B.3.12 Noise

NOISE Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☒	☐
d. A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☒	☐	☐
e. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☒	☐
f. For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

Significance criteria established by CEQA Guidelines, Appendix G.

B.3.12.1 Setting

Existing Conditions

Community Noise. To describe environmental noise and to assess project impacts on areas that are sensitive to community noise, a measurement scale that simulates human perception is used. The A-weighted scale of frequency sensitivity accounts for the sensitivity of the human ear, which is less sensitive to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. Decibels are logarithmic units that can be used to conveniently compare wide ranges of sound intensities.

Community noise levels can be highly variable from day to day as well as between day and night. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (Leq) or by an average level occurring over a 24-hour day-night period (Ldn). The Leq, or equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually one hour. The L50 is the median noise level that is exceeded fifty per cent of the time during any measuring interval. The Ldn, or day-night average sound level, is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to nighttime sounds occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) is another metric that is the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels in the night from 10:00 p.m. to 7:00 a.m. To easily estimate the day-night level caused by any noise source emitting steadily and continuously over 24 hours, the Ldn is 6.4 dBA higher than the source's Leq. For example, if the expected continuous noise level from equipment is 50.0 dBA Leq for every hour, the day-night noise level would be 56.4 dBA Ldn.

Community noise levels are usually closely related to the intensity of human activity. Noise levels are generally considered low when below 45 dBA, moderate in the 45 to 60 dBA range, and high above 60 dBA. In wilderness areas, the Ldn noise levels can be below 35 dBA. In small towns or wooded and lightly used residential areas, the Ldn is more likely to be around 50 or 60 dBA. Levels around 75 dBA are more common in busy urban areas, and levels up to 85 dBA occur near major freeways and airports. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse to public health.

Surrounding land uses dictate what noise levels would be considered acceptable or unacceptable. Lower levels are expected in rural or suburban areas than what would be expected for commercial or industrial zones. Nighttime ambient levels in urban environments are about seven decibels lower than the corresponding daytime levels. In rural areas away from roads and other human activity, the day-to-night difference can be considerably less. Areas with full-time human occupation and residency are often considered incompatible with substantial nighttime noise because of the likelihood of disrupting sleep. Noise levels above 45 dBA at night can result in the onset of sleep interference. At 70 dBA, sleep interference effects become considerable (USEPA, 1974).

Noise Environment in the Project Area

Downs Substation. The lands surrounding the existing Downs Substation are mostly zoned for commercial and park use. There also exists an undeveloped area zoned residential adjacent to the southwestern corner of the substation boundary. The dominant existing ambient noise sources in the vicinity of the existing Downs Substation location include automobile, bus, and truck traffic noise from Downs Street and Ridgecrest Boulevard (SCE, 2010a). Additional ambient noise source contributions include aircraft operations associated with the China Lake Naval Air Weapons Station (CLNAWS) airfield, located approximately four miles north of the substation (SCE, 2010a). The noise generated from the existing Downs Substation also contributes to the ambient noise levels. Noise from the existing Downs Substation transformer banks is primarily due to the fans associated with each bank's cooling system (SCE, 2010a). To document the existing ambient noise conditions within the vicinity of the proposed Downs Substation expansion location, hourly ambient noise measurements were recorded along the southeastern edge of the existing Downs Substation fence line nearest Ridgecrest Boulevard over a 24-hour period (as shown in Figure B.3.12-1). The results of these ambