose A substation and the El Patio substation with tapped connections to the IBM Harry Rd and IBM Baily substations. The other 115 kV line has an intermediate stop at the Evergreen substation with a tapped connection to the Markham, Catalyst and Stone substations.
8	**Metcalf to Grove Transmission Line**: Please provide the MW rating for the proposed Metcalf to Grove transmission line.	The proposed Metcalf to Grove 500 kV AC transmission line has a rating of 1,000 MW.
9	**Downtown San José (DSJ) Segment**: The PEA's Project Description states that the alignment of the DSJ Segment is unknown (see below). Please provide an update on this development and narrow to one or two leading alternatives for this segment. • "LSPGC continues to survey existing underground utilities and consult with the City of San José to identify and account for existing underground constraints within the Downtown San José area. Detailed utility surveys may ultimately determine that it is not feasible to route the Grove to Skyline transmission line in some streets in Downtown San José."	Since submitting the PEA, LSPGC has conducted a significantly greater amount of due diligence in the DSJ segment. This includes desktop utility work, topographical surveys, utility markout surveys, and potholing. There is still a level of uncertainty regarding the final route for the DSJ segment. However, based on the additional due diligence conducted since the PEA was submitted, LSPGC has identified an apparent fatal routing issue for a portion of the proposed alignment on Bassett Street. As such, LSPGC is currently further evaluating three primary alternatives in the DSJ area: 1. Revised Grove to Skyline 320 kV DC transmission line alignment a. The Revised Grove to Skyline 320 kV DC transmission line begins at the Interstate 280 (I-280) underpass for First Street and aligns with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment within First Street and Market Street for the first approximately 1.1 mile. The Revised Grove to Skyline 320 kV DC transmission line would then follow Devine Street west for approximately 0.1 mile and then turn north on Terraine Street for approximately 0.15 mile. Revised Grove to Skyline 320 kV DC transmission line would turn west onto Bassett Street and align with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.15 mile.

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		2. Downtown San José Alternative 1 from the PEA a. Downtown San José Alternative 1 begins at the I-280 underpass for First Street and then turns onto West Reed Street for approximately 0.3 mile before turning north on Almaden Boulevard. Downtown San José Alternative 1 continues north on Almaden Boulevard for approximately one mile, including a crossing underneath State Route (SR) 87. Downtown San José Alternative 1 would then cross Julian Street and enter the parking lot of a private property leased to the County of Santa Clara. Downtown San José Alternative 1 would travel through the private parking lot for approximately 0.2 mile before aligning with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.05 mile. 3. Modified Downtown Alternative a. The Modified Downtown Alternative begins at the I-280 underpass for First Street and aligns with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment within First Street and Market Street for the first approximately 1.0 mile. The Modified Downtown Alternative would then follow West Saint James Street, which turns into Julian Street, west for approximately 0.3 mile, and turn north and enter the parking lot of a private property leased to the County of Santa Clara. The Modified Downtown Alternative would travel through the private parking lot for approximately 0.2 mile before aligning with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.05 mile. Updated mapping showing these alternatives is being developed and will be provided to the CPUC by December 6, 2024.
10	**Proposed Grove Terminal**: Please confirm if the Monterey Road frontage, noted for visual screening in the PEA PD, is included in the 12.8 acres accounted for temporary disturbance at the proposed Grove terminal.	The entire Grove Terminal site is approximately 13.6 acres with the frontage accounting for approximately 0.8 acres of the site. Since the planned frontage area would retain its vegetation, this 0.8 acres was not included in the 12.8 acres of temporary disturbance.
11	**Aerial Marking and Lighting**: It is provided that, "A 100-foot-tall structure would still be below the maximum FAA authorized aboveground structure height limit for the Skyline terminal site". Please confirm if this is	The Grove terminal site is subject to less strict FAA structure height limits because it is approximately 13.5 miles from the San Jose Mineta International Airport, whereas the Skyline terminal site is approximately 1

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	the same for the Grove Terminal site.	mile from the airport. Based on the FAA Notice Criteria Tool, a 100-foot-tall structure does not exceed the Notice Criteria at the Grove terminal.
12	**Duct Bank Dimensions and Configurations**: To the extent design information is available, please provide further details on the dimensions and configurations of duct banks, especially in relation to the proposed CAISO change.	The proposed duct bank design would not change from the typical duct bank that was included as Figure 3-9 in the PEA to account for the CAISO change. As shown in, Figure 3-9, the duct banks would typically be approximately 2.5 feet wide and 2.5 feet tall with a minimum of 3 feet of cover from the ground surface to the top of duct bank.
13	**PG&E San Jose B Tie Line**: Please provide further detail regarding the tie line (e.g., 60 feet wood or steel pole, with concrete foundations, etc.). • "…anticipated to require structure up to approximately 60 feet tall".	The tie line structures are anticipated to be approximately 60-foot-tall steel H-frame (dead-end) or similar termination structure with reinforced concrete drilled shaft or pile foundations.
14	**Modifications at the PG&E San Jose B Substation**: Please confirm what 'new facilities' would entail regarding expansion of the San Jose B Substation. • "New facilities for the expansion of the San Jose B substation would range in height up to approximately 95 feet above grade."	LSPGC sent an RFI to PG&E and is waiting for a response. As of November 21, 2024, PG&E is targeting a response by November 27, 2024. LSPGC will provide this information to the CPUC once it is received from PG&E.
15	**Access Roads**: Please provide GIS files for access roads that would be used by the Project.	The Proposed Project would include two new access roads, which would connect the proposed Grove and Skyline terminals to existing roadways. GIS files for these access roads were submitted with the PEA. All construction and operations traffic would utilize the existing public roadway network. PEA Table 3-2, Construction Staging Areas, lists the primary public roadways that would be utilized to access each staging yard.
16	**LSPGC Work at PG&E San Jose B Substation**: Please clarify if this work would occur inside or outside the boundaries of the existing San Jose B Substation (i.e., within the proposed Skyline Terminal or in the Expansion area)? • "LSPGC's scope for the Skyline to San Jose B tie line between the Skyline terminal and the existing San Jose B Substation is proposed	The PG&E H-frame (dead-end) or similar termination structure located adjacent to the new San Jose B Substation GIS enclosure would be located within the San Jose B substation expansion area, outside of the existing San Jose B substation fenceline.

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	to stop at a H- frame (dead-end) or similar termination structure located adjacent to the new San Jose B Substation GIS enclosure."	
17	**ROW Width**: Please confirm the width (e.g., average width) of new ROWs (new easement franchise agreements or otherwise).	The permanent ROW for the Grove to Skyline and Metcalf to Grove transmission lines would vary in width but would typically range in width from 3 to 5 feet. The ROW would be expanded at vault locations to encompass the entire splice vault (i.e., approximately 10 feet wide). The specific width of necessary easements, ROW, or franchise agreements along the transmission line alignments would be refined during the final engineering process.
18	**New ROW**: Please confirm if the statement below is permanent and does not include temporary work areas. • "The Project is anticipated to require a total of approximately seven acres of new ROW, easement, or franchise agreements."	Confirmed.
19	**Westbury Park, LLC**: Please confirm the nature of the negotiation with Westbury Park, LLC regarding a temporary easement (i.e., is this for transmission line installation)?	A temporary easement is required from Westbury Park, LLC for transmission line construction workspace including horizontal bore work area. A smaller permanent easement would also be required for the transmission line ROW.
20	**Skyline Terminal Access Road**: It is provided that there is a potential upgrade to a paved access road apron to "provide an adequate entrance from Ryland Street to the terminal site may be required". Please confirm this potential Project component.	It is believed that the road apron to the Skyline terminal site off Ryland Street would need to be upgraded to tie the new Skyline access road into the existing Ryland Street.
21	**Staging and Construction Work Areas**: It is provided that the Project's underground transmission lines are sited almost exclusively within existing public roadways, however, there is also language that states, "[A]ll underground transmission not installed in roads (e.g., parking lots or sidewalk) would be restored to the original condition". Please identify where these areas would be, and if available, dimensions.	Based on preliminary design information, the locations where the transmission line would not be located within existing public roadways are shown in Figure 3-4 of the PEA and include: 1) The Metcalf substation for approximately 100 feet, the Grove terminal for approximately 1,000 feet, and the Skyline terminal for approximately 600 feet; 2) The parking lot south of the Skyline terminal for approximately 130 feet;

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		3) Coyote Creek Parkway between the Grove terminal and Coyote Ranch Road for approximately 1,200 feet and approximately 850 feet for the realignment of Coyote Ranch Road; and 4) While exact locations are unknown, sidewalks and road medians may be affected where the proposed Project is constructed within existing roads in close proximity to these features. The permanent ROW for the Grove to Skyline and Metcalf to Grove transmission lines would vary in width but would typically range in width from 3 to 5 feet. The ROW would be expanded at vault locations to encompass the entire splice vault (i.e., approximately 10 feet wide). The specific width of necessary easements, ROW, or franchise agreements along the transmission line alignments would be refined during the final engineering process.
22	**Temporary Power**: It is provided that, "Temporary generators would be required during construction of the underground transmission lines". Please confirm specifications of these generators.	It is anticipated that 8 kW (~20 hp) diesel generators would be required during duct bank and splice vault installation work. Additionally, 25 kW (~45 hp) diesel generators would be required during cable installation work.
23	**Work at Coyote Ranch Road and Coyote Creek Trail**: Please provide details, including dimensions, on staging and work activities anticipated along Coyote Ranch Road and Coyote Creek Trail. • Also, it is noted that the Coyote Creek Trail alignment would result in a disturbance area of approximately 0.65 acre, while Table 3-3 Work Area Disturbance Summary notes a disturbance of approximately 1.1 acres. Does this mean that the disturbance along Coyote Ranch Road would be the different between these two values (i.e., 0.45 acre)?	The staging and work areas are shown as Construction Staging Area and Limits of Construction in Figure 3-4. Staging Area No. 2 is located adjacent to Coyote Ranch Road and is approximately 7.8 acres in size. Staging Area No. 3 is also located adjacent to Coyote Ranch Road and is approximately 9.3 acres in size. The total permanent disturbance area for the Coyote Creek Trail and Coyote Ranch Road re-alignments would be approximately 1.1 acres (conservatively rounded up). The Coyote Creek Trail realignment is approximately 12 feet wide and would result in a permanent disturbance area of approximately 0.65 acre while the Coyote Ranch Road realignment would be approximately 20 feet wide and would result in approximately 0.36-acre permanent disturbance area. Temporary work areas surrounding Coyote Ranch Road and Coyote Creek Trail would differ in size, shape, and width, but would total approximately 13.1 acres. This temporary construction work area would encompass the permanent road and trail realignment area and would extend from the Metcalf Substation to the HDD work area on the north side of Coyote Creek (refer to PEA Figure 3-4). This work area would be used for transmission line construction as well as construction of the road and trail realignment with most work occurring within the permanent disturbance area.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #1		
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24	**Work Disturbance Acreage for Pulling and Splicing**: Table 3-3, footnote 3 notes that the transmission line acreage includes temporary acreage for splice vaults, HDD pits, and jack-and-bore pits. Does this include pulling and splicing work areas acreage? If not, please provide details and locations.	Transmission line work area/ disturbance acreage also includes all anticipated pulling and splicing work areas. The transmission line temporary construction work area polygons are intended to encompass all required construction activities.
25	**Vegetation Clearing at Grove Terminal**: It is provided that the Grove terminal site would require clearing of approximately 13.6 acres of orchard trees. In considering the presence of dense grasslands at this site, please verify the total acreage of vegetation clearing that is anticipated for the Grove terminal sites, as well as all other Project locations.	The Grove terminal site would require the clearing of approximately 12.8 acres of orchard trees and surrounding vegetation. Approximately 0.8 acre of existing orchard trees along the Monterey Road frontage of the Grove terminal site would be preserved as screening in place of new landscaping. Vegetation removal would also be required for the Metcalf to Grove transmission line. This includes approximately 1.1 acres associated with the permanent impacts from the Coyote Creek Trail and Coyote Ranch Road re-alignments. Additional vegetation clearing would be needed within a portion of the temporary work area for the Coyote Creek Trail and Coyote Ranch Road re-alignments. Finally, vegetation clearing would be required within part of the identified work area for the Metcalf to Grove transmission line between the Grove terminal and Coyote Ranch Road which is approximately 1.7 acres.
26	**Tree Trimming and Removal**: It is provided that 'minimal tree clearing and trimming' would be required for the Project, particularly near Coyote Ranch Road and Coyote Creek Trail. Please quantify these amounts to the best extent possible. Also, please provide information on coordination efforts with landowners on tree clearing and trimming.	LSPGC has met with the Santa Clara County Parks Department multiple times to discuss the Project alignment and related tree trimming in Coyote Creek Parkway, including near Coyote Ranch Road and Coyote Creek Trail. Approximately 30 trees would need to be trimmed or removed based on the final location and width of the new Coyote Creek Road and Trail alignment and to support the HDD and duct bank installation work. Beyond Coyote Creek Parkway, minimal tree clearing and trimming near would be required to allow sufficient work area to construct the transmission lines within existing roads. This included trees in the median and along the shoulder that overhang the road and would prevent the necessary equipment from operating as required. The final route details will dictate tree clearing requirements near roads so exact trees and quantities have not been identified yet.
27	**Grading, Excavation, and Material Removal**: Grading, excavation, and material removal quantities anticipated for the Project based on current information are summarized in PEA Table 3-4, however, does not account for grading, excavation, and material removal at the staging areas. To the	Almost all identified potential staging areas are existing pre-disturbed sites, many of which have historically been used for staging material on other projects. Therefore, these proposed staging areas are anticipated to require a negligible amount of grading, excavation, and material removal. The remaining

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #1		
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	extent that information is possible, please update the table or provide values for grading, excavation, and material removal anticipated for the 12 staging areas.	proposed staging areas that are not pre-disturbed sited, are generally flat and are anticipated to require a negligible amount of grading, excavation, and material removal.
28	**Poles and Towers**: There is an inconsistency between the number of wooden poles associated with a radial distribution line at the Grove terminal site. Please confirm if there are three or four wooden poles.	There are currently four distribution poles on the Grove terminal site. Three would be removed and one is anticipated to be left in place to support providing station service power to the Grove terminal.
29	**Duct Bank Segments**: To the extent that information is possible, please provide the typical length of duct bank installations at any one time (e.g., are 100-foot segments installed at once, or 500 feet?)	The duct bank would generally move in a linear fashion, with multiple installation crews working simultaneously along the route in different locations. The duct bank installation would progress such that only a maximum of approximately 1,000 feet of trench at a single work site would be left open at any one time or as allowed by permit requirements. Each crew would be spaced out along this work area conducting different tasks (i.e. excavation, conduit installation, and backfilling) concurrently in a linear fashion. Duct bank installation daily production rates would vary significantly as it is highly dependent on site specifics including but not limited to duct bank depth, soil types encountered, utility crossings, and traffic constraints.
30	**Temporary Work Area Estimates**: It is provided that trenching operations would progress such that only a maximum of approximately 1,000 feet of trench at single work site would be left open at any one time. Please confirm if temporary work area estimates are consistent with the statement.	Confirmed. Temporary work areas identified within the PEA would encompass all anticipated construction activities, including open trenches for underground transmission line construction.
31	**Dewatering and Hazardous Waste Management**: It is provided that the typical temporary workspace around sending and receiving pits at the HDD site would be approximately 200 feet by 100 feet, which equates to 2,000 square feet of workspace (4,000 square feet for both ends). Please confirm if this is sufficient space for dewatering and waste management activities, and temporary work and staging activities in general.	The typical temporary work areas around the sending and receiving pits at the HDD site would be approximately 200 feet by 100 feet, which equates to approximately 20,000 square feet of workspace (40,000 square feet for both ends). The dimensions for each temporary workspace dimensions may significantly vary to accommodate the site-specific constraints at each setup location. The approximate 40,000 square feet of work area would be sufficient for HDD equipment staging, dewatering, and waste management activities. Pull back area for pipe staging and fusion is not included in this work area and typically begins at the receiving pit and is longer than the HDD's entire length.
32	**Anticipated Construction Equipment and Workforce Table**: Please provide the number of crews needed for under material delivery of	Two crews are anticipated for material delivery.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #1		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
	terminals.	
33	**PG&E Construction Sequence**: To the extent that information is available, please provide details on PG&E's proposed construction sequences (i.e., 'means and methods').	LSPGC sent an RFI to PG&E and is waiting for a response. As of November 21, 2024, PG&E is targeting a response by November 27, 2024. LSPGC will provide this information to the CPUC once it is received from PG&E.
34	**Vegetation Management Program**: Would vegetation management only occur at the terminal sites? Please confirm locations where the vegetation management program would apply. • It is provided that emergency vegetation treatment would be conducted when any vegetation encroaches within the *10-foot line clearance*. Please clarify what this refers to.	Routine vegetation management is not anticipated to be required for the underground transmission lines with the transmission line predominately located within city streets. If tree roots, water intrusion, and other natural occurring environmental encroachments are impacting the underground transmission line, the encroaching vegetation would be removed to ensure the integrity of the transmission line. The 10-foot line clearance would only apply to overhead lines. With the only overhead transmission line being the Skyline to San Jose B transmission line, no vegetation should ever be near this line given the transmission line's location within the Skyline terminal site. Vegetation management would primarily occur at the terminal sites to ensure that required vegetation clearances are met.

Attachment B

LSPGC Response 2 to Data Request 1

December 5, 2024

VIA EMAIL

Ms. Tharon Wright
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Response No.2 to Project Description Data Request No. 1 for LS Power Grid California, LLC's Power Santa Clara Valley Project (Application 24-04-017)

Dear Ms. Wright:

As requested by the California Public Utilities Commission, LS Power Grid California, LLC has collected and provided the additional information requested relating to the Draft California Environmental Quality Act, Project Description Data Request No. 1 (DR-1) for the Power Santa Clara Valley Project (Project). This letter includes the following enclosures:

- Updated DR-1 Response Table providing the additional Project information requested.
- Updated downtown alternative routing GIS information (SharePoint link: Power Santa Clara Valley Data Responses).

Please contact me at (925) 808-0291 or djoseph@lspower.com with any questions regarding this information.

Sincerely,

Dustin Joseph

Dustin Joseph
Director of Environmental Permitting

Enclosures

cc: Jacob Diermann (LS Power)
Casey Carroll (LS Power)
Lucy Marton (LS Power)
David Wilson (LS Power)
Roxanne Henriquez (CPUC)
Valisa Nez (ESA)
Michael Manka (ESA)

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) Energy Division, California Environmental Quality Act (CEQA) and Energy Permitting Unit, is currently developing a project description for the Power Santa Clara Valley Project (Project) pursuant to CEQA. As the CPUC proceeds with the environmental review for the Proposed Project, we have identified additional information that is needed to adequately conduct the CEQA analysis.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #2		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
Project Description		
1	**Existing Utility System**: Please provide further information about nearby existing substations (e.g., names of other substations) and transmission lines beyond the existing PG&E Metcalf and PG&E San Jose B Substations.	Figure 3-5 of the Proponent's Environmental Assessment (PEA) shows the existing transmission system in proximity to the Project, including substations and transmission lines. Existing substations in electrical proximity to the Project include but are not limited to, San Jose A, FMC, El Patio, Markham, Evergreen, IBM Baily, and IBM Harry Rd.
2	**Existing Transmission Lines**: Please provide details (e.g., count, location) of existing transmission and distribution lines in the Project's vicinity, even if they are not crossed by the Project's alignment. • "The Project would not directly affect any other existing transmission or distribution lines."	The following is based on publicly available data. The Metcalf to Grove transmission line would cross under numerous existing transmission lines outside of the existing Metcalf substation including approximately one 500 kV, three 230 kV, and five 115 kV transmission lines The Grove to Skyline transmission line would be located near existing transmission and lines including: - Crossing under numerous existing transmission lines outside of the existing Metcalf substation including approximately one 500 kV, three 230 kV, and five 115 kV transmission lines. - Paralleling the existing Hummingbird Battery Storage to Metcalf underground 115 kV transmission line in Monterey Road from near the Metcalf substation to just south of State Route 85 with a crossing of this underground transmission line just south of State Route 85. - Paralleling a 60 kV transmission line from approximately Capitol Expressway Street to Umbarger Road with an overhead 60 kV crossing of Monterey Road near Umbarger Road

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Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
		- Paralleling a 115 kV transmission line from approximately Umbarger Road to Phelan Avenue with overhead 115 kV crossings of Monterey Road near Umbarger Road and Phelan Avenue. Numerous existing distribution lines are in the vicinity of the Project, all owned by PG&E. Distribution lines in the vicinity of the Project are generally fed from the following PG&E substations: - San Jose B - San Jose A - Stone - Evergreen - Piercy - Edenvale LSPGC will work closely with PG&E to ensure all required clearances are met.
3	**Skyline Terminal**: Please confirm if the existing PG&E distribution lines are within the 10.6-acre lot for the proposed Skyline terminal, OR if these lines are located within the existing PG&E San Jose B Substation.	PG&E has numerous existing distribution circuits that leave the existing San Jose B substation. Four existing distribution circuits leave the San Jose B substation and cross the 10.6-acre lot for the proposed Skyline terminal in underground duct bank(s) that conflict with PG&E's planned rebuild and expansion of the existing PG&E San Jose B substation. As described in the PEA, these four distribution lines will be relocated to allow the rebuild and expansion of the existing PG&E San José B Substation.
4	**Voltages of existing transmission/distribution lines**: Please provide the voltages of existing transmission/distribution lines in the area.	The voltages of existing distribution and transmission lines in the Project area include 12 kV, 21 kV, 60 kV, 115 kV, 230 kV, and 500 kV.
5	**Oil for Transformers**: Please confirm if the Project would require a total of up to 75,000 gallons for the transformers at each site. • "The maximum amount of oil required for the transformers would be approximately 25,000 for each of the three transformers".	The three energized transformers would be filled with up to approximately 25,000 gallons each. In addition, the on-site spare would also be filled with up to approximately 25,000 gallons. Therefore, each terminal would have up to approximately 100,000 gallons for the transformers at each site.
6	**Enclosure Roofs**: Please confirm if the white finishing for enclosure roofs is designed to reflect sunlight to moderate temperatures within the enclosures. Also, would this have an anti-glare finish?	The white finish for the enclosure roofs is designed to reflect sunlight to be more environmentally friendly and moderate temperatures. This finish is commonly used for commercial buildings of all types (i.e., offices, apartments, large commercial buildings). A low gloss finish would be selected as available to avoid glare.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #2		
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	• "Equipment and enclosures at the HVDC terminal sites would be non-reflective as practicable with neutral gray or neutral earth-tone colors. Enclosure roofs would typically be white".	
7	**Other substations**: The following sentence is from the PEA's Project Description (Page 3-3) – please identify the 'other substations': • "There are currently two 115 kV lines that connect the existing PG&E Metcalf and San Jose B substations, with each 115 kV line having intermediate stops at other substations."	Based on publicly available data, one 115 kV line has intermediate stops at both the San Jose A substation and the El Patio substation with tapped connections to the IBM Harry Rd and IBM Baily substations. The other 115 kV line has an intermediate stop at the Evergreen substation with a tapped connection to the Markham, Catalyst and Stone substations.
8	**Metcalf to Grove Transmission Line**: Please provide the MW rating for the proposed Metcalf to Grove transmission line.	The proposed Metcalf to Grove 500 kV AC transmission line has a rating of 1,000 MW.
9	**Downtown San José (DSJ) Segment**: The PEA's Project Description states that the alignment of the DSJ Segment is unknown (see below). Please provide an update on this development and narrow to one or two leading alternatives for this segment. • "LSPGC continues to survey existing underground utilities and consult with the City of San José to identify and account for existing underground constraints within the Downtown San José area. Detailed utility surveys may ultimately determine that it is not feasible to route the Grove to Skyline transmission line in some streets in Downtown San José."	Since submitting the PEA, LSPGC has conducted a significantly greater amount of due diligence in the DSJ segment. This includes desktop utility work, topographical surveys, utility markout surveys, and potholing. There is still a level of uncertainty regarding the final route for the DSJ segment. However, based on the additional due diligence conducted since the PEA was submitted, LSPGC has identified an apparent fatal routing issue for a portion of the proposed alignment on Bassett Street. As such, LSPGC is currently further evaluating three primary alternatives in the DSJ area: 1. Revised Grove to Skyline 320 kV DC transmission line alignment a. The Revised Grove to Skyline 320 kV DC transmission line begins at the Interstate 280 (I-280) underpass for First Street and aligns with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment within First Street and Market Street for the first approximately 1.1 mile. The Revised Grove to Skyline 320 kV DC transmission line would then follow Devine Street west for approximately 0.1 mile and then turn north on Terraine Street for approximately 0.15 mile. Revised Grove to Skyline 320 kV DC transmission line would turn west onto Bassett Street and align with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.15 mile.

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		2. Downtown San José Alternative 1 from the PEA a. Downtown San José Alternative 1 begins at the I-280 underpass for First Street and then turns onto West Reed Street for approximately 0.3 mile before turning north on Almaden Boulevard. Downtown San José Alternative 1 continues north on Almaden Boulevard for approximately one mile, including a crossing underneath State Route (SR) 87. Downtown San José Alternative 1 would then cross Julian Street and enter the parking lot of a private property leased to the County of Santa Clara. Downtown San José Alternative 1 would travel through the private parking lot for approximately 0.2 mile before aligning with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.05 mile. 3. Modified Downtown Alternative a. The Modified Downtown Alternative begins at the I-280 underpass for First Street and aligns with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment within First Street and Market Street for the first approximately 1.0 mile. The Modified Downtown Alternative would then follow West Saint James Street, which turns into Julian Street, west for approximately 0.3 mile, and turn north and enter the parking lot of a private property leased to the County of Santa Clara. The Modified Downtown Alternative would travel through the private parking lot for approximately 0.2 mile before aligning with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.05 mile. Updated mapping (see link in cover letter) showing these alternatives has been provided as a supplement to LSPGC's Response #2.
10	**Proposed Grove Terminal**: Please confirm if the Monterey Road frontage, noted for visual screening in the PEA PD, is included in the 12.8 acres accounted for temporary disturbance at the proposed Grove terminal.	The entire Grove Terminal site is approximately 13.6 acres with the frontage accounting for approximately 0.8 acres of the site. Since the planned frontage area would retain its vegetation, this 0.8 acres was not included in the 12.8 acres of temporary disturbance.
11	**Aerial Marking and Lighting**: It is provided that, "A 100-foot-tall structure would still be below the maximum FAA authorized aboveground structure height limit for the Skyline terminal site". Please confirm if this is	The Grove terminal site is subject to less strict FAA structure height limits because it is approximately 13.5 miles from the San Jose Mineta International Airport, whereas the Skyline terminal site is approximately 1

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	the same for the Grove Terminal site.	mile from the airport. Based on the FAA Notice Criteria Tool, a 100-foot-tall structure does not exceed the Notice Criteria at the Grove terminal.
12	**Duct Bank Dimensions and Configurations**: To the extent design information is available, please provide further details on the dimensions and configurations of duct banks, especially in relation to the proposed CAISO change.	The proposed duct bank design would not change from the typical duct bank that was included as Figure 3-9 in the PEA to account for the CAISO change. As shown in, Figure 3-9, the duct banks would typically be approximately 2.5 feet wide and 2.5 feet tall with a minimum of 3 feet of cover from the ground surface to the top of duct bank.
13	**PG&E San Jose B Tie Line**: Please provide further detail regarding the tie line (e.g., 60 feet wood or steel pole, with concrete foundations, etc.). • "…anticipated to require structure up to approximately 60 feet tall".	The tie line structures are anticipated to be approximately 60-foot-tall steel H-frame (dead-end) or similar termination structure with reinforced concrete drilled shaft or pile foundations.
14	**Modifications at the PG&E San Jose B Substation**: Please confirm what 'new facilities' would entail regarding expansion of the San Jose B Substation. • "New facilities for the expansion of the San Jose B substation would range in height up to approximately 95 feet above grade."	PG&E provided the following feedback: Within the expansion area south of PG&E's existing San Jose B Substation, PG&E will construct a gas-insulated switchgear (GIS) enclosure containing 115 kV GIS in a BAAH configuration, protection and communications, and miscellaneous support equipment. In addition, to account for the CAISO change, PG&E will also install a 230/115 kV transformer and GIS enclosure containing 230 kV GIS and related equipment. Newly installed infrastructure will use a combination of high-voltage overhead conductor and underground cable to interconnect with existing electrical outdoor equipment. The installation of a ground grid is required to address step and touch potential electrical hazards. The San Jose B Substation fenceline will be expanded to encompass the expansion area. Within the existing substation area as well as within the new expansion area, transmission poles, dead-end structures, and other steel structures will be installed to support new and relocated existing lines. The layout and design of the new facilities is currently being explored in collaboration with LSPGC.
15	**Access Roads**: Please provide GIS files for access roads that would be used by the Project.	The Proposed Project would include two new access roads, which would connect the proposed Grove and Skyline terminals to existing roadways. GIS files for these access roads were submitted with the PEA. All construction and operations traffic would utilize the existing public roadway network. PEA Table 3-2,

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		Construction Staging Areas, lists the primary public roadways that would be utilized to access each staging yard.
16	**LSPGC Work at PG&E San Jose B Substation**: Please clarify if this work would occur inside or outside the boundaries of the existing San Jose B Substation (i.e., within the proposed Skyline Terminal or in the Expansion area)? • "LSPGC's scope for the Skyline to San Jose B tie line between the Skyline terminal and the existing San Jose B Substation is proposed to stop at a H- frame (dead-end) or similar termination structure located adjacent to the new San Jose B Substation GIS enclosure."	The PG&E H-frame (dead-end) or similar termination structure located adjacent to the new San Jose B Substation GIS enclosure would be located within the San Jose B substation expansion area, outside of the existing San Jose B substation fenceline.
17	**ROW Width**: Please confirm the width (e.g., average width) of new ROWs (new easement franchise agreements or otherwise).	The permanent ROW for the Grove to Skyline and Metcalf to Grove transmission lines would vary in width but would typically range in width from 3 to 5 feet. The ROW would be expanded at vault locations to encompass the entire splice vault (i.e., approximately 10 feet wide). The specific width of necessary easements, ROW, or franchise agreements along the transmission line alignments would be refined during the final engineering process.
18	**New ROW**: Please confirm if the statement below is permanent and does not include temporary work areas. • "The Project is anticipated to require a total of approximately seven acres of new ROW, easement, or franchise agreements."	Confirmed.
19	**Westbury Park, LLC**: Please confirm the nature of the negotiation with Westbury Park, LLC regarding a temporary easement (i.e., is this for transmission line installation)?	A temporary easement is required from Westbury Park, LLC for transmission line construction workspace including horizontal bore work area. A smaller permanent easement would also be required for the transmission line ROW.
20	**Skyline Terminal Access Road**: It is provided that there is a potential upgrade to a paved access road apron to "provide an adequate entrance from Ryland Street to the terminal site may be required". Please confirm this	It is believed that the road apron to the Skyline terminal site off Ryland Street would need to be upgraded to tie the new Skyline access road into the existing Ryland Street.

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	potential Project component.	
21	**Staging and Construction Work Areas**: It is provided that the Project's underground transmission lines are sited almost exclusively within existing public roadways, however, there is also language that states, "[A]ll underground transmission not installed in roads (e.g., parking lots or sidewalk) would be restored to the original condition". Please identify where these areas would be, and if available, dimensions.	Based on preliminary design information, the locations where the transmission line would not be located within existing public roadways are shown in Figure 3-4 of the PEA and include: 1) The Metcalf substation for approximately 100 feet, the Grove terminal for approximately 1,000 feet, and the Skyline terminal for approximately 600 feet; 2) The parking lot south of the Skyline terminal for approximately 130 feet; 3) Coyote Creek Parkway between the Grove terminal and Coyote Ranch Road for approximately 1,200 feet and approximately 850 feet for the realignment of Coyote Ranch Road; and 4) While exact locations are unknown, sidewalks and road medians may be affected where the proposed Project is constructed within existing roads in close proximity to these features. The permanent ROW for the Grove to Skyline and Metcalf to Grove transmission lines would vary in width but would typically range in width from 3 to 5 feet. The ROW would be expanded at vault locations to encompass the entire splice vault (i.e., approximately 10 feet wide). The specific width of necessary easements, ROW, or franchise agreements along the transmission line alignments would be refined during the final engineering process.
22	**Temporary Power**: It is provided that, "Temporary generators would be required during construction of the underground transmission lines". Please confirm specifications of these generators.	It is anticipated that 8 kW (~20 hp) diesel generators would be required during duct bank and splice vault installation work. Additionally, 25 kW (~45 hp) diesel generators would be required during cable installation work.
23	**Work at Coyote Ranch Road and Coyote Creek Trail**: Please provide details, including dimensions, on staging and work activities anticipated along Coyote Ranch Road and Coyote Creek Trail. • Also, it is noted that the Coyote Creek Trail alignment would result in a disturbance area of approximately 0.65 acre, while Table 3-3 Work Area Disturbance Summary notes a disturbance of approximately 1.1 acres. Does this mean that the disturbance along	The staging and work areas are shown as Construction Staging Area and Limits of Construction in Figure 3-4. Staging Area No. 2 is located adjacent to Coyote Ranch Road and is approximately 7.8 acres in size. Staging Area No. 3 is also located adjacent to Coyote Ranch Road and is approximately 9.3 acres in size. The total permanent disturbance area for the Coyote Creek Trail and Coyote Ranch Road re-alignments would be approximately 1.1 acres (conservatively rounded up). The Coyote Creek Trail realignment is approximately 12 feet wide and would result in a permanent disturbance area of approximately 0.65 acre

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	Coyote Ranch Road would be the different between these two values (i.e., 0.45 acre)?	while the Coyote Ranch Road realignment would be approximately 20 feet wide and would result in approximately 0.36-acre permanent disturbance area. Temporary work areas surrounding Coyote Ranch Road and Coyote Creek Trail would differ in size, shape, and width, but would total approximately 13.1 acres. This temporary construction work area would encompass the permanent road and trail realignment area and would extend from the Metcalf Substation to the HDD work area on the north side of Coyote Creek (refer to PEA Figure 3-4). This work area would be used for transmission line construction as well as construction of the road and trail realignment with most work occurring within the permanent disturbance area.
24	**Work Disturbance Acreage for Pulling and Splicing**: Table 3-3, footnote 3 notes that the transmission line acreage includes temporary acreage for splice vaults, HDD pits, and jack-and-bore pits. Does this include pulling and splicing work areas acreage? If not, please provide details and locations.	Transmission line work area/ disturbance acreage also includes all anticipated pulling and splicing work areas. The transmission line temporary construction work area polygons are intended to encompass all required construction activities.
25	**Vegetation Clearing at Grove Terminal**: It is provided that the Grove terminal site would require clearing of approximately 13.6 acres of orchard trees. In considering the presence of dense grasslands at this site, please verify the total acreage of vegetation clearing that is anticipated for the Grove terminal sites, as well as all other Project locations.	The Grove terminal site would require the clearing of approximately 12.8 acres of orchard trees and surrounding vegetation. Approximately 0.8 acre of existing orchard trees along the Monterey Road frontage of the Grove terminal site would be preserved as screening in place of new landscaping. Vegetation removal would also be required for the Metcalf to Grove transmission line. This includes approximately 1.1 acres associated with the permanent impacts from the Coyote Creek Trail and Coyote Ranch Road re-alignments. Additional vegetation clearing would be needed within a portion of the temporary work area for the Coyote Creek Trail and Coyote Ranch Road re-alignments. Finally, vegetation clearing would be required within part of the identified work area for the Metcalf to Grove transmission line between the Grove terminal and Coyote Ranch Road which is approximately 1.7 acres.
26	**Tree Trimming and Removal**: It is provided that 'minimal tree clearing and trimming' would be required for the Project, particularly near Coyote Ranch Road and Coyote Creek Trail. Please quantify these amounts to the best extent possible. Also, please provide information on coordination efforts with landowners on tree clearing and trimming.	LSPGC has met with the Santa Clara County Parks Department multiple times to discuss the Project alignment and related tree trimming in Coyote Creek Parkway, including near Coyote Ranch Road and Coyote Creek Trail. Approximately 30 trees would need to be trimmed or removed based on the final location and width of the new Coyote Creek Road and Trail alignment and to support the HDD and duct bank installation work.

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		Beyond Coyote Creek Parkway, minimal tree clearing and trimming near would be required to allow sufficient work area to construct the transmission lines within existing roads. This included trees in the median and along the shoulder that overhang the road and would prevent the necessary equipment from operating as required. The final route details will dictate tree clearing requirements near roads so exact trees and quantities have not been identified yet.
27	**Grading, Excavation, and Material Removal**: Grading, excavation, and material removal quantities anticipated for the Project based on current information are summarized in PEA Table 3-4, however, does not account for grading, excavation, and material removal at the staging areas. To the extent that information is possible, please update the table or provide values for grading, excavation, and material removal anticipated for the 12 staging areas.	Almost all identified potential staging areas are existing pre-disturbed sites, many of which have historically been used for staging material on other projects. Therefore, these proposed staging areas are anticipated to require a negligible amount of grading, excavation, and material removal. The remaining proposed staging areas that are not pre-disturbed sited, are generally flat and are anticipated to require a negligible amount of grading, excavation, and material removal.
28	**Poles and Towers**: There is an inconsistency between the number of wooden poles associated with a radial distribution line at the Grove terminal site. Please confirm if there are three or four wooden poles.	There are currently four distribution poles on the Grove terminal site. Three would be removed and one is anticipated to be left in place to support providing station service power to the Grove terminal.
29	**Duct Bank Segments**: To the extent that information is possible, please provide the typical length of duct bank installations at any one time (e.g., are 100-foot segments installed at once, or 500 feet?)	The duct bank would generally move in a linear fashion, with multiple installation crews working simultaneously along the route in different locations. The duct bank installation would progress such that only a maximum of approximately 1,000 feet of trench at a single work site would be left open at any one time or as allowed by permit requirements. Each crew would be spaced out along this work area conducting different tasks (i.e. excavation, conduit installation, and backfilling) concurrently in a linear fashion. Duct bank installation daily production rates would vary significantly as it is highly dependent on site specifics including but not limited to duct bank depth, soil types encountered, utility crossings, and traffic constraints.
30	**Temporary Work Area Estimates**: It is provided that trenching operations would progress such that only a maximum of approximately 1,000 feet of trench at single work site would be left open at any one time. Please confirm if temporary work area estimates are consistent with the statement.	Confirmed. Temporary work areas identified within the PEA would encompass all anticipated construction activities, including open trenches for underground transmission line construction.

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31	**Dewatering and Hazardous Waste Management**: It is provided that the typical temporary workspace around sending and receiving pits at the HDD site would be approximately 200 feet by 100 feet, which equates to 2,000 square feet of workspace (4,000 square feet for both ends). Please confirm if this is sufficient space for dewatering and waste management activities, and temporary work and staging activities in general.	The typical temporary work areas around the sending and receiving pits at the HDD site would be approximately 200 feet by 100 feet, which equates to approximately 20,000 square feet of workspace (40,000 square feet for both ends). The dimensions for each temporary workspace dimensions may significantly vary to accommodate the site-specific constraints at each setup location. The approximate 40,000 square feet of work area would be sufficient for HDD equipment staging, dewatering, and waste management activities. Pull back area for pipe staging and fusion is not included in this work area and typically begins at the receiving pit and is longer than the HDD's entire length.
32	**Anticipated Construction Equipment and Workforce Table**: Please provide the number of crews needed for under material delivery of terminals.	Two crews are anticipated for material delivery.
33	**PG&E Construction Sequence**: To the extent that information is available, please provide details on PG&E's proposed construction sequences (i.e., 'means and methods').	PG&E provided the following feedback: San Jose B Substation Expansion: The construction sequence for PG&E's San Jose B Substation involves the initial rough grading in the expansion area. A new fence will be installed to incorporate the additional area. All disturbed soils will be handled per the developed plan for waste generation and management, and the construction crew will abide by permitting, cultural, and environmental requirements. Rough grading will be followed by the installation of concrete support foundations. In parallel, ground grid conductors, conduit for high-voltage cables, and low-voltage control wiring will be installed below grade. Electrical enclosures, transformers, and steel structures will be installed and anchored to their appropriate foundation. Specific to electrical enclosures, equipment will be assembled, installed, and anchored inside each of the equipment enclosures. Namely, high-voltage GIS, protection relays, communication equipment, fiber optic, and control cable will be installed. Specific to transformers and the installation of insulating oil, spill prevention plans will be maintained. Finally, all control cables will be pulled to interconnect the new and existing equipment. Upon the installation of all equipment, PG&E will conduct a series of electrical tests on all newly installed equipment before energization. Metcalf Substation Construction: Plans are not yet available for this work.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #2		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
34	**Vegetation Management Program**: Would vegetation management only occur at the terminal sites? Please confirm locations where the vegetation management program would apply. • It is provided that emergency vegetation treatment would be conducted when any vegetation encroaches within the *10-foot line clearance*. Please clarify what this refers to.	Routine vegetation management is not anticipated to be required for the underground transmission lines with the transmission line predominately located within city streets. If tree roots, water intrusion, and other natural occurring environmental encroachments are impacting the underground transmission line, the encroaching vegetation would be removed to ensure the integrity of the transmission line. The 10-foot line clearance would only apply to overhead lines. With the only overhead transmission line being the Skyline to San Jose B transmission line, no vegetation should ever be near this line given the transmission line's location within the Skyline terminal site. Vegetation management would primarily occur at the terminal sites to ensure that required vegetation clearances are met.

Attachment C

LSPGC Response 3 to Data Request 1

January 13, 2025

VIA EMAIL

Ms. Tharon Wright
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Response No. 3 to Project Description Data Request No. 1 for LS Power Grid California, LLC's Power Santa Clara Valley Project (Application 24-04-017)

Dear Ms. Wright:

As requested by the California Public Utilities Commission, LS Power Grid California, LLC has collected and provided the additional information requested relating to the Draft California Environmental Quality Act, Project Description Data Request No. 1 (DR-1) for the Power Santa Clara Valley Project (Project). This letter includes the following enclosure:

- Updated DR-1 Response Table providing the additional Project information requested (see response 33).

Please contact me at (925) 808-0291 or djoseph@lspower.com with any questions regarding this information.

Sincerely,

Dustin Joseph

Dustin Joseph
Director of Environmental Permitting

Enclosure

cc: Jacob Diermann (LS Power)
Casey Carroll (LS Power)
Lucy Marton (LS Power)
David Wilson (LS Power)
Michelle Wilson (CPUC)
Valisa Nez (ESA)
Michael Manka (ESA)

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) Energy Division, California Environmental Quality Act (CEQA) and Energy Permitting Unit, is currently developing a project description for the Power Santa Clara Valley Project (Project) pursuant to CEQA. As the CPUC proceeds with the environmental review for the Proposed Project, we have identified additional information that is needed to adequately conduct the CEQA analysis.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #3		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
Project Description		
1	**Existing Utility System**: Please provide further information about nearby existing substations (e.g., names of other substations) and transmission lines beyond the existing PG&E Metcalf and PG&E San Jose B Substations.	Figure 3-5 of the Proponent's Environmental Assessment (PEA) shows the existing transmission system in proximity to the Project, including substations and transmission lines. Existing substations in electrical proximity to the Project include but are not limited to, San Jose A, FMC, El Patio, Markham, Evergreen, IBM Baily, and IBM Harry Rd.
2	**Existing Transmission Lines**: Please provide details (e.g., count, location) of existing transmission and distribution lines in the Project's vicinity, even if they are not crossed by the Project's alignment. • "The Project would not directly affect any other existing transmission or distribution lines."	The following is based on publicly available data. The Metcalf to Grove transmission line would cross under numerous existing transmission lines outside of the existing Metcalf substation including approximately one 500 kV, three 230 kV, and five 115 kV transmission lines The Grove to Skyline transmission line would be located near existing transmission and lines including: - Crossing under numerous existing transmission lines outside of the existing Metcalf substation including approximately one 500 kV, three 230 kV, and five 115 kV transmission lines. - Paralleling the existing Hummingbird Battery Storage to Metcalf underground 115 kV transmission line in Monterey Road from near the Metcalf substation to just south of State Route 85 with a crossing of this underground transmission line just south of State Route 85. - Paralleling a 60 kV transmission line from approximately Capitol Expressway Street to Umbarger Road with an overhead 60 kV crossing of Monterey Road near Umbarger Road

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #3		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
		- Paralleling a 115 kV transmission line from approximately Umbarger Road to Phelan Avenue with overhead 115 kV crossings of Monterey Road near Umbarger Road and Phelan Avenue. Numerous existing distribution lines are in the vicinity of the Project, all owned by PG&E. Distribution lines in the vicinity of the Project are generally fed from the following PG&E substations: - San Jose B - San Jose A - Stone - Evergreen - Piercy - Edenvale LSPGC will work closely with PG&E to ensure all required clearances are met.
3	**Skyline Terminal**: Please confirm if the existing PG&E distribution lines are within the 10.6-acre lot for the proposed Skyline terminal, OR if these lines are located within the existing PG&E San Jose B Substation.	PG&E has numerous existing distribution circuits that leave the existing San Jose B substation. Four existing distribution circuits leave the San Jose B substation and cross the 10.6-acre lot for the proposed Skyline terminal in underground duct bank(s) that conflict with PG&E's planned rebuild and expansion of the existing PG&E San Jose B substation. As described in the PEA, these four distribution lines will be relocated to allow the rebuild and expansion of the existing PG&E San José B Substation.
4	**Voltages of existing transmission/distribution lines**: Please provide the voltages of existing transmission/distribution lines in the area.	The voltages of existing distribution and transmission lines in the Project area include 12 kV, 21 kV, 60 kV, 115 kV, 230 kV, and 500 kV.
5	**Oil for Transformers**: Please confirm if the Project would require a total of up to 75,000 gallons for the transformers at each site. • "The maximum amount of oil required for the transformers would be approximately 25,000 for each of the three transformers".	The three energized transformers would be filled with up to approximately 25,000 gallons each. In addition, the on-site spare would also be filled with up to approximately 25,000 gallons. Therefore, each terminal would have up to approximately 100,000 gallons for the transformers at each site.
6	**Enclosure Roofs**: Please confirm if the white finishing for enclosure roofs is designed to reflect sunlight to moderate temperatures within the enclosures. Also, would this have an anti-glare finish?	The white finish for the enclosure roofs is designed to reflect sunlight to be more environmentally friendly and moderate temperatures. This finish is commonly used for commercial buildings of all types (i.e., offices, apartments, large commercial buildings). A low gloss finish would be selected as available to avoid glare.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #3		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
	• "Equipment and enclosures at the HVDC terminal sites would be non-reflective as practicable with neutral gray or neutral earth-tone colors. Enclosure roofs would typically be white".	
7	**Other substations**: The following sentence is from the PEA's Project Description (Page 3-3) – please identify the 'other substations': • "There are currently two 115 kV lines that connect the existing PG&E Metcalf and San Jose B substations, with each 115 kV line having intermediate stops at other substations."	Based on publicly available data, one 115 kV line has intermediate stops at both the San Jose A substation and the El Patio substation with tapped connections to the IBM Harry Rd and IBM Baily substations. The other 115 kV line has an intermediate stop at the Evergreen substation with a tapped connection to the Markham, Catalyst and Stone substations.
8	**Metcalf to Grove Transmission Line**: Please provide the MW rating for the proposed Metcalf to Grove transmission line.	The proposed Metcalf to Grove 500 kV AC transmission line has a rating of 1,000 MW.
9	**Downtown San José (DSJ) Segment**: The PEA's Project Description states that the alignment of the DSJ Segment is unknown (see below). Please provide an update on this development and narrow to one or two leading alternatives for this segment. • "LSPGC continues to survey existing underground utilities and consult with the City of San José to identify and account for existing underground constraints within the Downtown San José area. Detailed utility surveys may ultimately determine that it is not feasible to route the Grove to Skyline transmission line in some streets in Downtown San José."	Since submitting the PEA, LSPGC has conducted a significantly greater amount of due diligence in the DSJ segment. This includes desktop utility work, topographical surveys, utility markout surveys, and potholing. There is still a level of uncertainty regarding the final route for the DSJ segment. However, based on the additional due diligence conducted since the PEA was submitted, LSPGC has identified an apparent fatal routing issue for a portion of the proposed alignment on Bassett Street. As such, LSPGC is currently further evaluating three primary alternatives in the DSJ area: 1. Revised Grove to Skyline 320 kV DC transmission line alignment a. The Revised Grove to Skyline 320 kV DC transmission line begins at the Interstate 280 (I-280) underpass for First Street and aligns with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment within First Street and Market Street for the first approximately 1.1 mile. The Revised Grove to Skyline 320 kV DC transmission line would then follow Devine Street west for approximately 0.1 mile and then turn north on Terraine Street for approximately 0.15 mile. Revised Grove to Skyline 320 kV DC transmission line would turn west onto Bassett Street and align with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.15 mile.

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		2. Downtown San José Alternative 1 from the PEA a. Downtown San José Alternative 1 begins at the I-280 underpass for First Street and then turns onto West Reed Street for approximately 0.3 mile before turning north on Almaden Boulevard. Downtown San José Alternative 1 continues north on Almaden Boulevard for approximately one mile, including a crossing underneath State Route (SR) 87. Downtown San José Alternative 1 would then cross Julian Street and enter the parking lot of a private property leased to the County of Santa Clara. Downtown San José Alternative 1 would travel through the private parking lot for approximately 0.2 mile before aligning with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.05 mile. 3. Modified Downtown Alternative a. The Modified Downtown Alternative begins at the I-280 underpass for First Street and aligns with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment within First Street and Market Street for the first approximately 1.0 mile. The Modified Downtown Alternative would then follow West Saint James Street, which turns into Julian Street, west for approximately 0.3 mile, and turn north and enter the parking lot of a private property leased to the County of Santa Clara. The Modified Downtown Alternative would travel through the private parking lot for approximately 0.2 mile before aligning with the Proposed Project's Grove to Skyline 320 kV DC transmission line alignment for the last approximately 0.05 mile. Updated mapping (see link in cover letter) showing these alternatives has been provided as a supplement to LSPGC's Response #2.
10	**Proposed Grove Terminal**: Please confirm if the Monterey Road frontage, noted for visual screening in the PEA PD, is included in the 12.8 acres accounted for temporary disturbance at the proposed Grove terminal.	The entire Grove Terminal site is approximately 13.6 acres with the frontage accounting for approximately 0.8 acres of the site. Since the planned frontage area would retain its vegetation, this 0.8 acres was not included in the 12.8 acres of temporary disturbance.
11	**Aerial Marking and Lighting**: It is provided that, "A 100-foot-tall structure would still be below the maximum FAA authorized aboveground structure height limit for the Skyline terminal site". Please confirm if this is	The Grove terminal site is subject to less strict FAA structure height limits because it is approximately 13.5 miles from the San Jose Mineta International Airport, whereas the Skyline terminal site is approximately 1

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	the same for the Grove Terminal site.	mile from the airport. Based on the FAA Notice Criteria Tool, a 100-foot-tall structure does not exceed the Notice Criteria at the Grove terminal.
12	**Duct Bank Dimensions and Configurations**: To the extent design information is available, please provide further details on the dimensions and configurations of duct banks, especially in relation to the proposed CAISO change.	The proposed duct bank design would not change from the typical duct bank that was included as Figure 3-9 in the PEA to account for the CAISO change. As shown in, Figure 3-9, the duct banks would typically be approximately 2.5 feet wide and 2.5 feet tall with a minimum of 3 feet of cover from the ground surface to the top of duct bank.
13	**PG&E San Jose B Tie Line**: Please provide further detail regarding the tie line (e.g., 60 feet wood or steel pole, with concrete foundations, etc.). • "…anticipated to require structure up to approximately 60 feet tall".	The tie line structures are anticipated to be approximately 60-foot-tall steel H-frame (dead-end) or similar termination structure with reinforced concrete drilled shaft or pile foundations.
14	**Modifications at the PG&E San Jose B Substation**: Please confirm what 'new facilities' would entail regarding expansion of the San Jose B Substation. • "New facilities for the expansion of the San Jose B substation would range in height up to approximately 95 feet above grade."	PG&E provided the following feedback: Within the expansion area south of PG&E's existing San Jose B Substation, PG&E will construct a gas-insulated switchgear (GIS) enclosure containing 115 kV GIS in a BAAH configuration, protection and communications, and miscellaneous support equipment. In addition, to account for the CAISO Project modification, PG&E will also install a 230/115 kV transformer and GIS enclosure containing 230 kV GIS and related equipment. Newly installed infrastructure will use a combination of high-voltage overhead conductor and underground cable to interconnect with existing electrical outdoor equipment. The installation of a ground grid is required to address step and touch potential electrical hazards. The San Jose B Substation fenceline will be expanded to encompass the proposed expansion area. Within the existing substation area as well as within the new expansion area, transmission poles, dead-end structures, and other steel structures will be installed to support new and relocated existing lines. The layout and design of the new facilities is currently being explored in collaboration with LSPGC.
15	**Access Roads**: Please provide GIS files for access roads that would be used by the Project.	The Proposed Project would include two new access roads, which would connect the proposed Grove and Skyline terminals to existing roadways. GIS files for these access roads were submitted with the PEA. All construction and operations traffic would utilize the existing public roadway network. PEA Table 3-2,

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		Construction Staging Areas, lists the primary public roadways that would be utilized to access each staging yard.
16	**LSPGC Work at PG&E San Jose B Substation**: Please clarify if this work would occur inside or outside the boundaries of the existing San Jose B Substation (i.e., within the proposed Skyline Terminal or in the Expansion area)? • "LSPGC's scope for the Skyline to San Jose B tie line between the Skyline terminal and the existing San Jose B Substation is proposed to stop at a H- frame (dead-end) or similar termination structure located adjacent to the new San Jose B Substation GIS enclosure."	The PG&E H-frame (dead-end) or similar termination structure located adjacent to the new San Jose B Substation GIS enclosure would be located within the San Jose B substation expansion area, outside of the existing San Jose B substation fenceline.
17	**ROW Width**: Please confirm the width (e.g., average width) of new ROWs (new easement franchise agreements or otherwise).	The permanent ROW for the Grove to Skyline and Metcalf to Grove transmission lines would vary in width but would typically range in width from 3 to 5 feet. The ROW would be expanded at vault locations to encompass the entire splice vault (i.e., approximately 10 feet wide). The specific width of necessary easements, ROW, or franchise agreements along the transmission line alignments would be refined during the final engineering process.
18	**New ROW**: Please confirm if the statement below is permanent and does not include temporary work areas. • "The Project is anticipated to require a total of approximately seven acres of new ROW, easement, or franchise agreements."	Confirmed.
19	**Westbury Park, LLC**: Please confirm the nature of the negotiation with Westbury Park, LLC regarding a temporary easement (i.e., is this for transmission line installation)?	A temporary easement is required from Westbury Park, LLC for transmission line construction workspace including horizontal bore work area. A smaller permanent easement would also be required for the transmission line ROW.
20	**Skyline Terminal Access Road**: It is provided that there is a potential upgrade to a paved access road apron to "provide an adequate entrance from Ryland Street to the terminal site may be required". Please confirm this	It is believed that the road apron to the Skyline terminal site off Ryland Street would need to be upgraded to tie the new Skyline access road into the existing Ryland Street.

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	potential Project component.	
21	**Staging and Construction Work Areas**: It is provided that the Project's underground transmission lines are sited almost exclusively within existing public roadways, however, there is also language that states, "[A]ll underground transmission not installed in roads (e.g., parking lots or sidewalk) would be restored to the original condition". Please identify where these areas would be, and if available, dimensions.	Based on preliminary design information, the locations where the transmission line would not be located within existing public roadways are shown in Figure 3-4 of the PEA and include: 1) The Metcalf substation for approximately 100 feet, the Grove terminal for approximately 1,000 feet, and the Skyline terminal for approximately 600 feet; 2) The parking lot south of the Skyline terminal for approximately 130 feet; 3) Coyote Creek Parkway between the Grove terminal and Coyote Ranch Road for approximately 1,200 feet and approximately 850 feet for the realignment of Coyote Ranch Road; and 4) While exact locations are unknown, sidewalks and road medians may be affected where the proposed Project is constructed within existing roads in close proximity to these features. The permanent ROW for the Grove to Skyline and Metcalf to Grove transmission lines would vary in width but would typically range in width from 3 to 5 feet. The ROW would be expanded at vault locations to encompass the entire splice vault (i.e., approximately 10 feet wide). The specific width of necessary easements, ROW, or franchise agreements along the transmission line alignments would be refined during the final engineering process.
22	**Temporary Power**: It is provided that, "Temporary generators would be required during construction of the underground transmission lines". Please confirm specifications of these generators.	It is anticipated that 8 kW (~20 hp) diesel generators would be required during duct bank and splice vault installation work. Additionally, 25 kW (~45 hp) diesel generators would be required during cable installation work.
23	**Work at Coyote Ranch Road and Coyote Creek Trail**: Please provide details, including dimensions, on staging and work activities anticipated along Coyote Ranch Road and Coyote Creek Trail. • Also, it is noted that the Coyote Creek Trail alignment would result in a disturbance area of approximately 0.65 acre, while Table 3-3 Work Area Disturbance Summary notes a disturbance of approximately 1.1 acres. Does this mean that the disturbance along	The staging and work areas are shown as Construction Staging Area and Limits of Construction in Figure 3-4. Staging Area No. 2 is located adjacent to Coyote Ranch Road and is approximately 7.8 acres in size. Staging Area No. 3 is also located adjacent to Coyote Ranch Road and is approximately 9.3 acres in size. The total permanent disturbance area for the Coyote Creek Trail and Coyote Ranch Road re-alignments would be approximately 1.1 acres (conservatively rounded up). The Coyote Creek Trail realignment is approximately 12 feet wide and would result in a permanent disturbance area of approximately 0.65 acre

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	Coyote Ranch Road would be the different between these two values (i.e., 0.45 acre)?	while the Coyote Ranch Road realignment would be approximately 20 feet wide and would result in approximately 0.36-acre permanent disturbance area. Temporary work areas surrounding Coyote Ranch Road and Coyote Creek Trail would differ in size, shape, and width, but would total approximately 13.1 acres. This temporary construction work area would encompass the permanent road and trail realignment area and would extend from the Metcalf Substation to the HDD work area on the north side of Coyote Creek (refer to PEA Figure 3-4). This work area would be used for transmission line construction as well as construction of the road and trail realignment with most work occurring within the permanent disturbance area.
24	**Work Disturbance Acreage for Pulling and Splicing**: Table 3-3, footnote 3 notes that the transmission line acreage includes temporary acreage for splice vaults, HDD pits, and jack-and-bore pits. Does this include pulling and splicing work areas acreage? If not, please provide details and locations.	Transmission line work area/ disturbance acreage also includes all anticipated pulling and splicing work areas. The transmission line temporary construction work area polygons are intended to encompass all required construction activities.
25	**Vegetation Clearing at Grove Terminal**: It is provided that the Grove terminal site would require clearing of approximately 13.6 acres of orchard trees. In considering the presence of dense grasslands at this site, please verify the total acreage of vegetation clearing that is anticipated for the Grove terminal sites, as well as all other Project locations.	The Grove terminal site would require the clearing of approximately 12.8 acres of orchard trees and surrounding vegetation. Approximately 0.8 acre of existing orchard trees along the Monterey Road frontage of the Grove terminal site would be preserved as screening in place of new landscaping. Vegetation removal would also be required for the Metcalf to Grove transmission line. This includes approximately 1.1 acres associated with the permanent impacts from the Coyote Creek Trail and Coyote Ranch Road re-alignments. Additional vegetation clearing would be needed within a portion of the temporary work area for the Coyote Creek Trail and Coyote Ranch Road re-alignments. Finally, vegetation clearing would be required within part of the identified work area for the Metcalf to Grove transmission line between the Grove terminal and Coyote Ranch Road which is approximately 1.7 acres.
26	**Tree Trimming and Removal**: It is provided that 'minimal tree clearing and trimming' would be required for the Project, particularly near Coyote Ranch Road and Coyote Creek Trail. Please quantify these amounts to the best extent possible. Also, please provide information on coordination efforts with landowners on tree clearing and trimming.	LSPGC has met with the Santa Clara County Parks Department multiple times to discuss the Project alignment and related tree trimming in Coyote Creek Parkway, including near Coyote Ranch Road and Coyote Creek Trail. Approximately 30 trees would need to be trimmed or removed based on the final location and width of the new Coyote Creek Road and Trail alignment and to support the HDD and duct bank installation work.

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		Beyond Coyote Creek Parkway, minimal tree clearing and trimming near would be required to allow sufficient work area to construct the transmission lines within existing roads. This included trees in the median and along the shoulder that overhang the road and would prevent the necessary equipment from operating as required. The final route details will dictate tree clearing requirements near roads so exact trees and quantities have not been identified yet.
27	**Grading, Excavation, and Material Removal**: Grading, excavation, and material removal quantities anticipated for the Project based on current information are summarized in PEA Table 3-4, however, does not account for grading, excavation, and material removal at the staging areas. To the extent that information is possible, please update the table or provide values for grading, excavation, and material removal anticipated for the 12 staging areas.	Almost all identified potential staging areas are existing pre-disturbed sites, many of which have historically been used for staging material on other projects. Therefore, these proposed staging areas are anticipated to require a negligible amount of grading, excavation, and material removal. The remaining proposed staging areas that are not pre-disturbed sited, are generally flat and are anticipated to require a negligible amount of grading, excavation, and material removal.
28	**Poles and Towers**: There is an inconsistency between the number of wooden poles associated with a radial distribution line at the Grove terminal site. Please confirm if there are three or four wooden poles.	There are currently four distribution poles on the Grove terminal site. Three would be removed and one is anticipated to be left in place to support providing station service power to the Grove terminal.
29	**Duct Bank Segments**: To the extent that information is possible, please provide the typical length of duct bank installations at any one time (e.g., are 100-foot segments installed at once, or 500 feet?)	The duct bank would generally move in a linear fashion, with multiple installation crews working simultaneously along the route in different locations. The duct bank installation would progress such that only a maximum of approximately 1,000 feet of trench at a single work site would be left open at any one time or as allowed by permit requirements. Each crew would be spaced out along this work area conducting different tasks (i.e. excavation, conduit installation, and backfilling) concurrently in a linear fashion. Duct bank installation daily production rates would vary significantly as it is highly dependent on site specifics including but not limited to duct bank depth, soil types encountered, utility crossings, and traffic constraints.
30	**Temporary Work Area Estimates**: It is provided that trenching operations would progress such that only a maximum of approximately 1,000 feet of trench at single work site would be left open at any one time. Please confirm if temporary work area estimates are consistent with the statement.	Confirmed. Temporary work areas identified within the PEA would encompass all anticipated construction activities, including open trenches for underground transmission line construction.

LSPGC – Power Santa Clara Valley Project (A. 24-04-017) Project Description DR-1 Response #3		
Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
31	**Dewatering and Hazardous Waste Management**: It is provided that the typical temporary workspace around sending and receiving pits at the HDD site would be approximately 200 feet by 100 feet, which equates to 2,000 square feet of workspace (4,000 square feet for both ends). Please confirm if this is sufficient space for dewatering and waste management activities, and temporary work and staging activities in general.	The typical temporary work areas around the sending and receiving pits at the HDD site would be approximately 200 feet by 100 feet, which equates to approximately 20,000 square feet of workspace (40,000 square feet for both ends). The dimensions for each temporary workspace dimensions may significantly vary to accommodate the site-specific constraints at each setup location. The approximate 40,000 square feet of work area would be sufficient for HDD equipment staging, dewatering, and waste management activities. Pull back area for pipe staging and fusion is not included in this work area and typically begins at the receiving pit and is longer than the HDD's entire length.
32	**Anticipated Construction Equipment and Workforce Table**: Please provide the number of crews needed for under material delivery of terminals.	Two crews are anticipated for material delivery.
33	**PG&E Construction Sequence**: To the extent that information is available, please provide details on PG&E's proposed construction sequences (i.e., 'means and methods').	PG&E provided the following feedback: San Jose B Substation Expansion: The construction sequence for PG&E's San Jose B Substation involves the initial rough grading in the expansion area. A new fence will be installed to incorporate the additional area. All disturbed soils will be handled per the developed plan for waste generation and management (including the Soil Management Plan), and the construction crew will abide by permitting, cultural, and environmental requirements. Rough grading will be followed by the installation of concrete support foundations. In parallel, ground grid conductors, conduit for high-voltage cables, and low-voltage control wiring will be installed below grade. Electrical enclosures, transformers, and steel structures will be installed and anchored to their appropriate foundation. Specific to electrical enclosures, equipment will be assembled, installed, and anchored inside each of the equipment enclosures. Namely, high-voltage GIS, protection relays, communication equipment, fiber optic, and control cable will be installed. Specific to transformers and the installation of insulating oil, spill prevention plans will be maintained. Finally, all control cables will be pulled to interconnect the new and existing equipment. Upon the installation of all equipment, PG&E will conduct a series of electrical tests on all newly installed equipment before energization. Metcalf Substation Construction:

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Deficiency No.	**DATA REQUEST**	**LSPGC RESPONSE**
		Based on the current scope of work, the construction sequence for PG&E's Metcalf Substation involves the effort to expand the substation perimeter fence to allow for the installation of an additional 500 kV breaker-and-a-half bay. The sequence will start with the installation of a security wall north of the existing yard. Once the substation is physically secure with the new wall, the northern wall will be removed. The substation expansion area then will be graded to project needs. In parallel, underground ground grid conductors and conduit will be installed. All disturbed soils will be handled per developed plan for waste generation and management, and the construction crew will abide by permitting, cultural, and environmental requirements. Equipment support concrete foundations will be installed followed by the equipment support steel mounting. Electrical equipment then will be mounted on support structures. Namely, extra high voltage circuit breakers, disconnect switches, potential transformers, and overhead conductor will be installed. Other work involves the installation of indoor control equipment that includes equipment protection relays, meters, control equipment, and communication devices. Finally, all control cables will be pulled to interconnect the new and existing equipment. Upon the installation of all equipment, PG&E will conduct a series of electrical tests on all newly installed equipment before energization.
34	**Vegetation Management Program**: Would vegetation management only occur at the terminal sites? Please confirm locations where the vegetation management program would apply. • It is provided that emergency vegetation treatment would be conducted when any vegetation encroaches within the *10-foot line clearance*. Please clarify what this refers to.	Routine vegetation management is not anticipated to be required for the underground transmission lines with the transmission line predominately located within city streets. If tree roots, water intrusion, and other natural occurring environmental encroachments are impacting the underground transmission line, the encroaching vegetation would be removed to ensure the integrity of the transmission line. The 10-foot line clearance would only apply to overhead lines. With the only overhead transmission line being the Skyline to San Jose B transmission line, no vegetation should ever be near this line given the transmission line's location within the Skyline terminal site. Vegetation management would primarily occur at the terminal sites to ensure that required vegetation clearances are met.

Attachment D

LSPGC Response 1 to Data Request 2

February 11, 2025

VIA EMAIL

Ms. Tharon Wright
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Response to Project Description Data Request No. 2 for LS Power Grid California, LLC's Power Santa Clara Valley Project (Application 24-04-017)

Dear Ms. Wright:

As requested by the California Public Utilities Commission, LS Power Grid California, LLC (LSPGC)has collected and provided the additional information requested relating to Data Request No. 2 (DR-2) for the Power Santa Clara Valley Project (Project).

DR-2 Question 1: Please provide site plans showing grading and drainage at the proposed Skyline and Grove terminal sites.

Response 1: The detailed site plans showing grading and drainage at the proposed Skyline and Grove terminal sites are still being developed, however, the grading and drainage design for the new high voltage direct current (HVDC) terminals would ensure proper water management, stability, and compliance with standard substation engineering practices. Generally, substations yards have a finished surface slope of around 1% to facilitate drainage. Equipment pads and critical infrastructure areas typically have a minimum 0.5% slope to prevent water accumulation. Additionally, gravel surfacing would be placed throughout the terminal to aid in infiltration and minimize erosion. The stormwater drainage and conveyance system may include a combination of surface drainage, swales, and/or underground piping to efficiently direct stormwater towards the stormwater detention system while minimizing erosion and standing water risks.

The existing Grove terminal site generally slopes gently to the southwest, towards Monterey Road, at a 0.5% to 1% grade. To minimize site grading, LSPGC anticipates installing the stormwater detention system on the southwest side of the Grove terminal site to capture stormwater runoff associated with the newly created impervious surfaces within the proposed Grove terminal. Overall, minimal grading is anticipated for the Grove terminal site.

The existing Skyline terminal site generally slopes gently to the east, towards State Route 87, at approximately 0.5% to 1% grade. To minimize site grading, LSPGC anticipates installing the stormwater detention system on the east side of the Skyline terminal to capture and treat stormwater runoff associated with the newly created impervious surfaces within the proposed Skyline terminal in accordance with local stormwater discharge requirements. Given the urban nature of the Skyline terminal site, LSPGC may also discharge stormwater from the Skyline terminal site into the City of San Jose's existing stormwater system within Santa Theresa Street, adjacent to the Skyline terminal site. Overall, minimal grading is anticipated for the Skyline terminal.

The proposed grading and drainage plan for the new HVDC terminals would ensure efficient stormwater management by maintaining natural drainage patterns while incorporating engineered conveyance features to

direct water to the stormwater detention systems. These measures would help protect substation infrastructure, maintain site stability, and ensure long-term operational reliability.

For the PG&E San Jose B expansion area on the Skyline terminal site, PG&E plans to grade the expansion area to a similar elevation as the existing substation and install a retaining wall as necessary between the San Jose B expansion area and LSPGC's Skyline terminal. PG&E has an existing stormwater system for the existing San Jose B substation. If the existing stormwater system is not adequate for the expansion area, additional stormwater management measures may be required to address runoff from new or redeveloped impervious areas.

DR-2 Question 2: The PEA's Project Description states that the proposed Skyline terminal has a Covenant, identifying that "subsurface soils on the subject property have been impacted by metals, petroleum hydrocarbons, and semi-volatile organic compounds (SVOCs) due to past operations that consisted of a former railroad maintenance and fueling facility". Please provide Phase 1 assessment(s), or applicable environmental site assessments, and other associated documents such as the approved Site Management Plan, for the proposed Skyline terminal site.

Response 2: The Site Management Plan and associated Covenant were previously provided as part Deficiency No. 1 and are therefore not being provided again. In previous coordination with the San Francisco Bay Regional Water Quality Control Board, staff had no comments on the proposed use of the property for an electrical power substation and reminded LSPGC to implement the Site Management Plan as required.

Please contact me at (925) 808-0291 or djoseph@lspower.com with any questions regarding this information.

Sincerely,

Dustin Joseph

Dustin Joseph
Director of Environmental Permitting

Enclosure

cc: Jacob Diermann (LS Power)
Casey Carroll (LS Power)
Lucy Marton (LS Power)
David Wilson (LS Power)
Michelle Wilson (CPUC)
Valisa Nez (ESA)
Michael Manka (ESA)
Vincent Molina (ESA)

Attachment E

LSPGC Response 1 to Data Request 3

March 21, 2025

VIA EMAIL

Ms. Tharon Wright
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

RE: Response to Project Description Data Request No. 3 for LS Power Grid California, LLC's Power Santa Clara Valley Project (Application 24-04-017)

Dear Ms. Wright:

As requested by the California Public Utilities Commission (CPUC), LS Power Grid California, LLC (LSPGC) has collected and provided the additional information requested relating to Data Request No. 3 (DR-3) for the Power Santa Clara Valley Project (Project).

DR-3 Question 1: Provide an updated CalEEMod run to include the construction activity for the "PG&E Distribution Line Modifications at Skyline Terminal." Please include relevant updates to all CalEEMod runs to reflect changes to the Project, post PEA filing (Workforce numbers, equipment usage, etc.). Additionally, provide the following updated emission calculations for air quality and greenhouse gases, and energy fuel usage calculations.

Response 1: The CalEEMod air quality emissions modeling has been updated to reflect changes to the Project and work force reflected in **Attachment A (Revised Construction Equipment and Workforce Table)**. Refer to **Attachment B** (Updated Air Quality Emissions Tables, Health Risk, and APMs) and **Attachment C** (Air Quality Modeling Files). Updated Fuel Usage is provided as **Attachment D**.

DR-3 Question 2: If the construction activity described above is within the boundaries of the sensitive receptors (Receptors Location 1, 2, and 3) located near the Skyline Terminal, an updated HRA will be needed to evaluate the associated diesel particulate matter (DPM) risk and particulate matter equal to or less than 2.5 microns in diameter (PM2.5) concentrations at those receptor locations.

Response 2: Health Risk Assessment (HRA) impacts were updated based on the revised air quality modeling referenced in Response 1 above and detailed in **Attachment B**, **Attachment E** (AERMOD Files), and **Attachment F** (HRA Calculations).

DR-3 Question 3: The PEA Section 5.8, Greenhouse Gas Emissions, included SF6 emissions from the gas-insulated switchgear (GIS) from the high-voltage direct current (HVDC) Grove and Skyline Terminals. As the GIS equipment is removed from the Terminal components and added to the PG&E San Jose B Substation, provide new GHG emissions from SF6 usage at the PG&E San Jose B Substation.

Response 3: The Project would require a combined total of approximately 15,000 pounds of SF_6 for substation equipment located at the proposed Skyline and Grove terminals, as well as PG&E's substations. Specifically for the San Jose B substation, PG&E would rebuild a large portion of the existing San Jose B substation. In doing so, PG&E would remove a number of existing SF_6 air-insulated circuit breakers and replace them with GIS breakers. Based on detailed engineering conducted by PG&E, the new 115 kV GIS equipment would need to use SF_6 for the insulation medium instead of clean air for insulation. PG&E's new 230 kV GIS at the San Jose B substation would also use SF_6 for the insulation medium.

The CalEEMod greenhouse gas (GHG) emissions modeling has been updated to reflect changes in the construction schedule and equipment usage presented in **Attachment A (**Revised Construction Equipment and Workforce Table). Updated PEA GHG Emissions tables have been included as **Attachment G** (Updated GHG Emissions Tables) and the updated GHG emissions modeling files are included within **Attachment C** (Air Quality Modeling Files). The updated GHG emissions tables include updated construction emissions modeling as well as the increased SF_6 usage previously described in this response.

Please contact me at (925) 808-0291 or djoseph@lspower.com with any questions regarding this information.

Sincerely,

Dustin Joseph

Dustin Joseph
Director of Environmental Permitting

Enclosures

cc: Jacob Diermann (LS Power)
Casey Carroll (LS Power)
Lucy Marton (LS Power)
David Wilson (LS Power)
Michelle Wilson (CPUC)
Valisa Nez (ESA)
Michael Manka (ESA)
Vincent Molina (ESA)

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Workforce	Number of Crews	Estimated Start Date	Estimated End Date	Duration of Use, Hours/Day	Percent of Days Equipment is Used
TERMINALS									
Survey									
Pickup – ½ Ton	395	Gas	1	2	2	~~June~~March 2026	~~August~~May 2026	4	95%
Material Delivery									
Tractor Trailer	500	Diesel	1	5	2	~~June~~March 2026	~~February 2028~~November 2027	8	50%
Heavy Hauler Moving Truck	600	Diesel	1					8	20 days
Mobile Crane	260	Diesel	1					8	40%
Forklift / Loader	275	Diesel	1					8	50%
Pickup - 1 Ton and Trailer	410	Diesel	2					2	90%
Road Work, Site and Staging Preparation									
Truck – Water 4 K	300	Diesel	2	20	2	~~June~~March 2026	~~September~~June 2026	10	95%%
Loader - 4-5 Yd	275	Diesel	2					8	80%
Truck - Dump 10-12 Yd	415	Diesel	6					5	80%
Motor Grader	250	Diesel	1					8	80%
Roller	405	Diesel	2					8	80%
Pickup - 1/2 Ton	395	Gas	3					6	100%
Pickup - 1 Ton	410	Diesel	3					6	95%
Backhoe	70	Diesel	1					8	80%
Discing Tractor and Machine	640	Diesel	1					8	5%
Skid Steer	74.3	Diesel	1					4	80%
Pot Holing Machine (Hydro Vacuum Excavator)	525	Diesel	1					8	10 days
Excavating Scraper	407	Diesel	1					6	90%
Generator - 25 Kw	45	Diesel	2					10	95%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	**Estimated Horsepower**	**Probable Fuel Type**	**Equipment Quantity**	**Estimated Workforce**	**Number of Crews**	**Estimated Start Date**	**Estimated End Date**	**Duration of Use, Hours/Day**	**Percent of Days Equipment is Used**
Security Vehicle	158	Gas	1					24	100%
Bulldozer (CAT D5 Equivalent)	170	Diesel	1					7	30%
Below-Grade Construction									
Truck - Water 4 K	300	Diesel	2	30	2	~~October~~July 2026	~~January 2027~~October 2026	10	95%
Excavator	275	Diesel	2					8	90%
Forklift - 8-9 K Reach	100	Diesel	1					4	75%
Backhoe - 2X4	68	Diesel	2					5	75%
Pickup - 1/2 Ton	395	Gas	3					6	100%
Pickup - 1 Ton	410	Diesel	3					6	100%
Excavator - Mini	70	Diesel	2					8	75%
Generator - 25 Kw	45	Diesel	2					10	100%
Loader - 4-5 Yd	275	Diesel	2					8	75%
Pressure Digger - Lo- Drill (Tracked)	275	Diesel	2					8	60%
Truck - Dump 10-12 Yd	415	Diesel	2					4	75%
Tool - Van/Conex 20'	0	NA	6					10	75%
Trencher	75	Diesel	2					5	75%
Security Vehicle	158	Gas	1					24	100%
Roller	405	Diesel	2					3	75%
Concrete Truck	430	Diesel	2					6	40%
Concrete Crain Pourer	430	Diesel	1					8	25%
Above-Grade Construction and Equipment Installation									
Pickup - 1/2 Ton	395	Gas	3	30	2	~~February 2027~~November 2026	~~March 2028~~December 2027	6	100%
Pickup - 1 Ton	410	Diesel	3					6	100%
Welding Truck	395	Diesel	2					6	50%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	**Estimated Horsepower**	**Probable Fuel Type**	**Equipment Quantity**	**Estimated Workforce**	**Number of Crews**	**Estimated Start Date**	**Estimated End Date**	**Duration of Use, Hours/Day**	**Percent of Days Equipment is Used**
Generator - 25 Kw	45	Diesel	2					10	100%
Crane - 35 Ton	250	Diesel	2					8	90%
Forklift - 10 K Reach	130	Diesel	2					8	90%
Forklift -15,000 lb	130	Diesel	2					8	90%
Manlift - 40'	49	Diesel	3					8	85%
Manlift - 120'	74	Diesel	2					8	75%
Security Vehicle	158	Gas	1					24	100%
320 kV Transmission Line Construction HVDC									
Survey/Potholing									
Pickup - 1/2 Ton	395	Gas	2	7	2	~~June~~March 2026	~~May~~February 2027	8	95%
Pot Holing Machine (Hydro Vacuum Excavator)	525	Diesel	1					8	95%
Vaults									
Pickup - 1/2 Ton	395	Gas	2	8	2	~~July~~April 2026	~~August~~May 2027	5	95%
Pickup - 1 Ton	410	Diesel	1					5	95%
Excavator	275	Diesel	1					8	80%
Backhoe - 2X4	68	Diesel	1					8	70%
Loader - 4-5 Yd	275	Diesel	1					8	70%
Compressor	100	NA	1					8	80%
Tractor Trailer	500	Diesel	1					6	20%
Mobile Crane	260	Diesel	2					2	20%
Truck - Dump 10-12 Yd	415	Diesel	2					8	60%
Truck - Water 4 K	300	Diesel	1					4	80%
Concrete Truck	430	Diesel	2					8	30%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	**Estimated Horsepower**	**Probable Fuel Type**	**Equipment Quantity**	**Estimated Workforce**	**Number of Crews**	**Estimated Start Date**	**Estimated End Date**	**Duration of Use, Hours/Day**	**Percent of Days Equipment is Used**
Duct Bank and Restoration									
Pickup - 1/2 Ton	395	Gas	3	11	6	~~July~~April 2026	~~January 2028~~October 2027	5	95%
Pickup - 1 Ton	410	Diesel	2					5	95%
Excavator	275	Diesel	1					8	80%
Backhoe	68	Diesel	1					8	70%
Loader	275	Diesel	1					8	70%
Compressor	100	NA	1					8	80%
Truck - Water 4 K	300	Diesel	1					8	90%
Asphalt Paver	235	Diesel	1					2	90%
Roller	405	Diesel	1					3	90%
Truck - Dump 10-12 Yd	415	Diesel	2					8	95%
Truck - Water 4 K	300	Diesel	1					4	80%
Concrete Truck	430	Diesel	2					4	90%
Trenchless Crossings									
Horizontal Bore Machine	67	Diesel	1	7	1	~~January 2027~~October 2026	~~April~~January 2027	8	60%
Pickup - 1/2 Ton	395	Gas	2					4	95%
Pickup - 1 Ton	410	Diesel	2					4	95%
Excavator	275	Diesel	1					8	80%
Backhoe	68	Diesel	1					8	70%
Truck - Dump 10-12 Yd	415	Diesel	2					8	80%
Truck - Water 4 K	300	Diesel	1					4	80%
Concrete Truck	430	Diesel	2					6	30%
Cable Install									
Pickup - 1/2 Ton	395	Gas	1	8	2			3	95%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Workforce	Number of Crews	Estimated Start Date	Estimated End Date	Duration of Use, Hours/Day	Percent of Days Equipment is Used
Pickup - 1 Ton	410	Diesel	1			~~September~~June 2027	~~April~~January 2028	3	95%
Wire Trailer/ Tensioner	175	Diesel	2					8	60%
Wire Puller	175	Gas	2					8	60%
Cable Splicing Truck	300	Diesel	1					8	40%
Generator - 25 Kw	45	Diesel	1					8	95%
Cable Splice Test Truck	300	Diesel	1					8	20%
500 kV Transmission Line Construction HVAC									
Survey/Potholing									
Pickup - 1/2 Ton	395	Gas	2	7	1	~~July 2026~~April 2027	~~September~~May 2027	8	95%
Pot Holing Machine (Hydro Vacuum Excavator)	525	Diesel	1					8	95%
Vaults									
Pickup - 1/2 Ton	395	Gas	2	8	1	~~September 2026~~June 2027	~~November~~August 2027	5	95%
Pickup - 1 Ton	410	Diesel	1					5	95%
Excavator	275	Diesel	1					8	80%
Backhoe - 2X4	68	Diesel	1					8	70%
Loader - 4-5 Yd	275	Diesel	1					8	70%
Compressor	100	NA	1					8	80%
Tractor Trailer	500	Diesel	1					6	20%
Mobile Crane	260	Diesel	2					2	20%
Truck - Dump 10-12 Yd	415	Diesel	2					8	60%
Truck - Water 4 K	300	Diesel	1					4	80%
Concrete Truck	430	Diesel	2					8	30%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Workforce	Number of Crews	Estimated Start Date	Estimated End Date	Duration of Use, Hours/Day	Percent of Days Equipment is Used
Duct Bank and Restoration									
Pickup - 1/2 Ton	395	Gas	3	11	2	~~September~~June 2027	~~November~~August 2027	5	95%
Pickup - 1 Ton	410	Diesel	2					5	95%
Excavator	275	Diesel	1					8	80%
Backhoe	68	Diesel	1					8	70%
Loader	275	Diesel	1					8	70%
Compressor	100	NA	1					8	80%
Truck - Water 4 K	300	Diesel	1					8	90%
Asphalt Paver	235	Diesel	1					2	90%
Roller	405	Diesel	1					3	90%
Truck - Dump 10-12 Yd	415	Diesel	2					8	95%
Truck - Water 4 K	300	Diesel	1					4	80%
Concrete Truck	430	Diesel	2					4	90%
HDD									
Pickup - 1/2 Ton	395	Gas	3	10	1	~~September 2026~~June 2027	~~November~~August 2027	3	95%
Pickup - 1 Ton	410	Diesel	2					3	95%
Excavator	275	Diesel	2					8	60%
Backhoe	68	Diesel	1					8	50%
Truck - Dump 10-12 Yd	415	Diesel	3					8	50%
Truck - Water 4 K	300	Diesel	1					4	80%
Crane - 60 Ton	450	Diesel	1					8	30%
Skid Steer	74.3	Diesel	1					4	80%
Tractor Trailer	500	Diesel	1					8	30%
Forklift - 10 K Reach	130	Diesel	2					5	70%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Workforce	Number of Crews	Estimated Start Date	Estimated End Date	Duration of Use, Hours/Day	Percent of Days Equipment is Used
Asphalt Paver	235	Diesel	1					6	10%
Roller	405	Diesel	1					6	10%
Cable Install									
Pickup - 1/2 Ton	395	Gas	1	8	1	~~December~~September 2027	~~February 2028~~November 2027	3	95%
Pickup - 1 Ton	410	Diesel	1					3	95%
Wire Trailer/ Tensioner	175	Diesel	2					8	60%
Wire Puller	175	Gas	2					8	60%
Cable Splicing Truck	300	Diesel	1					8	40%
Generator - 25 Kw	45	Diesel	1					8	95%
Cable Splice Test Truck	300	Diesel	1					8	20%
Other									
Commissioning and Testing									
Pickup - 1/2 Ton	395	Gas	2	20	1	November 2027	~~December~~October 2028	2	95%
Pickup - 1 Ton	410	Diesel	2					2	95%
Generator - 25 Kw	45	Diesel	2					10	70%
Manlift - 40'	49	Diesel	3					8	50%
Tool - Van/Conex 20'		NA	6					10	80%
10 K Reach Forklift	130	Diesel	1					5	50%
15 k lb Forklift	49	Diesel	1					5	50%
PG&E Metcalf Substation Modifications and Connection									
Manlift - 40'	49	Diesel	1	10	1	~~December~~October 2026	~~May~~December 2027	10	70%
Forklift - 10 K Reach	130	Diesel	1					10	60%
Excavator - Mini	70	Diesel	1					5	70%
Loader - 4-5 Yd	275	Diesel	1					5	70%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Workforce	Number of Crews	Estimated Start Date	Estimated End Date	Duration of Use, Hours/Day	Percent of Days Equipment is Used
Pressure Digger - Lo- Drill (Tracked)	125	Diesel	2					8	50%
Pickup - 1/2 Ton	395	Gas	2					4	100%
Pickup - 1 Ton	410	Diesel	2					4	95%
Welding Truck	395	Diesel	2					2	50%
Concrete Truck	430	Diesel	2					6	30%
PG&E San Jose B Modifications and Connection – 115 kV									
Pickup - 1/2 Ton	395	Gas	3	15	1	~~December~~June 2026	~~February 2028~~December 2027	4	100%
Pickup - 1 Ton	410	Diesel	3					4	95%
Truck - Water 4 K	300	Diesel	1					10	95%
Truck - Dump 10-12 Yd	415	Diesel	2					5	20%
Pot Holing Machine (Hydro Vacuum Excavator)	525	Diesel	1					8	10 days
Skid Steer	74.3	Diesel	1					4	30%
Excavator	275	Diesel	1					8	30%
Backhoe - 2X4	68	Diesel	1					5	50%
Excavator - Mini	70	Diesel	1					8	50%
Pressure Digger - Lo- Drill (Tracked)	275	Diesel	1					8	20%
Tool - Van/Conex 20'	0	NA	2					10	60%
Trencher	75	Diesel	1					5	20%
Roller	405	Diesel	1					3	10%
Concrete Truck	430	Diesel	2					4	15%
Generator - 25 Kw	45	Diesel	1					10	80%
Crane - 35 Ton	250	Diesel	1					8	60%
Forklift - 10 K Reach	130	Diesel	1					8	50%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	Estimated Horsepower	Probable Fuel Type	Equipment Quantity	Estimated Workforce	Number of Crews	Estimated Start Date	Estimated End Date	Duration of Use, Hours/Day	Percent of Days Equipment is Used
Forklift -15,000 lb	130	Diesel	1					8	50%
Manlift - 40'	49	Diesel	2					8	50%
Manlift - 120'	74	Diesel	1					8	50%
Welding Truck	395	Diesel	1					6	50%
PG&E San Jose B Modifications and Connection – 230 kV									
Pickup - 1/2 Ton	395	Gas	3	15	1	January 2028	March 2030	4	100%
Pickup - 1 Ton	410	Diesel	3					4	95%
Truck - Water 4 K	300	Diesel	1					10	95%
Truck - Dump 10-12 Yd	415	Diesel	2					5	20%
Pot Holing Machine (Hydro Vacuum Excavator)	525	Diesel	1					8	10 days
Skid Steer	74.3	Diesel	1					4	30%
Excavator	275	Diesel	1					8	30%
Backhoe - 2X4	68	Diesel	1					5	50%
Excavator - Mini	70	Diesel	1					8	50%
Pressure Digger - Lo- Drill (Tracked)	275	Diesel	1					8	20%
Tool - Van/Conex 20'	0	NA	2					10	60%
Trencher	75	Diesel	1					5	20%
Roller	405	Diesel	1					3	10%
Concrete Truck	430	Diesel	2					4	15%
Generator - 25 Kw	45	Diesel	1					10	80%
Crane - 35 Ton	250	Diesel	1					8	60%
Forklift - 10 K Reach	130	Diesel	1					8	50%
Forklift -15,000 lb	130	Diesel	1					8	50%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	**Estimated Horsepower**	**Probable Fuel Type**	**Equipment Quantity**	**Estimated Workforce**	**Number of Crews**	**Estimated Start Date**	**Estimated End Date**	**Duration of Use, Hours/Day**	**Percent of Days Equipment is Used**
Manlift - 40'	49	Diesel	2					8	50%
Manlift - 120'	74	Diesel	1					8	50%
Welding Truck	395	Diesel	1					6	50%
PG&E Distribution Line Removal at Grove Terminal									
Pickup - 1/2 Ton	395	Gas	1	8	1	July 2026	August 2026	6	100%
Pickup - 1 Ton	410	Diesel	1					6	95%
Crane - 35 Ton (Manlift)	250	Diesel	2					8	95%
Forklift - 10 K Reach	130	Diesel	1					5	50%
PG&E Distribution Line Modifications at Skyline Terminal									
Pickup - 1/2 Ton	395	Gas	1	8	1	~~July~~March 2026	~~September~~May 2026	4	100%
Pickup - 1 Ton	410	Diesel	1					8	95%
Mobile Crane	260	Diesel	1					10	25%
Forklift - 10 K Reach	130	Diesel	1					5	25%
Excavator – Mini	70	Diesel	1					8	50%
Truck - Dump 10-12 Yd	415	Diesel	2					5	50%
Skid Steer	74.3	Diesel	1					4	50%
Trencher	75	Diesel	1					5	50%
Truck - Water 4 K	300	Diesel	1					10	80%
Concrete Truck	430	Diesel	1					8	15%
Excavator	275	Diesel	1					8	30%
Wire Trailer/ Tensioner	175	Diesel	1					8	40%
Wire Puller	175	Gas	1					8	40%
PG&E Distribution Line to the Grove Terminal									
Pickup - 1/2 Ton	395	Gas	1	8	1	August 2026	September	4	100%

TABLE 2-6
ANTICIPATED CONSTRUCTION EQUIPMENT AND WORKFORCE TABLE

Work Activity				Activity Production					
Equipment Description	**Estimated Horsepower**	**Probable Fuel Type**	**Equipment Quantity**	**Estimated Workforce**	**Number of Crews**	**Estimated Start Date**	**Estimated End Date**	**Duration of Use, Hours/Day**	**Percent of Days Equipment is Used**
Pickup - 1 Ton	410	Diesel	1				2026	4	95%
Pressure Digger - Lo- Drill (Tracked)	275	Diesel	1					8	30%
Truck - Dump 10-12 Yd	415	Diesel	2					4	30%
Crane - 35 Ton (Manlift)	250	Diesel	2					8	60%
Forklift - 10 K Reach	130	Diesel	1					2	50%
Manlift - 40'	49	Diesel	2					8	50%
Wire Trailer/ Tensioner	175	Diesel	1					8	30%
Wire Puller	175	Gas	1					8	30%
Staging Areas									
Pickup - 1/2 Ton	395	Gas	1	5	3	~~June~~March 2026	~~May~~February 2028	6	100%
Pickup - 1 Ton	410	Diesel	1					6	95%
Truck - Water 4 K	300	Diesel	1					8	95%
Mobile Crane	260	Diesel	1					8	40%
Forklift - 10 K Reach	130	Diesel	2					8	75%
Security Vehicle	158	Gas	1					24	100%

Air Quality Emissions Updates

The following tables[1] from PEA **Section 5.3** (*Air Quality*) have been updated based on Data Request No. 3, Response No. 1. Updated emissions input and output files have been included as **Attachment C,** Air Quality Modeling Files.

Table 5.3-5: Expected Construction Emissions Summary (Pounds per Day) – Skyline Terminal and San Jose B Substation				
	ROG	**NO_x**	**PM10 (Exhaust)**	**PM2.5 (Exhaust)**
Average Maximum Daily Emissions	1.~~45~~47	~~13.6~~14.3	0.~~32~~33	0.~~30~~32
BAAQMD Air Quality Thresholds	54	54	82	54
Exceeds Thresholds?	***NO***	***NO***	***NO***	***NO***

Table 5.3-6: Expected Construction Emissions Summary (Pounds per Day) – Grove Terminal and Metcalf Substation				
	ROG	**NO_x**	**PM10 (Exhaust)**	**PM2.5 (Exhaust)**
Average Maximum Daily Emissions	~~0.86~~1.21	~~9.48~~11.4	0.~~18~~26	0.~~17~~25
BAAQMD Air Quality Thresholds	54	54	82	54
Exceeds Thresholds?	***NO***	***NO***	***NO***	***NO***

Table 5.3-7: Expected Construction Emissions Summary (Pounds per Day) – Transmission Lines				
	ROG	**NO_x**	**PM10 (Exhaust)**	**PM2.5 (Exhaust)**
Average Maximum Daily Emissions	2.~~87~~34	~~24.3~~17.4	0.~~62~~48	0.~~59~~46
BAAQMD Air Quality Thresholds	54	54	82	54
Exceeds Thresholds?	***NO***	***NO***	***NO***	***NO***

[1] Where edits were made to text from the PEA, added text is shown in underline and removed text is shown in ~~strikethrough~~.

Table 5.3-8: Combined Expected Construction Emissions Summary (Pounds per Day)				
	ROG	**NO_x**	**PM10 (Exhaust)**	**PM2.5 (Exhaust)**
Skyline Terminal Construction	1.~~45~~47	~~13.6~~14.3	0.~~32~~33	0.~~30~~32
Grove Terminal Construction	~~0.86~~1.21	~~9.48~~11.4	0.~~18~~26	0.~~17~~25
Transmission Line Construction	2.~~87~~34	~~24.3~~17.4	0.~~62~~48	0.~~59~~46
Combined Total Emissions	**5.~~18~~02**	**~~47.38~~43.1**	**1.~~12~~07**	**1.~~06~~03**
BAAQMD Air Quality Thresholds	54	54	82	54
Exceeds Thresholds?	***NO***	***NO***	***NO***	***NO***

Health Risk Updates

The following updates were made to the HRA analysis for the Project, based on the updated emissions modeling discussed above. Refer to Data Request 3, Response No. 1 **Attachments C** (Air Quality Modeling Files), **Attachment E** (AERMOD Files) and **Attachment F** (HRA Calculations) for detailed emissions, modeling, and calculations.

The highest DPM concentrations at the proposed Skyline terminal location would be at Receptor location ~~2~~3 identified in **Figure 5.3-1**. Emission concentrations at this location are 0.0~~1~~2~~2~~3 µg/m^3. Based on this, the increased cancer risk is ~~3.72~~8.01 people per million exposed[2]. Non-cancer risks are less than one (or 0.0~~1~~2~~2~~3 µg/m^3 / 5 µg/m^3 <1).

Similarly, the highest DPM concentrations at the proposed Grove terminal would be at Receptor location 3 identified in **Figure 5.3-2**. Emission concentrations at this location are 0.03~~2~~57 µg/m^3. Based on this, the increased cancer risk is ~~6.4~~9.38 people per million exposed. Non-cancer risks are less than one (or 0.~~02~~20357 µg/m^3 / 5 µg/m^3 <1).

Applicant Proposed Measure (APM) Updates

The following Applicant Proposed Measures have been updated based on the revised emissions modeling and health risk assessment (HRA) calculations described above and detailed in **Attachments E and F**.

APM AQ-1: Construction Fleet Minimum Requirements and Tracking

LS Power shall ensure that at least 75 percent ~~of equipment horsepower hours related to~~ all off-road construction equipment include~~s~~ Tier 4 interim or Tier 4 final emissions controls for all construction locations with the exception of the Grove terminal. Due to the close proximity of homes to the Grove terminal, LS Power shall ensure that 100 precent of all off-road construction is Tier 4 interim or Final. An initial listing that identifies each off-road unit's certified tier specification to be operated on the Proposed Project shall be submitted to the CPUC for review

[2] Cancer risk refers to the probability of contracting cancer associated with exposure to a substance and is expressed as the chance per million of a cancer case occurring. For example, a risk of one per million would mean that in a population of one million individuals exposed over ~~a 70-year lifetime~~the exposure period, one additional cancer case would be expected.

before the start of construction activities. Construction activities shall not begin until the equipment listing has been submitted to the CPUC.

As LS Power requires new or replacement construction equipment on the Proposed Project, LS Power shall document verification of the certified engine tier before their use on Proposed Project sites. Before the start of construction, LS Power shall develop a diesel-powered equipment-use hours tracking tool and procedure. The tracking tool shall be utilized by LS Power to keep track of the certified engine tier and daily equipment use hours of all off-road diesel-powered equipment. If all diesel-powered equipment is Tier 4 certified, the tracking tool is not required. The tracking tool shall be maintained by LS Power, and tracking updates shall be submitted to the CPUC on a monthly basis to track the Proposed Project's compliance. The updated tracking tool shall be submitted to the CPUC no later than the tenth day of the following month.

San Jose B - Skyline Terminal Location - Metcalf HVDC Tier 4 Final Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	San Jose B - Skyline Terminal Location - Metcalf HVDC Tier 4 Final
Construction Start Date	6/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	1.60
Location	37.339980180212095, -121.90106721139239
County	Santa Clara
City	San Jose
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1850
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

User Defined Industrial	1.00	User Defined Unit	13.8	10,000	0.00	—	—	Electrical Substation no buildings

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.09	30.4	101	0.19	0.75	7.61	8.16	0.71	3.23	3.76	—	20,433	20,433	0.84	0.31	20,550
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.08	30.5	89.6	0.17	0.75	7.50	7.88	0.71	3.20	3.58	—	18,435	18,435	0.76	0.27	18,534
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.24	22.1	53.9	0.10	0.43	2.36	2.76	0.40	0.97	1.35	—	11,129	11,129	0.46	0.17	11,190
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	4.02	9.84	0.02	0.08	0.43	0.50	0.07	0.18	0.25	—	1,842	1,842	0.08	0.03	1,853

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.09	30.4	101	0.19	0.75	7.61	8.16	0.71	3.23	3.76	—	20,433	20,433	0.84	0.31	20,550
2027	2.93	28.7	63.4	0.11	0.56	0.53	1.09	0.53	0.13	0.66	—	11,165	11,165	0.45	0.18	11,233
2028	1.20	10.3	31.9	0.06	0.23	0.05	0.28	0.22	0.01	0.23	—	6,105	6,105	0.25	0.06	6,128
2029	1.17	10.2	31.8	0.06	0.22	0.05	0.26	0.21	0.01	0.22	—	6,104	6,104	0.25	0.06	6,127
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.08	30.5	89.6	0.17	0.75	7.50	7.88	0.71	3.20	3.58	—	18,435	18,435	0.76	0.27	18,534
2027	2.93	28.8	63.1	0.11	0.56	0.53	1.09	0.53	0.13	0.66	—	11,138	11,138	0.45	0.18	11,204
2028	1.20	10.3	31.8	0.06	0.23	0.05	0.28	0.22	0.01	0.23	—	6,102	6,102	0.25	0.06	6,125
2029	1.17	10.2	31.8	0.06	0.22	0.05	0.26	0.21	0.01	0.22	—	6,102	6,102	0.25	0.06	6,125
2030	1.14	10.0	31.8	0.06	0.20	0.05	0.25	0.19	0.01	0.21	—	6,100	6,100	0.25	0.06	6,123
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.81	17.0	53.9	0.10	0.40	2.36	2.76	0.38	0.97	1.35	—	11,129	11,129	0.46	0.17	11,190
2027	2.24	22.1	48.1	0.08	0.43	0.40	0.83	0.40	0.10	0.50	—	8,416	8,416	0.34	0.14	8,466
2028	0.86	7.39	22.8	0.04	0.17	0.03	0.20	0.16	0.01	0.17	—	4,371	4,371	0.18	0.04	4,387
2029	0.84	7.28	22.7	0.04	0.16	0.03	0.19	0.15	0.01	0.16	—	4,359	4,359	0.18	0.04	4,375
2030	0.17	1.45	4.60	0.01	0.03	0.01	0.04	0.03	< 0.005	0.03	—	883	883	0.04	0.01	887
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.33	3.10	9.84	0.02	0.07	0.43	0.50	0.07	0.18	0.25	—	1,842	1,842	0.08	0.03	1,853
2027	0.41	4.02	8.77	0.02	0.08	0.07	0.15	0.07	0.02	0.09	—	1,393	1,393	0.06	0.02	1,402
2028	0.16	1.35	4.16	0.01	0.03	0.01	0.04	0.03	< 0.005	0.03	—	724	724	0.03	0.01	726
2029	0.15	1.33	4.15	0.01	0.03	0.01	0.03	0.03	< 0.005	0.03	—	722	722	0.03	0.01	724
2030	0.03	0.27	0.84	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	146	146	0.01	< 0.005	147

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	20.1	20.1	< 0.005	< 0.005	20.4
Area	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	18.9	18.9	< 0.005	< 0.005	19.1
Area	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	19.0	19.0	< 0.005	< 0.005	19.3
Area	0.28	< 0.005	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	0.89
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.15	3.15	< 0.005	< 0.005	3.20
Area	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	162	162	0.03	< 0.005	164
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

3. Construction Emissions Details

3.1. PG&E Distribution Line Modifications at Skyline Terminal (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.00	14.9	0.03	0.09	—	0.09	0.09	—	0.09	—	3,072	3,072	0.12	0.02	3,082
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.00	14.9	0.03	0.09	—	0.09	0.09	—	0.09	—	3,072	3,072	0.12	0.02	3,082
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.45	2.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	463	463	0.02	< 0.005	464
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.6	76.6	< 0.005	< 0.005	76.9
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.3	67.3	< 0.005	< 0.005	68.3
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.3	62.3	< 0.005	< 0.005	63.2
Vendor	< 0.005	0.17	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.49	9.49	< 0.005	< 0.005	9.63
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.0	20.0	< 0.005	< 0.005	20.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.57	1.57	< 0.005	< 0.005	1.59
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.31	3.31	< 0.005	< 0.005	3.46
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. Road Work, Site and Staging Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.44	11.7	73.3	0.14	0.28	—	0.28	0.28	—	0.28	—	14,349	14,349	0.58	0.12	14,399
Dust From Material Movement	—	—	—	—	—	7.06	7.06	—	3.09	3.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	11.7	73.3	0.14	0.28	—	0.28	0.28	—	0.28	—	14,349	14,349	0.58	0.12	14,399
Dust From Material Movement	—	—	—	—	—	7.06	7.06	—	3.09	3.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	3.34	20.9	0.04	0.08	—	0.08	0.08	—	0.08	—	4,089	4,089	0.17	0.03	4,103
Dust From Material Movement	—	—	—	—	—	2.01	2.01	—	0.88	0.88	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.61	3.81	0.01	0.01	—	0.01	0.01	—	0.01	—	677	677	0.03	0.01	679
Dust From Material Movement	—	—	—	—	—	0.37	0.37	—	0.16	0.16	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	< 0.005	0.01	171
Vendor	0.02	0.82	0.40	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	663	663	0.04	0.10	694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	156	156	< 0.005	0.01	158
Vendor	0.02	0.87	0.41	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	663	663	0.04	0.10	693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	44.9	44.9	< 0.005	< 0.005	45.5
Vendor	0.01	0.24	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	189	189	0.01	0.03	198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	7.54
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.3	31.3	< 0.005	< 0.005	32.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. Below Grade Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	18.3	46.9	0.10	0.48	—	0.48	0.45	—	0.45	—	10,626	10,626	0.43	0.09	10,663
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	18.3	46.9	0.10	0.48	—	0.48	0.45	—	0.45	—	10,626	10,626	0.43	0.09	10,663
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	5.32	13.6	0.03	0.14	—	0.14	0.13	—	0.13	—	3,086	3,086	0.13	0.03	3,097
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.97	2.49	0.01	0.03	—	0.03	0.02	—	0.02	—	511	511	0.02	< 0.005	513

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.14	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	252	252	< 0.005	0.01	256
Vendor	0.01	0.49	0.24	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	398	398	0.02	0.06	417
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237
Vendor	0.01	0.52	0.25	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	398	398	0.02	0.06	416
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.6	68.6	< 0.005	< 0.005	69.6
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	116	116	0.01	0.02	121
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	11.5
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	20.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Above Grade Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75	17.5	35.3	0.06	0.37	—	0.37	0.35	—	0.35	—	5,413	5,413	0.22	0.04	5,431
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.51	5.06	0.01	0.05	—	0.05	0.05	—	0.05	—	775	775	0.03	0.01	778
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.46	0.92	< 0.005	0.01	—	0.01	0.01	—	0.01	—	128	128	0.01	< 0.005	129
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237
Vendor	0.01	0.35	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.8	33.8	< 0.005	< 0.005	34.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.0	38.0	< 0.005	0.01	39.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.60	5.60	< 0.005	< 0.005	5.68
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.29	6.29	< 0.005	< 0.005	6.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. Above Grade Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	17.1	35.2	0.06	0.32	—	0.32	0.30	—	0.30	—	5,413	5,413	0.22	0.04	5,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	17.1	35.2	0.06	0.32	—	0.32	0.30	—	0.30	—	5,413	5,413	0.22	0.04	5,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.37	14.1	28.9	0.05	0.26	—	0.26	0.25	—	0.25	—	4,436	4,436	0.18	0.04	4,452

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.56	5.27	0.01	0.05	—	0.05	0.05	—	0.05	—	734	734	0.03	0.01	737
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	1.07	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	248	248	< 0.005	0.01	251
Vendor	0.01	0.31	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	229	229	0.01	0.01	232
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.74	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	190	190	< 0.005	0.01	193
Vendor	0.01	0.27	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	0.01	0.03	223
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.5	31.5	< 0.005	< 0.005	31.9
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.2	35.2	< 0.005	0.01	36.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. PGE Upgrades SanJoseB Sub. 115 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	11.1	26.2	0.05	0.26	—	0.26	0.24	—	0.24	—	4,809	4,809	0.20	0.04	4,825
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	11.1	26.2	0.05	0.26	—	0.26	0.24	—	0.24	—	4,809	4,809	0.20	0.04	4,825
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.64	11.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,014	2,014	0.08	0.02	2,021
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.85	2.00	< 0.005	0.02	—	0.02	0.02	—	0.02	—	333	333	0.01	< 0.005	335
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	128
Vendor	0.01	0.39	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	318	318	0.02	0.05	333

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	118
Vendor	0.01	0.42	0.20	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	318	318	0.02	0.05	333
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.5	49.5	< 0.005	< 0.005	50.2
Vendor	< 0.005	0.17	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.19	8.19	< 0.005	< 0.005	8.31
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.1	22.1	< 0.005	< 0.005	23.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. PGE Upgrades SanJoseB Sub. 115 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	10.8	26.2	0.05	0.23	—	0.23	0.22	—	0.22	—	4,809	4,809	0.20	0.04	4,826
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.12	10.8	26.2	0.05	0.23	—	0.23	0.22	—	0.22	—	4,809	4,809	0.20	0.04	4,826
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.39	17.9	0.03	0.16	—	0.16	0.15	—	0.15	—	3,285	3,285	0.13	0.03	3,296
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.35	3.26	0.01	0.03	—	0.03	0.03	—	0.03	—	544	544	0.02	< 0.005	546
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	126
Vendor	0.01	0.38	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	312	312	0.02	0.05	327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	116
Vendor	0.01	0.40	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	312	312	0.02	0.05	326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.2	79.2	< 0.005	< 0.005	80.4
Vendor	0.01	0.27	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	0.01	0.03	223
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.1	13.1	< 0.005	< 0.005	13.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.2	35.2	< 0.005	0.01	36.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.15. PGE Upgrades SanJoseB Sub. 230 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.3	31.7	0.06	0.23	—	0.23	0.22	—	0.22	—	6,029	6,029	0.24	0.05	6,050
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.3	31.7	0.06	0.23	—	0.23	0.22	—	0.22	—	6,029	6,029	0.24	0.05	6,050
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	7.34	22.7	0.04	0.17	—	0.17	0.16	—	0.16	—	4,318	4,318	0.18	0.04	4,333
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.34	4.14	0.01	0.03	—	0.03	0.03	—	0.03	—	715	715	0.03	0.01	717

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34.1	34.1	< 0.005	< 0.005	34.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.5	41.5	< 0.005	0.01	43.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	32.0
Vendor	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.6	41.6	< 0.005	0.01	43.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	23.2
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.8	29.8	< 0.005	< 0.005	31.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.78	3.78	< 0.005	< 0.005	3.84
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.93	4.93	< 0.005	< 0.005	5.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.17. PGE Upgrades SanJoseB Sub. 230 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	10.1	31.7	0.06	0.22	—	0.22	0.21	—	0.21	—	6,030	6,030	0.24	0.05	6,051
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	10.1	31.7	0.06	0.22	—	0.22	0.21	—	0.21	—	6,030	6,030	0.24	0.05	6,051
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	7.24	22.6	0.04	0.16	—	0.16	0.15	—	0.15	—	4,307	4,307	0.17	0.03	4,322
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.32	4.13	0.01	0.03	—	0.03	0.03	—	0.03	—	713	713	0.03	0.01	716
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.5	33.5	< 0.005	< 0.005	33.7
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.4	40.4	< 0.005	0.01	42.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.0	31.0	< 0.005	< 0.005	31.5
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.4	40.4	< 0.005	0.01	42.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.4	22.4	< 0.005	< 0.005	22.7
Vendor	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.8	28.8	< 0.005	< 0.005	30.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.71	3.71	< 0.005	< 0.005	3.77
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.78	4.78	< 0.005	< 0.005	5.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.19. PGE Upgrades SanJoseB Sub. 230 (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.98	31.6	0.06	0.20	—	0.20	0.19	—	0.19	—	6,031	6,031	0.24	0.05	6,051
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.45	4.58	0.01	0.03	—	0.03	0.03	—	0.03	—	873	873	0.04	0.01	876

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	145	145	0.01	< 0.005	145
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.5	30.5	< 0.005	< 0.005	31.0
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.1	39.1	< 0.005	0.01	40.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	4.49
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.66	5.66	< 0.005	< 0.005	5.92
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	0.74
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	0.98
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164
Total	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscap Equipment	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Total	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Total	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
PG&E Distribution Line Modifications at Skyline Terminal	Demolition	3/1/2026	5/15/2026	5.00	55.0	Demolish infrastructure no longer needed at PGE location

Road Work, Site and Staging Preparation	Site Preparation	3/1/2026	6/30/2026	6.00	104	Road Work, Site and Staging Preparation
Below Grade Construction	Grading	7/1/2026	10/31/2026	6.00	106	—
Above Grade Construction	Building Construction	11/1/2026	12/15/2027	6.00	351	—
PGE Upgrades SanJoseB Sub. 115	Building Construction	6/1/2026	12/15/2027	5.00	403	—
PGE Upgrades SanJoseB Sub. 230	Building Construction	1/1/2028	3/15/2030	5.00	575	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
PG&E Distribution Line Modifications at Skyline Terminal	Cranes	Diesel	Tier 4 Final	1.00	10.0	260	0.07
PG&E Distribution Line Modifications at Skyline Terminal	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	5.00	130	0.10
PG&E Distribution Line Modifications at Skyline Terminal	Excavators	Diesel	Tier 4 Final	1.00	8.00	70.0	0.19
PG&E Distribution Line Modifications at Skyline Terminal	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	5.00	415	0.19
PG&E Distribution Line Modifications at Skyline Terminal	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.18
PG&E Distribution Line Modifications at Skyline Terminal	Trenchers	Diesel	Average	1.00	5.00	40.0	0.25

PG&E Distribution Line Modifications at Skyline Terminal	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	300	0.30
PG&E Distribution Line Modifications at Skyline Terminal	Excavators	Diesel	Average	1.00	8.00	275	0.11
PG&E Distribution Line Modifications at Skyline Terminal	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	8.00	175	0.15
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	275	0.30
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	6.00	5.00	415	0.30
Road Work, Site and Staging Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	250	0.33
Road Work, Site and Staging Preparation	Rollers	Diesel	Tier 4 Final	2.00	8.00	405	0.30
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	70.0	0.30
Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	640	0.02
Road Work, Site and Staging Preparation	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.30
Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	525	0.05
Road Work, Site and Staging Preparation	Scrapers	Diesel	Tier 4 Final	1.00	6.00	407	0.43
Road Work, Site and Staging Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	170	0.12
Road Work, Site and Staging Preparation	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.70
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36

Below Grade Construction	Excavators	Diesel	Average	2.00	8.00	275	0.34
Below Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	4.00	100	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	5.00	68.0	0.28
Below Grade Construction	Excavators	Diesel	Tier 4 Final	2.00	8.00	70.0	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	275	0.28
Below Grade Construction	Bore/Drill Rigs	Diesel	Average	2.00	8.00	275	0.30
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	4.00	415	0.28
Below Grade Construction	Trenchers	Diesel	Average	2.00	5.00	75.0	0.38
Below Grade Construction	Rollers	Diesel	Tier 4 Final	1.00	3.00	405	0.28
Below Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74
Above Grade Construction	Welders	Diesel	Average	2.00	6.00	395	0.23
Above Grade Construction	Cranes	Diesel	Tier 4 Final	2.00	8.00	250	0.26
Above Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.36
Above Grade Construction	Forklifts	Diesel	Average	2.00	8.00	130	0.18
Above Grade Construction	Aerial Lifts	Diesel	Average	3.00	8.00	49.0	0.26
Above Grade Construction	Aerial Lifts	Diesel	Average	2.00	8.00	74.0	0.23
Above Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74

PGE Upgrades SanJoseB Sub. 115	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	11.0	300	0.36
PGE Upgrades SanJoseB Sub. 115	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	5.00	415	0.08
PGE Upgrades SanJoseB Sub. 115	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	525	0.01
PGE Upgrades SanJoseB Sub. 115	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.11
PGE Upgrades SanJoseB Sub. 115	Excavators	Diesel	Average	1.00	8.00	275	0.11
PGE Upgrades SanJoseB Sub. 115	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	5.00	68.0	0.18
PGE Upgrades SanJoseB Sub. 115	Excavators	Diesel	Tier 4 Final	1.00	8.00	70.0	0.19
PGE Upgrades SanJoseB Sub. 115	Bore/Drill Rigs	Diesel	Average	1.00	8.00	275	0.10
PGE Upgrades SanJoseB Sub. 115	Trenchers	Diesel	Average	1.00	5.00	75.0	0.10
PGE Upgrades SanJoseB Sub. 115	Rollers	Diesel	Tier 4 Final	2.00	3.00	405	0.04
PGE Upgrades SanJoseB Sub. 115	Cranes	Diesel	Tier 4 Final	1.00	8.00	250	0.17
PGE Upgrades SanJoseB Sub. 115	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	8.00	130	0.20
PGE Upgrades SanJoseB Sub. 115	Forklifts	Diesel	Average	1.00	8.00	130	0.10
PGE Upgrades SanJoseB Sub. 115	Aerial Lifts	Diesel	Average	2.00	8.00	49.0	0.15
PGE Upgrades SanJoseB Sub. 115	Aerial Lifts	Diesel	Average	1.00	8.00	74.0	0.15
PGE Upgrades SanJoseB Sub. 115	Welders	Diesel	Average	1.00	6.00	395	0.23
PGE Upgrades SanJoseB Sub. 115	Generator Sets	Diesel	Tier 4 Final	1.00	10.0	45.0	0.59

PGE Upgrades SanJoseB Sub. 230	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	11.0	300	0.36
PGE Upgrades SanJoseB Sub. 230	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	5.00	415	0.38
PGE Upgrades SanJoseB Sub. 230	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	8.00	525	0.01
PGE Upgrades SanJoseB Sub. 230	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.11
PGE Upgrades SanJoseB Sub. 230	Excavators	Diesel	Average	1.00	8.00	275	0.11
PGE Upgrades SanJoseB Sub. 230	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	5.00	68.0	0.18
PGE Upgrades SanJoseB Sub. 230	Excavators	Diesel	Tier 4 Final	1.00	8.00	70.0	0.19
PGE Upgrades SanJoseB Sub. 230	Bore/Drill Rigs	Diesel	Average	1.00	8.00	275	0.10
PGE Upgrades SanJoseB Sub. 230	Trenchers	Diesel	Average	1.00	5.00	75.0	0.10
PGE Upgrades SanJoseB Sub. 230	Rollers	Diesel	Tier 4 Final	2.00	3.00	405	0.04
PGE Upgrades SanJoseB Sub. 230	Cranes	Diesel	Tier 4 Final	1.00	8.00	250	0.17
PGE Upgrades SanJoseB Sub. 230	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	8.00	130	0.20
PGE Upgrades SanJoseB Sub. 230	Forklifts	Diesel	Average	1.00	8.00	130	0.10
PGE Upgrades SanJoseB Sub. 230	Aerial Lifts	Diesel	Average	2.00	8.00	49.0	0.15
PGE Upgrades SanJoseB Sub. 230	Aerial Lifts	Diesel	Average	1.00	8.00	74.0	0.15
PGE Upgrades SanJoseB Sub. 230	Welders	Diesel	Average	1.00	6.00	395	0.23
PGE Upgrades SanJoseB Sub. 230	Generator Sets	Diesel	Tier 4 Final	1.00	10.0	45.0	0.23

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Road Work, Site and Staging Preparation	—	—	—	—
Road Work, Site and Staging Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Road Work, Site and Staging Preparation	Vendor	25.0	8.40	HHDT,MHDT
Road Work, Site and Staging Preparation	Hauling	0.00	20.0	HHDT
Road Work, Site and Staging Preparation	Onsite truck	—	—	HHDT
Below Grade Construction	—	—	—	—
Below Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2
Below Grade Construction	Vendor	15.0	8.40	HHDT,MHDT
Below Grade Construction	Hauling	0.00	20.0	HHDT
Below Grade Construction	Onsite truck	—	—	HHDT
Above Grade Construction	—	—	—	—
Above Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2
Above Grade Construction	Vendor	10.0	8.40	HHDT,MHDT
Above Grade Construction	Hauling	0.00	20.0	HHDT
Above Grade Construction	Onsite truck	—	—	HHDT
PG&E Distribution Line Modifications at Skyline Terminal	—	—	—	—
PG&E Distribution Line Modifications at Skyline Terminal	Worker	8.00	11.7	LDA,LDT1,LDT2
PG&E Distribution Line Modifications at Skyline Terminal	Vendor	5.00	8.40	HHDT,MHDT

PG&E Distribution Line Modifications at Skyline Terminal	Hauling	0.00	20.0	HHDT
PG&E Distribution Line Modifications at Skyline Terminal	Onsite truck	—	—	HHDT
PGE Upgrades SanJoseB Sub. 115	—	—	—	—
PGE Upgrades SanJoseB Sub. 115	Worker	15.0	11.7	LDA,LDT1,LDT2
PGE Upgrades SanJoseB Sub. 115	Vendor	12.0	8.40	HHDT,MHDT
PGE Upgrades SanJoseB Sub. 115	Hauling	0.00	20.0	HHDT
PGE Upgrades SanJoseB Sub. 115	Onsite truck	—	—	HHDT
PGE Upgrades SanJoseB Sub. 230	—	—	—	—
PGE Upgrades SanJoseB Sub. 230	Worker	4.20	11.7	LDA,LDT1,LDT2
PGE Upgrades SanJoseB Sub. 230	Vendor	1.64	8.40	HHDT,MHDT
PGE Upgrades SanJoseB Sub. 230	Hauling	0.00	20.0	HHDT
PGE Upgrades SanJoseB Sub. 230	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
PG&E Distribution Line Modifications at Skyline Terminal	0.00	0.00	0.00	—	—

Road Work, Site and Staging Preparation	—	—	176	0.00	—
Below Grade Construction	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.74	2.74	2.74	1,000	27.4	27.4	27.4	10,000

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	1,752,000	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	34.6
AQ-DPM	90.0
Drinking Water	22.7
Lead Risk Housing	44.6
Pesticides	11.9
Toxic Releases	34.1
Traffic	76.0
Effect Indicators	—
CleanUp Sites	94.5
Groundwater	99.3
Haz Waste Facilities/Generators	96.7
Impaired Water Bodies	43.8
Solid Waste	0.00

Sensitive Population	—
Asthma	49.9
Cardio-vascular	36.5
Low Birth Weights	54.6
Socioeconomic Factor Indicators	—
Education	46.8
Housing	11.6
Linguistic	21.4
Poverty	43.7
Unemployment	51.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	55.19055563
Employed	58.62953933
Median HI	81.39355832
Education	—
Bachelor's or higher	73.95098165
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	47.37585012
Active commuting	90.4914667
Social	—
2-parent households	11.45900167
Voting	75.23418452

Neighborhood	—
Alcohol availability	18.09316053
Park access	81.35506224
Retail density	91.00474785
Supermarket access	81.04709355
Tree canopy	65.73848325
Housing	—
Homeownership	37.76466059
Housing habitability	66.9190299
Low-inc homeowner severe housing cost burden	86.48787373
Low-inc renter severe housing cost burden	61.86321057
Uncrowded housing	85.268831
Health Outcomes	—
Insured adults	60.5800077
Arthritis	94.2
Asthma ER Admissions	43.5
High Blood Pressure	93.3
Cancer (excluding skin)	80.0
Asthma	61.7
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	88.0
Diagnosed Diabetes	89.0
Life Expectancy at Birth	93.2
Cognitively Disabled	25.4
Physically Disabled	86.7
Heart Attack ER Admissions	64.5
Mental Health Not Good	62.3
Chronic Kidney Disease	90.3

Obesity	55.2
Pedestrian Injuries	58.7
Physical Health Not Good	77.4
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	13.6
Current Smoker	63.1
No Leisure Time for Physical Activity	76.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	88.7
Elderly	98.6
English Speaking	91.1
Foreign-born	40.7
Outdoor Workers	37.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	10.3
Traffic Density	68.6
Traffic Access	87.4
Other Indices	—
Hardship	28.6
Other Decision Support	—
2016 Voting	71.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	51.0

Healthy Places Index Score for Project Location (b)	78.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Approx. 10KSF control enclosure/building
Construction: Construction Phases	Construction Schedule from 022125 List
Construction: Off-Road Equipment	San Jose B Construction from Construction Activity Input 022125
Construction: Trips and VMT	Updated per Traffic Identified in construction spreadsheet
Operations: Energy Use	200 kW load so 1,752,000 kWH

Monterey- Metcalf Terminal Location - Metcalf HVDC Tier4 Final v2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Monterey- Metcalf Terminal Location - Metcalf HVDC Tier4 Final v2
Construction Start Date	6/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	34.4
Location	37.22067491854513, -121.73856716733097
County	Santa Clara
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1907
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

User Defined Industrial	1.00	User Defined Unit	13.8	10,000	0.00	—	—	Electrical Substation no buildings

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.13	19.6	70.5	0.14	0.43	7.40	7.80	0.41	3.18	3.57	—	15,180	15,180	0.62	0.22	15,264
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.01	19.9	70.4	0.14	0.43	7.40	7.80	0.41	3.18	3.57	—	15,168	15,168	0.62	0.22	15,250
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.21	11.4	42.4	0.08	0.26	2.29	2.54	0.25	0.95	1.19	—	8,904	8,904	0.36	0.13	8,953
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.22	2.09	7.73	0.01	0.05	0.42	0.46	0.04	0.17	0.22	—	1,474	1,474	0.06	0.02	1,482

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.13	19.6	70.5	0.14	0.43	7.40	7.80	0.41	3.18	3.57	—	15,180	15,180	0.62	0.22	15,264
2027	1.10	12.2	45.4	0.06	0.20	0.44	0.64	0.20	0.11	0.30	—	6,418	6,418	0.26	0.12	6,461
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.01	19.9	70.4	0.14	0.43	7.40	7.80	0.41	3.18	3.57	—	15,168	15,168	0.62	0.22	15,250
2027	1.09	12.3	45.2	0.06	0.20	0.44	0.64	0.20	0.11	0.30	—	6,394	6,394	0.26	0.12	6,435
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.21	11.4	42.4	0.08	0.26	2.29	2.54	0.25	0.95	1.19	—	8,904	8,904	0.36	0.13	8,953
2027	0.85	9.62	35.3	0.05	0.15	0.33	0.49	0.15	0.08	0.23	—	4,993	4,993	0.20	0.09	5,026
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.22	2.09	7.73	0.01	0.05	0.42	0.46	0.04	0.17	0.22	—	1,474	1,474	0.06	0.02	1,482
2027	0.15	1.76	6.44	0.01	0.03	0.06	0.09	0.03	0.01	0.04	—	827	827	0.03	0.02	832

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	20.1	20.1	< 0.005	< 0.005	20.4
Area	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	18.9	18.9	< 0.005	< 0.005	19.1
Area	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	19.0	19.0	< 0.005	< 0.005	19.3
Area	0.28	< 0.005	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	0.89

Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.15	3.15	< 0.005	< 0.005	3.20
Area	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	162	162	0.03	< 0.005	164
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

3. Construction Emissions Details

3.1. PG&E Distribution Line Removal at Metcalf Terminal (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.71	7.37	0.01	0.03	—	0.03	0.03	—	0.03	—	1,431	1,431	0.06	0.01	1,436
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	129	129	0.01	< 0.005	130
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.4	21.4	< 0.005	< 0.005	21.5
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.3	67.3	< 0.005	< 0.005	68.3
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.5	79.5	< 0.005	0.01	83.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.70	5.70	< 0.005	< 0.005	5.78
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.19	7.19	< 0.005	< 0.005	7.52
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	0.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	1.25

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. Road Work, Site and Staging Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75	14.6	69.3	0.14	0.39	—	0.39	0.38	—	0.38	—	14,349	14,349	0.58	0.12	14,399
Dust From Material Movement	—	—	—	—	—	7.06	7.06	—	3.09	3.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75	14.6	69.3	0.14	0.39	—	0.39	0.38	—	0.38	—	14,349	14,349	0.58	0.12	14,399
Dust From Material Movement	—	—	—	—	—	7.06	7.06	—	3.09	3.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	4.17	19.7	0.04	0.11	—	0.11	0.11	—	0.11	—	4,089	4,089	0.17	0.03	4,103

Dust From Material Movement	—	—	—	—	—	2.01	2.01	—	0.88	0.88	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.76	3.60	0.01	0.02	—	0.02	0.02	—	0.02	—	677	677	0.03	0.01	679
Dust From Material Movement	—	—	—	—	—	0.37	0.37	—	0.16	0.16	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	< 0.005	0.01	171
Vendor	0.02	0.82	0.40	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	663	663	0.04	0.10	694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	156	156	< 0.005	0.01	158
Vendor	0.02	0.87	0.41	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	663	663	0.04	0.10	693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	44.9	44.9	< 0.005	< 0.005	45.5
Vendor	0.01	0.24	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	189	189	0.01	0.03	198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	7.54
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.3	31.3	< 0.005	< 0.005	32.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. Below Grade Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	16.2	46.9	0.10	0.34	—	0.34	0.33	—	0.33	—	10,626	10,626	0.43	0.09	10,663
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	16.2	46.9	0.10	0.34	—	0.34	0.33	—	0.33	—	10,626	10,626	0.43	0.09	10,663
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	4.70	13.6	0.03	0.10	—	0.10	0.09	—	0.09	—	3,086	3,086	0.13	0.03	3,097

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.86	2.49	0.01	0.02	—	0.02	0.02	—	0.02	—	511	511	0.02	< 0.005	513
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.14	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	252	252	< 0.005	0.01	256
Vendor	0.01	0.46	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	371	371	0.02	0.05	389
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237
Vendor	0.01	0.49	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	371	371	0.02	0.05	388
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.6	68.6	< 0.005	< 0.005	69.6
Vendor	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	0.01	0.02	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	11.5
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	18.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Above Grade Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	8.80	31.3	0.04	0.12	—	0.12	0.12	—	0.12	—	4,077	4,077	0.17	0.03	4,091
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	1.26	4.48	0.01	0.02	—	0.02	0.02	—	0.02	—	584	584	0.02	< 0.005	586
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.23	0.82	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	96.7	96.7	< 0.005	< 0.005	97.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237
Vendor	0.01	0.35	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.8	33.8	< 0.005	< 0.005	34.3
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.0	38.0	< 0.005	0.01	39.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.60	5.60	< 0.005	< 0.005	5.68
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.29	6.29	< 0.005	< 0.005	6.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. Above Grade Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	8.79	31.3	0.04	0.12	—	0.12	0.12	—	0.12	—	4,077	4,077	0.17	0.03	4,091
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	8.79	31.3	0.04	0.12	—	0.12	0.12	—	0.12	—	4,077	4,077	0.17	0.03	4,091

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	7.21	25.7	0.03	0.10	—	0.10	0.09	—	0.09	—	3,341	3,341	0.14	0.03	3,353
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	1.31	4.68	0.01	0.02	—	0.02	0.02	—	0.02	—	553	553	0.02	< 0.005	555
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	1.07	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	248	248	< 0.005	0.01	251
Vendor	0.01	0.31	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	229	229	0.01	0.01	232
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.74	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	190	190	< 0.005	0.01	193
Vendor	0.01	0.27	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	213	213	0.01	0.03	223
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.5	31.5	< 0.005	< 0.005	31.9
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.2	35.2	< 0.005	0.01	36.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. PG&E Metcalf Substation Upgrades and Connection (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.91	12.4	0.01	0.08	—	0.08	0.07	—	0.07	—	1,620	1,620	0.07	0.01	1,625
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.52	2.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	292	292	0.01	< 0.005	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.3	48.3	< 0.005	< 0.005	48.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.9	77.9	< 0.005	< 0.005	79.0
Vendor	< 0.005	0.17	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.2	14.2	< 0.005	< 0.005	14.4
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.9	23.9	< 0.005	< 0.005	25.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.35	2.35	< 0.005	< 0.005	2.38
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.95	3.95	< 0.005	< 0.005	4.13
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. PG&E Metcalf Substation Upgrades and Connection (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.88	12.4	0.01	0.08	—	0.08	0.07	—	0.07	—	1,621	1,621	0.07	0.01	1,627
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.88	12.4	0.01	0.08	—	0.08	0.07	—	0.07	—	1,621	1,621	0.07	0.01	1,627

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	1.96	8.50	0.01	0.05	—	0.05	0.05	—	0.05	—	1,107	1,107	0.04	0.01	1,111
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	1.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.01	< 0.005	184
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.5	82.5	< 0.005	< 0.005	83.8
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	76.5	76.5	< 0.005	< 0.005	77.5
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	52.8	52.8	< 0.005	< 0.005	53.6
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	88.7	88.7	0.01	0.01	92.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.74	8.74	< 0.005	< 0.005	8.87
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	15.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.15. PG&E Distribution Line to the Metcalf Terminal (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	1.98	7.21	0.02	0.06	—	0.06	0.05	—	0.05	—	1,979	1,979	0.08	0.02	1,986
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.65	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	179	179	0.01	< 0.005	180
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.6	29.6	< 0.005	< 0.005	29.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.3	67.3	< 0.005	< 0.005	68.3
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.5	79.5	< 0.005	0.01	83.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.70	5.70	< 0.005	< 0.005	5.78
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.19	7.19	< 0.005	< 0.005	7.52
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	0.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	1.25
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164
Total	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Total	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Total	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequeste	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
PG&E Distribution Line Removal at Metcalf Terminal	Demolition	7/1/2026	8/15/2026	5.00	33.0	—
Road Work, Site and Staging Preparation	Site Preparation	3/1/2026	6/30/2026	6.00	104	Road Work, Site and Staging Preparation
Below Grade Construction	Grading	7/1/2026	10/31/2026	6.00	106	—
Above Grade Construction	Building Construction	11/1/2026	12/15/2027	6.00	351	—
PG&E Metcalf Substation Upgrades and Connection	Building Construction	10/1/2026	12/15/2027	5.00	315	—
PG&E Distribution Line to the Metcalf Terminal	Building Construction	7/1/2026	8/15/2026	5.00	33.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
PG&E Distribution Line Removal at Metcalf Terminal	Cranes	Diesel	Tier 4 Final	2.00	8.00	250	0.28

PG&E Distribution Line Removal at Metcalf Terminal	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	5.00	130	0.20
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	275	0.30
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	6.00	5.00	415	0.30
Road Work, Site and Staging Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	250	0.33
Road Work, Site and Staging Preparation	Rollers	Diesel	Tier 4 Final	2.00	8.00	405	0.30
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	70.0	0.30
Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	640	0.02
Road Work, Site and Staging Preparation	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.30
Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	525	0.05
Road Work, Site and Staging Preparation	Scrapers	Diesel	Tier 4 Final	1.00	6.00	407	0.43
Road Work, Site and Staging Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	170	0.12
Road Work, Site and Staging Preparation	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.70
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36
Below Grade Construction	Excavators	Diesel	Average	2.00	8.00	275	0.34
Below Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	4.00	100	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	5.00	68.0	0.28

Below Grade Construction	Excavators	Diesel	Tier 4 Final	2.00	8.00	70.0	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	275	0.28
Below Grade Construction	Bore/Drill Rigs	Diesel	Average	2.00	8.00	275	0.30
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	4.00	415	0.28
Below Grade Construction	Trenchers	Diesel	Tier 4 Final	2.00	5.00	75.0	0.38
Below Grade Construction	Rollers	Diesel	Tier 4 Final	1.00	3.00	405	0.28
Below Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74
Above Grade Construction	Welders	Diesel	Tier 4 Final	2.00	6.00	395	0.23
Above Grade Construction	Cranes	Diesel	Tier 4 Final	2.00	8.00	250	0.26
Above Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.36
Above Grade Construction	Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.18
Above Grade Construction	Aerial Lifts	Diesel	Average	3.00	8.00	49.0	0.26
Above Grade Construction	Aerial Lifts	Diesel	Average	2.00	8.00	74.0	0.23
Above Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74
PG&E Metcalf Substation Upgrades and Connection	Aerial Lifts	Diesel	Average	1.00	10.0	49.0	0.22
PG&E Metcalf Substation Upgrades and Connection	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	10.0	130	0.24

PG&E Metcalf Substation Upgrades and Connection	Excavators	Diesel	Tier 4 Final	1.00	5.00	70.0	0.27
PG&E Metcalf Substation Upgrades and Connection	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	5.00	275	0.27
PG&E Metcalf Substation Upgrades and Connection	Bore/Drill Rigs	Diesel	Average	2.00	8.00	125	0.25
PG&E Metcalf Substation Upgrades and Connection	Welders	Diesel	Tier 4 Final	1.00	6.00	395	0.23
PG&E Distribution Line to the Metcalf Terminal	Bore/Drill Rigs	Diesel	Average	1.00	8.00	275	0.15
PG&E Distribution Line to the Metcalf Terminal	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	4.00	415	0.11
PG&E Distribution Line to the Metcalf Terminal	Cranes	Diesel	Tier 4 Final	1.00	8.00	250	0.17
PG&E Distribution Line to the Metcalf Terminal	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	2.00	130	0.20
PG&E Distribution Line to the Metcalf Terminal	Aerial Lifts	Diesel	Average	2.00	8.00	175	0.15
PG&E Distribution Line to the Metcalf Terminal	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	8.00	175	0.11

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Road Work, Site and Staging Preparation	—	—	—	—
Road Work, Site and Staging Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Road Work, Site and Staging Preparation	Vendor	25.0	8.40	HHDT,MHDT
Road Work, Site and Staging Preparation	Hauling	0.00	20.0	HHDT
Road Work, Site and Staging Preparation	Onsite truck	—	—	HHDT
Below Grade Construction	—	—	—	—
Below Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2
Below Grade Construction	Vendor	14.0	8.40	HHDT,MHDT
Below Grade Construction	Hauling	0.00	20.0	HHDT
Below Grade Construction	Onsite truck	—	—	HHDT
Above Grade Construction	—	—	—	—
Above Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2
Above Grade Construction	Vendor	10.0	8.40	HHDT,MHDT
Above Grade Construction	Hauling	0.00	20.0	HHDT
Above Grade Construction	Onsite truck	—	—	HHDT
PG&E Distribution Line Removal at Metcalf Terminal	—	—	—	—
PG&E Distribution Line Removal at Metcalf Terminal	Worker	8.00	11.7	LDA,LDT1,LDT2
PG&E Distribution Line Removal at Metcalf Terminal	Vendor	3.00	8.40	HHDT,MHDT
PG&E Distribution Line Removal at Metcalf Terminal	Hauling	0.00	20.0	HHDT
PG&E Distribution Line Removal at Metcalf Terminal	Onsite truck	—	—	HHDT
PG&E Metcalf Substation Upgrades and Connection	—	—	—	—

PG&E Metcalf Substation Upgrades and Connection	Worker	10.0	11.7	LDA,LDT1,LDT2
PG&E Metcalf Substation Upgrades and Connection	Vendor	5.00	8.40	HHDT,MHDT
PG&E Metcalf Substation Upgrades and Connection	Hauling	0.00	20.0	HHDT
PG&E Metcalf Substation Upgrades and Connection	Onsite truck	—	—	HHDT
PG&E Distribution Line to the Metcalf Terminal	—	—	—	—
PG&E Distribution Line to the Metcalf Terminal	Worker	8.00	11.7	LDA,LDT1,LDT2
PG&E Distribution Line to the Metcalf Terminal	Vendor	3.00	8.40	HHDT,MHDT
PG&E Distribution Line to the Metcalf Terminal	Hauling	0.00	20.0	HHDT
PG&E Distribution Line to the Metcalf Terminal	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

PG&E Distribution Line Removal at Metcalf Terminal	0.00	0.00	0.00	—	—
Road Work, Site and Staging Preparation	—	—	176	0.00	—
Below Grade Construction	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.74	2.74	2.74	1,000	27.4	27.4	27.4	10,000

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	1,752,000	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	15.3	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	16.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	32.1
AQ-PM	7.54
AQ-DPM	16.2
Drinking Water	54.0
Lead Risk Housing	33.7
Pesticides	88.9
Toxic Releases	18.8
Traffic	70.7
Effect Indicators	—
CleanUp Sites	7.71
Groundwater	40.8
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	58.7
Solid Waste	83.3
Sensitive Population	—
Asthma	24.9

Cardio-vascular	39.8
Low Birth Weights	18.2
Socioeconomic Factor Indicators	—
Education	66.8
Housing	24.9
Linguistic	64.4
Poverty	37.0
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.89965354
Employed	19.97946875
Median HI	74.83639163
Education	—
Bachelor's or higher	39.1505197
High school enrollment	100
Preschool enrollment	4.709354549
Transportation	—
Auto Access	72.44963429
Active commuting	50.44270499
Social	—
2-parent households	70.69164635
Voting	86.1157449
Neighborhood	—
Alcohol availability	90.97908379

Park access	16.92544591
Retail density	17.41306301
Supermarket access	9.662517644
Tree canopy	53.06043886
Housing	—
Homeownership	66.77787758
Housing habitability	66.08494803
Low-inc homeowner severe housing cost burden	94.37957141
Low-inc renter severe housing cost burden	15.38560246
Uncrowded housing	48.81303734
Health Outcomes	—
Insured adults	46.18247145
Arthritis	50.5
Asthma ER Admissions	71.2
High Blood Pressure	53.6
Cancer (excluding skin)	49.7
Asthma	61.7
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	50.7
Diagnosed Diabetes	39.3
Life Expectancy at Birth	20.7
Cognitively Disabled	64.4
Physically Disabled	50.9
Heart Attack ER Admissions	58.4
Mental Health Not Good	52.8
Chronic Kidney Disease	45.1
Obesity	42.9
Pedestrian Injuries	82.5

Physical Health Not Good	47.6
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	57.8
No Leisure Time for Physical Activity	49.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	69.7
Elderly	24.3
English Speaking	56.3
Foreign-born	50.8
Outdoor Workers	7.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	92.9
Traffic Density	64.2
Traffic Access	55.9
Other Indices	—
Hardship	35.6
Other Decision Support	—
2016 Voting	73.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	35.0
Healthy Places Index Score for Project Location (b)	54.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Approx. 10KSF control enclosure/building
Construction: Construction Phases	Construction Schedule from 22125 List
Construction: Off-Road Equipment	Metcalf Terminal Construction from Construction Activity Input 101723
Construction: Trips and VMT	Updated per Traffic Identified in construction spreadsheet
Operations: Energy Use	Load is 200kW... total 1752000 kWh per year

Metcalf Transmission Line Work Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Metcalf Transmission Line Work
Construction Start Date	6/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	34.4
Location	37.22067491854513, -121.73856716733097
County	Santa Clara
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1907
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	14.0	Mile	17.0	0.00	0.00	—	—	Transmission Lines (UnderGround)

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.71	34.4	100	0.25	1.00	1.46	2.46	0.94	0.38	1.32	—	28,209	28,209	1.18	0.70	28,457
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.42	26.0	66.2	0.17	0.73	1.12	1.86	0.69	0.29	0.98	—	19,706	19,706	0.83	0.53	19,886
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.34	17.4	46.0	0.12	0.48	0.77	1.26	0.46	0.20	0.66	—	13,357	13,357	0.56	0.36	13,481
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	3.18	8.40	0.02	0.09	0.14	0.23	0.08	0.04	0.12	—	2,211	2,211	0.09	0.06	2,232

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.98	21.3	50.9	0.14	0.65	0.92	1.57	0.61	0.24	0.85	—	16,009	16,009	0.67	0.43	16,159

2027	4.71	34.4	100	0.25	1.00	1.46	2.46	0.94	0.38	1.32	—	28,209	28,209	1.18	0.70	28,457
2028	0.24	4.46	8.04	0.01	0.03	0.21	0.23	0.02	0.05	0.07	—	1,396	1,396	0.05	0.03	1,408
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.42	26.0	66.2	0.17	0.73	1.12	1.86	0.69	0.29	0.98	—	19,706	19,706	0.83	0.53	19,886
2027	3.40	24.8	66.0	0.17	0.70	1.12	1.82	0.66	0.29	0.95	—	19,646	19,646	0.83	0.53	19,826
2028	0.79	8.45	18.4	0.04	0.12	0.84	0.97	0.11	0.22	0.32	—	5,004	5,004	0.21	0.26	5,088
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.08	15.2	37.0	0.10	0.45	0.66	1.11	0.42	0.17	0.59	—	11,469	11,469	0.48	0.31	11,576
2027	2.34	17.4	46.0	0.12	0.48	0.77	1.26	0.46	0.20	0.66	—	13,357	13,357	0.56	0.36	13,481
2028	0.22	3.40	6.45	0.01	0.03	0.18	0.21	0.02	0.05	0.07	—	1,278	1,278	0.05	0.04	1,293
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.38	2.78	6.76	0.02	0.08	0.12	0.20	0.08	0.03	0.11	—	1,899	1,899	0.08	0.05	1,917
2027	0.43	3.18	8.40	0.02	0.09	0.14	0.23	0.08	0.04	0.12	—	2,211	2,211	0.09	0.06	2,232
2028	0.04	0.62	1.18	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	212	212	0.01	0.01	214

3. Construction Emissions Details

3.1. 500 kV Transmission Line Construction (HVAC) - Cable Install (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.06	7.37	0.02	0.06	—	0.06	0.06	—	0.06	—	1,696	1,696	0.07	0.01	1,702

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.06	7.37	0.02	0.06	—	0.06	0.06	—	0.06	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.55	1.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	302	302	0.01	< 0.005	303
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.0	50.0	< 0.005	< 0.005	50.2
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	67.1
Vendor	0.01	0.38	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	312	312	0.02	0.05	327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.2	61.2	< 0.005	< 0.005	62.0
Vendor	0.01	0.40	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	312	312	0.02	0.05	326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.2
Vendor	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.5	55.5	< 0.005	0.01	58.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	1.85
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.19	9.19	< 0.005	< 0.005	9.62
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. 320 kV Transmission Line Construction (HVDC) - Survey / Potholing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.01	2.88	0.01	0.07	—	0.07	0.06	—	0.06	—	1,437	1,437	0.06	0.01	1,442

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.01	2.88	0.01	0.07	—	0.07	0.06	—	0.06	—	1,437	1,437	0.06	0.01	1,442
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	1.45	2.07	0.01	0.05	—	0.05	0.05	—	0.05	—	1,032	1,032	0.04	0.01	1,036
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.26	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	171	171	0.01	< 0.005	172
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	120
Vendor	0.01	0.26	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	212	212	0.01	0.03	222
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	111
Vendor	0.01	0.28	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	212	212	0.01	0.03	222
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.32	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.2	79.2	< 0.005	< 0.005	80.4
Vendor	< 0.005	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	152	152	0.01	0.02	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.1	13.1	< 0.005	< 0.005	13.3
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	26.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. 320 kV Transmission Line Construction (HVDC) - Survey / Potholing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	1.78	2.89	0.01	0.06	—	0.06	0.06	—	0.06	—	1,438	1,438	0.06	0.01	1,443
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.19	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	155	155	0.01	< 0.005	156
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	25.8
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.03	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	108
Vendor	0.01	0.26	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	0.01	0.03	217
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	11.9
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.5	22.5	< 0.005	< 0.005	23.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.94	1.94	< 0.005	< 0.005	1.96
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.72	3.72	< 0.005	< 0.005	3.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. 320 kV Transmission Line Construction (HVDC) - Trenchless Crossings (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	3.82	15.0	0.03	0.08	—	0.08	0.08	—	0.08	—	3,139	3,139	0.13	0.03	3,150
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.83	3.24	0.01	0.02	—	0.02	0.02	—	0.02	—	678	678	0.03	0.01	680
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	112	112	< 0.005	< 0.005	113
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.5	54.5	< 0.005	< 0.005	55.3
Vendor	0.02	0.70	0.33	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	531	531	0.03	0.08	554
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	12.1
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	115	115	0.01	0.02	120
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	2.00
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.0	19.0	< 0.005	< 0.005	19.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. 320 kV Transmission Line Construction (HVDC) - Trenchless Crossings (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	3.78	15.0	0.03	0.08	—	0.08	0.08	—	0.08	—	3,140	3,140	0.13	0.03	3,151
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	111	111	< 0.005	< 0.005	111
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.02	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.3	18.3	< 0.005	< 0.005	18.4
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	54.2
Vendor	0.02	0.66	0.32	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	520	520	0.03	0.08	544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.91	1.91	< 0.005	< 0.005	1.93
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	19.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	0.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	3.17
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. 320 kV Transmission Line Construction (HVDC) - Vaults (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	5.78	14.6	0.04	0.18	—	0.18	0.17	—	0.17	—	4,010	4,010	0.16	0.03	4,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	5.78	14.6	0.04	0.18	—	0.18	0.17	—	0.17	—	4,010	4,010	0.16	0.03	4,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	3.73	9.41	0.02	0.12	—	0.12	0.11	—	0.11	—	2,590	2,590	0.11	0.02	2,598
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.68	1.72	< 0.005	0.02	—	0.02	0.02	—	0.02	—	429	429	0.02	< 0.005	430

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	0.01	137
Vendor	0.03	1.31	0.64	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,060	1,060	0.06	0.16	1,111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.52	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	125	125	< 0.005	0.01	126
Vendor	0.03	1.39	0.65	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,061	1,061	0.06	0.16	1,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.4	81.4	< 0.005	< 0.005	82.5
Vendor	0.02	0.88	0.42	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	685	685	0.04	0.10	717
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.5	13.5	< 0.005	< 0.005	13.7
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	0.01	0.02	119
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. 320 kV Transmission Line Construction (HVDC) - Vaults (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	5.47	14.5	0.04	0.17	—	0.17	0.16	—	0.16	—	4,009	4,009	0.16	0.03	4,023
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	5.47	14.5	0.04	0.17	—	0.17	0.16	—	0.16	—	4,009	4,009	0.16	0.03	4,023
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	1.73	4.61	0.01	0.06	—	0.06	0.05	—	0.05	—	1,271	1,271	0.05	0.01	1,275
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.32	0.84	< 0.005	0.01	—	0.01	0.01	—	0.01	—	210	210	0.01	< 0.005	211
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	< 0.005	0.01	134
Vendor	0.03	1.26	0.62	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,039	1,039	0.06	0.15	1,089
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.49	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	122	122	< 0.005	0.01	124
Vendor	0.03	1.32	0.64	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,040	1,040	0.06	0.16	1,087
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	39.8
Vendor	0.01	0.41	0.20	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	329	329	0.02	0.05	345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.49	6.49	< 0.005	< 0.005	6.59
Vendor	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.5	54.5	< 0.005	0.01	57.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.15. 320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	8.42	21.8	0.06	0.28	—	0.28	0.26	—	0.26	—	6,098	6,098	0.25	0.05	6,119
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	8.42	21.8	0.06	0.28	—	0.28	0.26	—	0.26	—	6,098	6,098	0.25	0.05	6,119
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	5.44	14.0	0.04	0.18	—	0.18	0.17	—	0.17	—	3,938	3,938	0.16	0.03	3,952
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.14	0.99	2.56	0.01	0.03	—	0.03	0.03	—	0.03	—	652	652	0.03	0.01	654
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.17. 320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	8.02	21.7	0.06	0.27	—	0.27	0.25	—	0.25	—	6,097	6,097	0.25	0.05	6,118
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	8.02	21.7	0.06	0.27	—	0.27	0.25	—	0.25	—	6,097	6,097	0.25	0.05	6,118
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	5.42	14.7	0.04	0.18	—	0.18	0.17	—	0.17	—	4,124	4,124	0.17	0.03	4,138
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.99	2.68	0.01	0.03	—	0.03	0.03	—	0.03	—	683	683	0.03	0.01	685
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.19. 500 kV Transmission Line Construction (HVAC) - Survey / Potholing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	1.78	2.89	0.01	0.06	—	0.06	0.06	—	0.06	—	1,438	1,438	0.06	0.01	1,443
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.19	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	154	154	0.01	< 0.005	154
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.4	25.4	< 0.005	< 0.005	25.5
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.8	57.8	< 0.005	< 0.005	58.7
Vendor	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.01	0.02	163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.78	5.78	< 0.005	< 0.005	5.87
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.7	16.7	< 0.005	< 0.005	17.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	0.97
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.76	2.76	< 0.005	< 0.005	2.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.21. 500 kV Transmission Line Construction (HVAC) - Vaults (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	5.34	15.3	0.04	0.17	—	0.17	0.16	—	0.16	—	4,077	4,077	0.17	0.03	4,091

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.95	2.72	0.01	0.03	—	0.03	0.03	—	0.03	—	726	726	0.03	0.01	729
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.17	0.50	< 0.005	0.01	—	0.01	0.01	—	0.01	—	120	120	< 0.005	< 0.005	121
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	67.1
Vendor	0.02	0.63	0.31	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	519	519	0.03	0.08	544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.2
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	92.5	92.5	0.01	0.01	96.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	1.85
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	16.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.23. 500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	6.31	21.7	0.05	0.21	—	0.21	0.19	—	0.19	—	5,518	5,518	0.22	0.04	5,537
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.16	1.12	3.87	0.01	0.04	—	0.04	0.03	—	0.03	—	983	983	0.04	0.01	986
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.21	0.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	163	163	0.01	< 0.005	163
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	182	182	< 0.005	0.01	184
Vendor	0.03	1.26	0.62	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,039	1,039	0.06	0.15	1,089
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.3	30.3	< 0.005	< 0.005	30.7
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	185	185	0.01	0.03	194
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.01	5.01	< 0.005	< 0.005	5.09

Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.6	30.6	< 0.005	< 0.005	32.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.25. 500 kV Transmission Line Construction (HVAC) - HDD (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	5.31	21.2	0.05	0.17	—	0.17	0.16	—	0.16	—	4,998	4,998	0.20	0.04	5,015
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.95	3.77	0.01	0.03	—	0.03	0.03	—	0.03	—	890	890	0.04	0.01	893
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.17	0.69	< 0.005	0.01	—	0.01	0.01	—	0.01	—	147	147	0.01	< 0.005	148

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.5	82.5	< 0.005	< 0.005	83.8
Vendor	0.01	0.31	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	14.0
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.3	46.3	< 0.005	0.01	48.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	2.31
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.66	7.66	< 0.005	< 0.005	8.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.27. 320 kV Transmission Line Construction (HVAC) - Cable Install (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.06	7.37	0.02	0.06	—	0.06	0.06	—	0.06	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.06	7.37	0.02	0.06	—	0.06	0.06	—	0.06	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.32	3.18	0.01	0.03	—	0.03	0.02	—	0.02	—	733	733	0.03	0.01	735
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.24	0.58	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	121	121	< 0.005	< 0.005	122

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	< 0.005	0.01	134
Vendor	0.02	0.75	0.37	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	623	623	0.04	0.09	653
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.49	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	122	122	< 0.005	0.01	124
Vendor	0.02	0.79	0.38	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	624	624	0.04	0.09	652
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	54.2
Vendor	0.01	0.34	0.16	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	269	269	0.02	0.04	282
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	8.98
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.6	44.6	< 0.005	0.01	46.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.29. 320 kV Transmission Line Construction (HVAC) - Cable Install (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.04	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	120	120	< 0.005	0.01	122
Vendor	0.02	0.76	0.37	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	609	609	0.03	0.09	636
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.28	4.28	< 0.005	< 0.005	4.34
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	22.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	3.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.31. Commissioning and Testing (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.24	7.28	0.01	0.02	—	0.02	0.02	—	0.02	—	1,082	1,082	0.04	0.01	1,085
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.61	1.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	155	155	0.01	< 0.005	155
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	25.7
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	0.01	155
Vendor	< 0.005	0.20	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.01	0.02	163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.2	22.2	< 0.005	< 0.005	22.5
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.3	22.3	< 0.005	< 0.005	23.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.67	3.67	< 0.005	< 0.005	3.72
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	3.87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.33. Commissioning and Testing (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.24	7.28	0.01	0.02	—	0.02	0.02	—	0.02	—	1,082	1,082	0.04	0.01	1,085
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.24	7.28	0.01	0.02	—	0.02	0.02	—	0.02	—	1,082	1,082	0.04	0.01	1,085
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	2.88	4.94	0.01	0.02	—	0.02	0.02	—	0.02	—	734	734	0.03	0.01	737
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.53	0.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	122	122	< 0.005	< 0.005	122
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.67	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	162	162	< 0.005	< 0.005	163
Vendor	< 0.005	0.18	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	152	152	0.01	0.02	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.57	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	150	150	< 0.005	0.01	152
Vendor	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	152	152	0.01	0.02	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.38	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	105
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	103	103	0.01	0.01	108

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	17.3
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	17.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.35. Staging Areas (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.43	8.72	0.02	0.09	—	0.09	0.08	—	0.08	—	2,017	2,017	0.08	0.02	2,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.43	8.72	0.02	0.09	—	0.09	0.08	—	0.08	—	2,017	2,017	0.08	0.02	2,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.31	1.74	6.27	0.01	0.06	—	0.06	0.06	—	0.06	—	1,450	1,450	0.06	0.01	1,455
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.32	1.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	240	240	0.01	< 0.005	241
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	128
Vendor	0.02	0.99	0.48	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	795	795	0.04	0.12	833
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	118
Vendor	0.02	1.04	0.49	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	796	796	0.04	0.12	832
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.35	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	84.9	84.9	< 0.005	< 0.005	86.1
Vendor	0.02	0.73	0.35	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	572	572	0.03	0.08	598

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	14.3
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.6	94.6	0.01	0.01	99.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.37. Staging Areas (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.34	8.72	0.02	0.08	—	0.08	0.08	—	0.08	—	2,017	2,017	0.08	0.02	2,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.34	8.72	0.02	0.08	—	0.08	0.08	—	0.08	—	2,017	2,017	0.08	0.02	2,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	2.01	7.48	0.02	0.07	—	0.07	0.07	—	0.07	—	1,729	1,729	0.07	0.01	1,735
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.37	1.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	287
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	126
Vendor	0.02	0.94	0.47	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	779	779	0.04	0.12	816
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	116
Vendor	0.02	0.99	0.48	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	780	780	0.04	0.12	815
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.39	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	99.4	99.4	< 0.005	< 0.005	101
Vendor	0.02	0.83	0.40	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	668	668	0.04	0.10	699

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.5	16.5	< 0.005	< 0.005	16.7
Vendor	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	111	111	0.01	0.02	116
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.39. Staging Areas (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.19	8.71	0.02	0.08	—	0.08	0.07	—	0.07	—	2,018	2,018	0.08	0.02	2,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.24	0.94	< 0.005	0.01	—	0.01	0.01	—	0.01	—	218	218	0.01	< 0.005	219
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.1	36.1	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	114
Vendor	0.02	0.95	0.46	0.01	0.01	0.21	0.22	0.01	0.06	0.06	—	761	761	0.04	0.11	795
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	12.5
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	82.1	82.1	< 0.005	0.01	85.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	2.07
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	14.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
500 kV Transmission Line Construction (HVAC) - Cable Install	Linear, Grubbing & Land Clearing	9/1/2027	11/15/2027	6.00	65.0	—
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Linear, Drainage, Utilities, & Sub-Grade	3/1/2026	2/15/2027	6.00	301	—
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Linear, Drainage, Utilities, & Sub-Grade	10/1/2026	1/15/2027	6.00	92.0	—
320 kV Transmission Line Construction (HVDC) - Vaults	Linear, Drainage, Utilities, & Sub-Grade	4/1/2026	5/15/2027	6.00	352	—
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Linear, Drainage, Utilities, & Sub-Grade	4/1/2026	10/15/2027	6.00	483	—
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Linear, Drainage, Utilities, & Sub-Grade	4/1/2027	5/15/2027	6.00	39.0	—
500 kV Transmission Line Construction (HVAC) - Vaults	Linear, Drainage, Utilities, & Sub-Grade	6/1/2027	8/15/2027	6.00	65.0	—
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Linear, Drainage, Utilities, & Sub-Grade	6/1/2027	8/15/2027	6.00	65.0	—
500 kV Transmission Line Construction (HVAC) - HDD	Linear, Drainage, Utilities, & Sub-Grade	6/1/2027	8/15/2027	6.00	65.0	—

320 kV Transmission Line Construction (HVAC) - Cable Install	Linear, Drainage, Utilities, & Sub-Grade	7/1/2027	1/15/2028	6.00	171	—
Commissioning and Testing	Linear, Drainage, Utilities, & Sub-Grade	11/1/2027	10/15/2028	6.00	300	—
Staging Areas	Linear, Drainage, Utilities, & Sub-Grade	3/1/2026	2/15/2028	6.00	614	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
500 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	175	0.23
500 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.15
500 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.08
500 kV Transmission Line Construction (HVAC) - Cable Install	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	45.0	0.70
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Off-Highway Tractors	Diesel	Average	1.00	8.00	525	0.29
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Excavators	Diesel	Tier 4 Final	1.00	8.00	68.0	0.30
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26

320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.30
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
320 kV Transmission Line Construction (HVDC) - Vaults	Excavators	Diesel	Average	1.00	8.00	275	0.34
320 kV Transmission Line Construction (HVDC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
320 kV Transmission Line Construction (HVDC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26
320 kV Transmission Line Construction (HVDC) - Vaults	Cranes	Diesel	Tier 4 Final	2.00	2.00	260	0.06
320 kV Transmission Line Construction (HVDC) - Vaults	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.23
320 kV Transmission Line Construction (HVDC) - Vaults	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.34
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Excavators	Diesel	Average	1.00	8.00	275	0.30
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26

320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.38
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Pavers	Diesel	Average	1.00	2.00	235	0.38
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.36
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Off-Highway Tractors	Diesel	Average	1.00	8.00	525	0.29
500 kV Transmission Line Construction (HVAC) - Vaults	Excavators	Diesel	Average	1.00	8.00	275	0.30
500 kV Transmission Line Construction (HVAC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
500 kV Transmission Line Construction (HVAC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26
500 kV Transmission Line Construction (HVAC) - Vaults	Cranes	Diesel	Tier 4 Final	2.00	8.00	260	0.06
500 kV Transmission Line Construction (HVAC) - Vaults	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.23
500 kV Transmission Line Construction (HVAC) - Vaults	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30

500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Excavators	Diesel	Average	1.00	8.00	275	0.30
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Pavers	Diesel	Average	1.00	2.00	235	0.38
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Rollers	Diesel	Tier 4 Final	1.00	3.00	405	0.34
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.36
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
500 kV Transmission Line Construction (HVAC) - HDD	Excavators	Diesel	Average	2.00	8.00	275	0.23
500 kV Transmission Line Construction (HVAC) - HDD	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.18
500 kV Transmission Line Construction (HVAC) - HDD	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	415	0.19

500 kV Transmission Line Construction (HVAC) - HDD	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
500 kV Transmission Line Construction (HVAC) - HDD	Cranes	Diesel	Tier 4 Final	1.00	8.00	450	0.09
500 kV Transmission Line Construction (HVAC) - HDD	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.40
500 kV Transmission Line Construction (HVAC) - HDD	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	5.00	130	0.27
500 kV Transmission Line Construction (HVAC) - HDD	Pavers	Diesel	Average	1.00	6.00	235	0.04
500 kV Transmission Line Construction (HVAC) - HDD	Rollers	Diesel	Tier 4 Final	1.00	6.00	405	0.04
320 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	175	0.23
320 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.15
320 kV Transmission Line Construction (HVAC) - Cable Install	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	45.0	0.70
320 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.08
Commissioning and Testing	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.52
Commissioning and Testing	Aerial Lifts	Diesel	Average	3.00	8.00	49.0	0.15
Commissioning and Testing	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	5.00	130	0.30

Commissioning and Testing	Forklifts	Diesel	Tier 4 Final	1.00	5.00	49.0	0.10
Staging Areas	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.36
Staging Areas	Cranes	Diesel	Tier 4 Final	1.00	8.00	260	0.12
Staging Areas	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.30

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
500 kV Transmission Line Construction (HVAC) - Cable Install	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Cable Install	Worker	8.00	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Cable Install	Vendor	12.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Cable Install	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Cable Install	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Worker	14.0	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Vendor	8.00	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Hauling	0.00	20.0	HHDT

320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Worker	7.00	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Vendor	20.0	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Vaults	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Vaults	Worker	16.0	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Vaults	Vendor	40.0	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVDC) - Vaults	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVDC) - Vaults	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Worker	0.00	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Vendor	0.00	8.40	HHDT,MHDT

320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Worker	7.00	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Vendor	6.00	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - Vaults	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Vaults	Worker	8.00	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Vaults	Vendor	20.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Vaults	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Vaults	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Worker	22.0	11.7	LDA,LDT1,LDT2

500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Vendor	40.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - HDD	—	—	—	—
500 kV Transmission Line Construction (HVAC) - HDD	Worker	10.0	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - HDD	Vendor	10.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - HDD	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - HDD	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVAC) - Cable Install	—	—	—	—
320 kV Transmission Line Construction (HVAC) - Cable Install	Worker	16.0	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVAC) - Cable Install	Vendor	24.0	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVAC) - Cable Install	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVAC) - Cable Install	Onsite truck	—	—	HHDT
Commissioning and Testing	—	—	—	—
Commissioning and Testing	Worker	20.0	11.7	LDA,LDT1,LDT2
Commissioning and Testing	Vendor	6.00	8.40	HHDT,MHDT
Commissioning and Testing	Hauling	0.00	20.0	HHDT
Commissioning and Testing	Onsite truck	—	—	HHDT

Staging Areas	—	—	—	—
Staging Areas	Worker	15.0	11.7	LDA,LDT1,LDT2
Staging Areas	Vendor	30.0	8.40	HHDT,MHDT
Staging Areas	Hauling	0.00	20.0	HHDT
Staging Areas	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
500 kV Transmission Line Construction (HVAC) - Cable Install	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVDC) - Vaults	—	—	17.0	0.00	—

320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - Vaults	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - HDD	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVAC) - Cable Install	—	—	17.0	0.00	—
Commissioning and Testing	—	—	17.0	0.00	—
Staging Areas	—	—	17.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Linear	17.0	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	15.3	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	16.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	32.1
AQ-PM	7.54
AQ-DPM	16.2
Drinking Water	54.0
Lead Risk Housing	33.7
Pesticides	88.9
Toxic Releases	18.8
Traffic	70.7
Effect Indicators	—
CleanUp Sites	7.71
Groundwater	40.8

Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	58.7
Solid Waste	83.3
Sensitive Population	—
Asthma	24.9
Cardio-vascular	39.8
Low Birth Weights	18.2
Socioeconomic Factor Indicators	—
Education	66.8
Housing	24.9
Linguistic	64.4
Poverty	37.0
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.89965354
Employed	19.97946875
Median HI	74.83639163
Education	—
Bachelor's or higher	39.1505197
High school enrollment	100
Preschool enrollment	4.709354549
Transportation	—
Auto Access	72.44963429
Active commuting	50.44270499

Social	—
2-parent households	70.69164635
Voting	86.1157449
Neighborhood	—
Alcohol availability	90.97908379
Park access	16.92544591
Retail density	17.41306301
Supermarket access	9.662517644
Tree canopy	53.06043886
Housing	—
Homeownership	66.77787758
Housing habitability	66.08494803
Low-inc homeowner severe housing cost burden	94.37957141
Low-inc renter severe housing cost burden	15.38560246
Uncrowded housing	48.81303734
Health Outcomes	—
Insured adults	46.18247145
Arthritis	50.5
Asthma ER Admissions	71.2
High Blood Pressure	53.6
Cancer (excluding skin)	49.7
Asthma	61.7
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	50.7
Diagnosed Diabetes	39.3
Life Expectancy at Birth	20.7
Cognitively Disabled	64.4
Physically Disabled	50.9

Heart Attack ER Admissions	58.4
Mental Health Not Good	52.8
Chronic Kidney Disease	45.1
Obesity	42.9
Pedestrian Injuries	82.5
Physical Health Not Good	47.6
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	57.8
No Leisure Time for Physical Activity	49.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	69.7
Elderly	24.3
English Speaking	56.3
Foreign-born	50.8
Outdoor Workers	7.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	92.9
Traffic Density	64.2
Traffic Access	55.9
Other Indices	—
Hardship	35.6
Other Decision Support	—
2016 Voting	73.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	35.0
Healthy Places Index Score for Project Location (b)	54.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Approx. 10KSF control enclosure/building
Construction: Construction Phases	Construction Schedule from 022125
Construction: Off-Road Equipment	San Jose B Construction from Construction Activity Input 101723
Construction: Trips and VMT	Updated per Traffic Identified in construction spreadsheet 66 120

Power Santa Clara Valley Project
Project Fuel Use Calculations - Project Construction

Fuel Usage (gallons) = CO_2 emission (kg) / fuel combustion rate (kg/gallon)

Diesel Emissions		
off road equipment	10333.80	MT
onroad (haul & vendor trips)	846.98	MT
Total Diesel Emissions	11180.78	MT
kg/MT	1000	
Total CO_2 Emissions (kg)	11180780	kg

Diesel fuel combustion rate	10.21	kg/gallon
Diesel fuel consumption	1,095,081	gallons

Gasoline Emissions		
Worker Trips	268.1	MT
kg/MT	1000	
Total Emissions (kg)	268100	kg

Gasoline combustion rate	8.78	kg/gallon
Gasoline consumption	30,535	gallons

Notes

Combustion rates taken from The Climate Registry 2020 default emission factors (Table 2.1).

Updated March 2025 in response to Data Request No. 3.

Power Santa Clara Valley Project
Project Fuel Use Calculations - Project Operations

Fuel Usage (gallons) = CO_2 emission (kg) / fuel combustion rate (kg/gallon)

Diesel Emissions		
off road equipment	0	MT
onroad (haul & vendor trips)	0	MT
Total Diesel Emissions	0	MT
kg/MT	1000	
Total CO_2 Emissions (kg)	0	kg

Diesel fuel combustion rate	10.21	kg/gallon
Diesel fuel consumption	0	gallons

Gasoline Emissions		
Worker Trips	6.3	MT
kg/MT	1000	
Total Emissions (kg)	6300	kg

Gasoline combustion rate	8.78	kg/gallon
Gasoline consumption	718	gallons

Notes

Combustion rates taken from The Climate Registry 2020 default emission factors (Table 2.1).
Updated March 2025 in response to Data Request No. 3.

1   AERMOD PRIME - (DATED 23132)

                   AERMODPrMSPx VERSION
            (C) COPYRIGHT 1998-2022, Trinity Consultants

 Run Began on 3/05/2025 at 9:46:52

```
** BREEZE AERMOD
** Trinity Consultants
** VERSION  12.1

CO STARTING
CO TITLEONE  Skyline Terminal DPM
CO MODELOPT  DFAULT  CONC  NODRYDPLT  NOWETDPLT
CO RUNORNOT  RUN
CO AVERTIME  ANNUAL
CO POLLUTID  PM10
CO FINISHED

SO STARTING
SO ELEVUNIT  METERS
SO LOCATION  U0ARC001  AREAPOLY  597389.9  4133232.6  0
** SRCDESCR  Construction Area
SO SRCPARAM  U0ARC001  2.56E-08  3  11  1
SO AREAVERT  U0ARC001  597389.9 4133232.6  597445 4133135.6  597410.8 4133103.7  597420.2 4133084.9
SO AREAVERT  U0ARC001  597412.5 4133078.9  597400.4 4133096.5  597306.1 4133046.9  597257.1 4133140
SO AREAVERT  U0ARC001  597273.1 4133206.7  597351.9 4133235.4  597389.9 4133232.6
SO SRCGROUP  ALL
SO FINISHED

RE STARTING
RE ELEVUNIT  METERS
RE DISCCART  597441.7  4133350  0  0
** SENSITIV
** RCPDESCR  R1
RE DISCCART  597490.8  4133235.9  0  0
** SENSITIV
** RCPDESCR  R2
RE DISCCART  597537.6  4133143.9  0  0
** SENSITIV
** RCPDESCR  R3
RE FINISHED

ME STARTING
ME SURFFILE  "C:\USERS\RYAN\MYDRIV~1.COM\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~1\KSJC_2017.SFC"
** SURFFILE  "C:\USERS\RYAN\MYDRIV~1.COM\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~1\KSJC_2017.SFC"
ME PROFFILE  "C:\USERS\RYAN\MYDRIV~1.COM\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~1\KSJC_2017.PFL"
** PROFFILE  "C:\USERS\RYAN\MYDRIV~1.COM\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~1\KSJC_2017.PFL"
ME SURFDATA  23293 2017
ME UAIRDATA  23230 2017
ME PROFBASE  0  METERS
ME FINISHED

OU STARTING
OU FILEFORM  FIX
OU PLOTFILE  ANNUAL  ALL  ALL`ANNUAL.plt  10000
OU FINISHED

** ************************************************************************
** It is recommended that the user not edit any data below this line
** ************************************************************************


** AMPTYPE
** AMPDATUM  -1
** AMPZONE  -1
** AMPHEMISPHERE

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.257223563],TOWGS84[0,0,0,0,0,0,0]],PRIMEM["Gree
nwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",11],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION  UTM
** DATUM  WGE
** UNITS  METER
** ZONE  11
** HEMISPHERE  N
** ORIGINLON  0
** ORIGINLAT  0
** PARALLEL1  0
** PARALLEL2  0
** AZIMUTH  0
** SCALEFACT  0
** FALSEEAST  0
** FALSENORTH  0

** POSTFMT  UNFORM
** TEMPLATE UserDefined
** AERMODEXE  AERMOD_BREEZE_23132_64.EXE
** AERMAPEXE  AERMAP_EPA_18081_64.EXE
```

```
 *** Message Summary For AERMOD Model Setup ***

 --------- Summary of Total Messages --------

A Total of            0 Fatal Error Message(s)
A Total of            2 Warning Message(s)
A Total of            0 Informational Message(s)


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186      52       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
ME W187      52       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

***********************************
*** SETUP Finishes Successfully ***
***********************************

*** AERMOD - VERSION 23132  ***   ***  Skyline Terminal DPM                                          ***        03/05/25
*** AERMET - VERSION  18081 ***   ***                                                               ***        09:46:52
                                                                                                              PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

                                       ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

** Model Options Selected:
     * Model Uses Regulatory DEFAULT Options
     * Model Is Setup For Calculation of Average CONCentration Values.
     * NO GAS DEPOSITION Data Provided.
     * NO PARTICLE DEPOSITION Data Provided.
     * Model Uses NO DRY DEPLETION. DDPLETE  =  F
     * Model Uses NO WET DEPLETION. WETDPLT  =  F
     * Stack-tip Downwash.
     * Model Accounts for ELEVated Terrain Effects.
     * Use Calms Processing Routine.
     * Use Missing Data Processing Routine.
     * No Exponential Decay.
     * Model Uses RURAL Dispersion Only.
     * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
     * CCVR_Sub - Meteorological data includes CCVR substitutions
     * TEMP_Sub - Meteorological data includes TEMP substitutions
     * Model Assumes No FLAGPOLE Receptor Heights.
     * The User Specified a Pollutant Type of: PM10

**Model Calculates ANNUAL Averages Only

**This Run Includes:      1 Source(s);       1 Source Group(s); and       3 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:      0 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                and:      0 SWPOINT source(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  18081

**Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                            ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

*** AERMOD - VERSION 23132  ***   ***  Skyline Terminal DPM                                          ***        03/05/25
*** AERMET - VERSION  18081 ***   ***                                                               ***        09:46:52
                                                                                                              PAGE   2
*** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*
```

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
U0ARC001	0	0.25600E-07	597389.9	4133232.6	0.0	3.00	11	1.00	NO		NO

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	U0ARC001 ,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\USERS\RYAN\MYDRIV~1.COM\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~1\KSJC_2017.SF Met Version: 18081
Profile file: C:\USERS\RYAN\MYDRIV~1.COM\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~1\KSJC_2017.PF
Surface format: FREE
Profile format: FREE
Surface station no.: 23293 Upper air station no.: 23230
Name: UNKNOWN Name: UNKNOWN
Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-22.4	0.219	-9.000	-9.000	-999.	246.	52.9	0.02	0.68	1.00	3.36	121.	7.9	277.5	2.0
17	01	01	1	02	-12.5	0.138	-9.000	-9.000	-999.	125.	21.0	0.02	0.68	1.00	2.17	180.	7.9	278.1	2.0
17	01	01	1	03	-16.7	0.164	-9.000	-9.000	-999.	160.	29.6	0.02	0.68	1.00	2.55	137.	7.9	278.8	2.0
17	01	01	1	04	-17.5	0.172	-9.000	-9.000	-999.	172.	32.7	0.02	0.68	1.00	2.67	125.	7.9	279.2	2.0
17	01	01	1	05	-21.8	0.215	-9.000	-9.000	-999.	239.	50.6	0.02	0.68	1.00	3.29	122.	7.9	279.2	2.0
17	01	01	1	06	-15.2	0.153	-9.000	-9.000	-999.	145.	25.8	0.02	0.68	1.00	2.39	154.	7.9	279.9	2.0
17	01	01	1	07	-18.9	0.187	-9.000	-9.000	-999.	194.	38.3	0.02	0.68	1.00	2.88	124.	7.9	279.9	2.0
17	01	01	1	08	-17.7	0.175	-9.000	-9.000	-999.	176.	33.7	0.02	0.68	0.74	2.71	132.	7.9	279.9	2.0
17	01	01	1	09	5.8	0.168	0.369	0.005	314.	166.	-74.7	0.02	0.68	0.39	2.32	134.	7.9	280.9	2.0
17	01	01	1	10	35.9	0.138	0.923	0.018	792.	123.	-6.6	0.02	0.68	0.27	1.59	138.	7.9	282.0	2.0
17	01	01	1	11	59.1	0.123	1.168	0.019	974.	104.	-2.9	0.02	0.68	0.23	1.28	129.	7.9	284.2	2.0
17	01	01	1	12	72.0	0.252	1.293	0.020	1085.	304.	-20.1	0.02	0.68	0.21	3.34	280.	7.9	284.9	2.0
17	01	01	1	13	87.9	0.389	1.384	0.019	1089.	582.	-60.3	0.05	0.68	0.21	4.65	263.	7.9	285.9	2.0
17	01	01	1	14	65.5	0.353	1.256	0.019	1091.	504.	-60.5	0.05	0.68	0.22	4.22	270.	7.9	285.9	2.0
17	01	01	1	15	46.1	0.403	1.118	0.018	1093.	613.	-128.0	0.05	0.68	0.25	4.97	244.	7.9	285.4	2.0
17	01	01	1	16	18.2	0.370	0.820	0.018	1094.	542.	-252.7	0.02	0.68	0.33	5.44	281.	7.9	285.4	2.0
17	01	01	1	17	-32.0	0.420	-9.000	-9.000	-999.	653.	209.2	0.02	0.68	0.57	6.43	279.	7.9	283.1	2.0
17	01	01	1	18	-28.9	0.288	-9.000	-9.000	-999.	382.	91.1	0.05	0.68	1.00	3.85	243.	7.9	282.0	2.0
17	01	01	1	19	-18.6	0.185	-9.000	-9.000	-999.	197.	37.6	0.05	0.68	1.00	2.52	246.	7.9	282.0	2.0
17	01	01	1	20	-13.3	0.147	-9.000	-9.000	-999.	135.	23.7	0.05	0.68	1.00	2.03	225.	7.9	280.9	2.0
17	01	01	1	21	-7.4	0.105	-9.000	-9.000	-999.	82.	14.3	0.02	0.68	1.00	1.69	116.	7.9	282.0	2.0
17	01	01	1	22	-10.4	0.130	-9.000	-9.000	-999.	112.	19.0	0.05	0.68	1.00	1.76	94.	7.9	281.4	2.0
17	01	01	1	23	-14.5	0.149	-9.000	-9.000	-999.	138.	24.5	0.02	0.68	1.00	2.33	133.	7.9	280.9	2.0
17	01	01	1	24	-21.8	0.215	-9.000	-9.000	-999.	240.	51.0	0.02	0.68	1.00	3.30	114.	7.9	280.4	2.0

First hour of profile data

```
YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
17 01 01 01    7.9 1  121.    3.36   277.6   99.0  -99.00  -99.00

F indicates top of profile (=1) or below (=0)
```


*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): U0ARC001 ,

*** SENSITIVE DISCRETE RECEPTOR POINTS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
597441.70	4133350.00	0.01048	597490.80	4133235.90	0.01618
597537.60	4133143.90	0.02334			

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.02334	AT (597537.60, 4133143.90, 0.00, 0.00, 0.00)	SR	
	2ND HIGHEST VALUE IS	0.01618	AT (597490.80, 4133235.90, 0.00, 0.00, 0.00)	SR	
	3RD HIGHEST VALUE IS	0.01048	AT (597441.70, 4133350.00, 0.00, 0.00, 0.00)	SR	
	4TH HIGHEST VALUE IS	0.00000	AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	5TH HIGHEST VALUE IS	0.00000	AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	6TH HIGHEST VALUE IS	0.00000	AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	7TH HIGHEST VALUE IS	0.00000	AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	8TH HIGHEST VALUE IS	0.00000	AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	9TH HIGHEST VALUE IS	0.00000	AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	10TH HIGHEST VALUE IS	0.00000	AT (0.00, 0.00, 0.00, 0.00, 0.00)		

```
*** RECEPTOR TYPES:  GC = GRIDCART
                     GP = GRIDPOLR
                     DC = DISCCART
                     DP = DISCPOLR
```


*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

```
*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of           3 Warning Message(s)
A Total of         194 Informational Message(s)

A Total of        8784 Hours Were Processed

A Total of          52 Calm Hours Identified

A Total of         142 Missing Hours Identified (  1.62 Percent)


   ******** FATAL ERROR MESSAGES ********
            ***  NONE  ***


   ********   WARNING MESSAGES   ********
ME W186      52       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
ME W187      52       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
MX W481    8785         MAIN: Data Remaining After End of Year. Number of Hours=           24

   ************************************
   *** AERMOD Finishes Successfully ***
   ************************************
```

```
1                    AERMOD PRIME - (DATED 23132 )

                   AERMODPrMSPx VERSION
            (C) COPYRIGHT 1998-2022, Trinity Consultants

 Run Began on  3/05/2025 at  9:51:39

** BREEZE AERMOD
** Trinity Consultants
** VERSION  12.1

CO STARTING
CO TITLEONE  Metcalf Terminal DPM
CO MODELOPT  DFAULT  CONC  NODRYDPLT  NOWETDPLT
CO RUNORNOT  RUN
CO AVERTIME  ANNUAL
CO POLLUTID  PM25
CO FINISHED

SO STARTING
SO ELEVUNIT  METERS
SO LOCATION  KSKZJ00E  AREAPOLY  612147.8  4119321.7  0
** SRCDESCR  Construction
SO SRCPARAM  KSKZJ00E  1.43E-08  3  7  1
SO AREAVERT  KSKZJ00E  612147.8 4119321.7  612319 4119483.5  612395.4 4119398.5  612292.4 4119303.9
SO AREAVERT  KSKZJ00E  612231.9 4119371.9  612161.4 4119304.9  612147.8 4119321.7
SO SRCGROUP  ALL
SO FINISHED

RE STARTING
RE ELEVUNIT  METERS
RE DISCCART  612188.1  4119524.2  0  0
** SENSITIV
** RCPDESCR  R1
RE DISCCART  612223  4119482  0  0
** SENSITIV
** RCPDESCR  R2
RE DISCCART  612152.7  4119402.9  0  0
** SENSITIV
** RCPDESCR  R3
RE DISCCART  612532.9  4119278.4  0  0
** SENSITIV
** RCPDESCR  R4
RE DISCCART  612190.8  4118973.5  0  0
** SENSITIV
** RCPDESCR  R5
RE FINISHED

ME STARTING
ME SURFFILE  "C:\Users\ryan\MYDRIV~1.COM\CIA265~1\23-31M~1\Models\AERMOD\METCAL~1\KSJC_2017.SFC"
** SURFFILE  "C:\Users\ryan\MYDRIV~1.COM\CIA265~1\23-31M~1\Models\AERMOD\METCAL~1\KSJC_2017.SFC"
ME PROFFILE  "C:\Users\ryan\MYDRIV~1.COM\CIA265~1\23-31M~1\Models\AERMOD\METCAL~1\KSJC_2017.PFL"
** PROFFILE  "C:\Users\ryan\MYDRIV~1.COM\CIA265~1\23-31M~1\Models\AERMOD\METCAL~1\KSJC_2017.PFL"
ME SURFDATA  23293 2017
ME UAIRDATA  23230 2017
ME PROFBASE  0  METERS
ME FINISHED

OU STARTING
OU FILEFORM  FIX
OU PLOTFILE  ANNUAL  ALL  ALL`ANNUAL.plt  10000
OU FINISHED

** **************************************************************************
** It is recommended that the user not edit any data below this line
** **************************************************************************


** AMPTYPE
** AMPDATUM  -1
** AMPZONE  -1
** AMPHEMISPHERE

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.257223563],TOWGS84[0,0,0,0,0,0,0]],PRIMEM["Gree
nwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",11],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION  UTM
** DATUM  WGE
** UNITS  METER
** ZONE  11
** HEMISPHERE  N
** ORIGINLON  0
** ORIGINLAT  0
** PARALLEL1  0
** PARALLEL2  0
** AZIMUTH  0
** SCALEFACT  0
** FALSEEAST  0
** FALSENORTH  0

** POSTFMT  UNFORM
```

```
** TEMPLATE UserDefined
** AERMODEXE  AERMOD_BREEZE_23132_64.EXE
** AERMAPEXE  AERMAP_EPA_18081_64.EXE



  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      57       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187      57       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 *********************************
 *** SETUP Finishes Successfully ***
 *********************************

 *** AERMOD - VERSION 23132  ***   ***  Metcalf Terminal DPM                                                  ***        03/05/25
 *** AERMET - VERSION  18081 ***   ***                                                                       ***        09:51:39
                                                                                                                       PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses RURAL Dispersion Only.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: PM25

 **Note that special processing requirements apply for the 24-hour PM2.5 NAAQS - check available guidance.
   Model will process user-specified ranks of high 24-hour values averaged across the number of years modeled, and
   the multi-year average of individual ANNUAL values, averaged across the number of years modeled.

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:      1 Source(s);       1 Source Group(s); and       5 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                  and:     0 VOLUME source(s)
                  and:     1 AREA type source(s)
                  and:     0 LINE source(s)
                  and:     0 RLINE/RLINEXT source(s)
                  and:     0 OPENPIT source(s)
                  and:     0 BUOYANT LINE source(s) with a total of     0 line(s)
                  and:     0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  18081

 **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                            ;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.
```

**Input Runstream File: aermod.inp
**Output Print File: aermod.out

↑ *** AERMOD - VERSION 23132 *** *** Metcalf Terminal DPM *** 03/05/25
*** AERMET - VERSION 18081 *** *** *** 09:51:39
PAGE 2

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	LOCATION OF AREA Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
KSKZJ00E	0	0.14300E-07	612147.8	4119321.7	0.0	3.00	7	1.00	NO		NO

↑ *** AERMOD - VERSION 23132 *** *** Metcalf Terminal DPM *** 03/05/25
*** AERMET - VERSION 18081 *** *** *** 09:51:39
PAGE 3

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	KSKZJ00E ,

↑ *** AERMOD - VERSION 23132 *** *** Metcalf Terminal DPM *** 03/05/25
*** AERMET - VERSION 18081 *** *** *** 09:51:39
PAGE 4

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

↑ *** AERMOD - VERSION 23132 *** *** Metcalf Terminal DPM *** 03/05/25
*** AERMET - VERSION 18081 *** *** *** 09:51:39
PAGE 5

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\Users\ryan\MYDRIV~1.COM\CIA265~1\23-31M~1\Models\AERMOD\METCAL~1\KSJC_2017.SF Met Version: 18081
Profile file: C:\Users\ryan\MYDRIV~1.COM\CIA265~1\23-31M~1\Models\AERMOD\METCAL~1\KSJC_2017.PF
Surface format: FREE
Profile format: FREE
Surface station no.: 23293 Upper air station no.: 23230
Name: UNKNOWN Name: UNKNOWN
Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-22.4	0.219	-9.000	-9.000	-999.	246.	52.9	0.02	0.68	1.00	3.36	121.	7.9	277.5	2.0
17	01	01	1	02	-12.5	0.138	-9.000	-9.000	-999.	125.	21.0	0.02	0.68	1.00	2.17	180.	7.9	278.1	2.0
17	01	01	1	03	-16.7	0.164	-9.000	-9.000	-999.	160.	29.6	0.02	0.68	1.00	2.55	137.	7.9	278.8	2.0
17	01	01	1	04	-17.5	0.172	-9.000	-9.000	-999.	172.	32.7	0.02	0.68	1.00	2.67	125.	7.9	279.2	2.0
17	01	01	1	05	-21.8	0.215	-9.000	-9.000	-999.	239.	50.6	0.02	0.68	1.00	3.29	122.	7.9	279.2	2.0
17	01	01	1	06	-15.2	0.153	-9.000	-9.000	-999.	145.	25.8	0.02	0.68	1.00	2.39	154.	7.9	279.9	2.0
17	01	01	1	07	-18.9	0.187	-9.000	-9.000	-999.	194.	38.3	0.02	0.68	1.00	2.88	124.	7.9	279.9	2.0
17	01	01	1	08	-17.7	0.175	-9.000	-9.000	-999.	176.	33.7	0.02	0.68	0.74	2.71	132.	7.9	279.9	2.0
17	01	01	1	09	5.8	0.168	0.369	0.005	314.	166.	-74.7	0.02	0.68	0.39	2.32	134.	7.9	280.9	2.0
17	01	01	1	10	35.9	0.138	0.923	0.018	792.	123.	-6.6	0.02	0.68	0.27	1.59	138.	7.9	282.0	2.0
17	01	01	1	11	59.1	0.123	1.168	0.019	974.	104.	-2.9	0.02	0.68	0.23	1.28	129.	7.9	284.2	2.0
17	01	01	1	12	72.0	0.252	1.293	0.020	1085.	304.	-20.1	0.02	0.68	0.21	3.34	280.	7.9	284.9	2.0
17	01	01	1	13	87.9	0.389	1.384	0.019	1089.	582.	-60.3	0.05	0.68	0.21	4.65	263.	7.9	285.9	2.0
17	01	01	1	14	65.5	0.353	1.256	0.019	1091.	504.	-60.5	0.05	0.68	0.22	4.22	270.	7.9	285.9	2.0
17	01	01	1	15	46.1	0.403	1.118	0.018	1093.	613.	-128.0	0.05	0.68	0.25	4.97	244.	7.9	285.4	2.0
17	01	01	1	16	18.2	0.370	0.820	0.018	1094.	542.	-252.7	0.02	0.68	0.33	5.44	281.	7.9	285.4	2.0
17	01	01	1	17	-32.0	0.420	-9.000	-9.000	-999.	653.	209.2	0.02	0.68	0.57	6.43	279.	7.9	283.1	2.0
17	01	01	1	18	-28.9	0.288	-9.000	-9.000	-999.	382.	91.1	0.05	0.68	1.00	3.85	243.	7.9	282.0	2.0

```
 17 01 01   1 19  -18.6  0.185 -9.000 -9.000 -999.  197.     37.6  0.05   0.68   1.00    2.52  246.    7.9  282.0    2.0
 17 01 01   1 20  -13.3  0.147 -9.000 -9.000 -999.  135.     23.7  0.05   0.68   1.00    2.03  225.    7.9  280.9    2.0
 17 01 01   1 21   -7.4  0.105 -9.000 -9.000 -999.   82.     14.3  0.02   0.68   1.00    1.69  116.    7.9  282.0    2.0
 17 01 01   1 22  -10.4  0.130 -9.000 -9.000 -999.  112.     19.0  0.05   0.68   1.00    1.76   94.    7.9  281.4    2.0
 17 01 01   1 23  -14.5  0.149 -9.000 -9.000 -999.  138.     24.5  0.02   0.68   1.00    2.33  133.    7.9  280.9    2.0
 17 01 01   1 24  -21.8  0.215 -9.000 -9.000 -999.  240.     51.0  0.02   0.68   1.00    3.30  114.    7.9  280.4    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01    7.9 1  121.    3.36   277.6   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

                  *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   1 YEARS FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):     KSKZJ00E    ,

                                             *** SENSITIVE DISCRETE RECEPTOR POINTS ***

                                        ** CONC OF PM25     IN MICROGRAMS/M**3                          **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
         612188.10    4119524.20       0.02250                      612223.00    4119482.00       0.03583
         612152.70    4119402.90       0.02308                      612532.90    4119278.40       0.01021
         612190.80    4118973.50       0.00039
```



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

                                 *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER   1 YEARS ***


                                  ** CONC OF PM25     IN MICROGRAMS/M**3                         **

                                                                                                              NETWORK
GROUP ID                      AVERAGE CONC               RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.03583 AT (  612223.00,  4119482.00,     0.00,     0.00,     0.00)  SR
          2ND HIGHEST VALUE IS       0.02308 AT (  612152.70,  4119402.90,     0.00,     0.00,     0.00)  SR
          3RD HIGHEST VALUE IS       0.02250 AT (  612188.10,  4119524.20,     0.00,     0.00,     0.00)  SR
          4TH HIGHEST VALUE IS       0.01021 AT (  612532.90,  4119278.40,     0.00,     0.00,     0.00)  SR
          5TH HIGHEST VALUE IS       0.00039 AT (  612190.80,  4118973.50,     0.00,     0.00,     0.00)  SR
          6TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,     0.00)
          7TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,     0.00)
          8TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,     0.00)
          9TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,     0.00)
         10TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,     0.00)


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of          194 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of           52 Calm Hours Identified

 A Total of          142 Missing Hours Identified (  1.62 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      57       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used           0.50
 ME W187      57       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
 MX W481    8785         MAIN: Data Remaining After End of Year. Number of Hours=           24

    ************************************
    *** AERMOD Finishes Successfully ***
```

****

Air Quality Health Risk Calculations (Worst-Case)
Skyline Terminal Tier 4 (REC3)

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.2013**
	Construction Start	**3/1/2026**
	Construction Complete	**3/15/2030**
	Days	**1475**
	Construction Emission per day (lb/day)	**0.272949153**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.001431088**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**2.56E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.023**

	Days	Days to years				
Duration	1475	4.04109589				
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.023	0.023	0.023	0.023	0.023	0.023
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000797	0.00002407	0.00001901	0.00001645	0.00000740	0.00000640
Construction Days	1475	4.04109589				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	2	2.04109589	0	0	0
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	2.6617E-07	6.42938E-06	1.31709E-06	0	0	0
Risk per million Exposed	0.266170457	6.429380571	1.317085671	0	0	0
Cancer Risk Per Million (Construction Duration)	8.01					

Air Quality Health Risk Calculations (Worst-Case)
Metcalf Terminal (Tier 4)

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.0497**
	Construction Start	**3/1/2026**
	Construction Complete	**12/15/2027**
	Days	**654**
	Construction Emission per day (lb/day)	**0.151987768**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.00079688**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**1.43E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.0358**

	Days	Days to years				
Duration	654	1.791780822				
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.0358	0.0358	0.0358	0.0358	0.0358	0.0358
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00001241	0.00003746	0.00002959	0.00002560	0.00001151	0.00000997
Construction Days	654	1.791780822				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	1.791780822	0	0	0	0
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	4.143E-07	8.9656E-06	0	0	0	0
Risk per million Exposed	0.414300103	8.965596974	0	0	0	0

Cancer Risk Per Million (Construction Duration) 9.38

Greenhouse Gas Emissions Updates

The following tables[1] from PEA **Section 5.8** (*Greenhouse Gas Emissions*) have been updated based on Data Request No. 3, Response No. 1. Updated emissions input and output files have been included as **Attachment C,** Air Quality Modeling Files. Project usage of SF_6 has been updated to 15,000 pounds, as described in Data Request 3, Response 3. Based on CARB's older regulations, the allowable SF_6 leak rate for circuit breakers is limited to one percent. Based on the total usage of 15,000 pounds, this equates to 150 pounds per year. Given this, 150 pounds per year was used in this updated GHG analysis.

Table 5.8-3: Expected Annual Construction CO_2e Emissions	
Year	**CO_2e (MT/Year)**
Skyline Terminal and San Jose B Substation 2026	~~1,490.00~~1853
Skyline Terminal and San Jose B Substation 2027	~~724.00~~1402
Skyline Terminal and San Jose B Substation 2028	~~78.40~~726
Skyline Terminal and San Jose B Substation 2029	724
Skyline Terminal and San Jose B Substation 2030	147
Grove Terminal and Metcalf Substation 2026	~~972.00~~1482
Grove Terminal and Metcalf Substation 2027	~~376.00~~832
Transmission Lines 2026	1,~~835.00~~917
Transmission Lines 2027	~~3,960.00~~2,232
Transmission Lines 2028	~~683.00~~214
Total	**~~10,155.70~~11,529**
Yearly Average Construction Emissions (MT/year over 30 years)	**~~338.53~~384**
Expected construction emissions are based upon CalEEMod modeling assumptions (refer to ~~**Appendix 5.**~~Data Request ~~3-**A**~~, Response No. 1, **Attachment C**) through years 2026 to 20~~28~~30.	

Table 5.8-4: Operational Emissions Summary MT/Year	
Site Locations	**CO_2e (MT/Year)**
Skyline Terminal Operations	167~~.00~~
Grove Terminal Operations	167~~.00~~
SF_6 Emissions (Total allowed one percent or ~~60~~150 pounds per year)	~~620.51~~1,551
Amortized Construction Emissions (Table 5.8-3 above)	~~338.53~~384
Total Construction and Operations (MT/Year)	**~~1,293.04~~2,269**
Threshold	**10,000**
Exceeds Thresholds?	***NO***
Data is in MT. Conversion rate is 1 pound = 0.000453592 MT. GWP SF_6 = 22,800 Data is presented in decimal format and may have rounding errors.	

[1] Where edits were made to text from the PEA, added text is shown in underline and removed text is shown in ~~strikethrough~~.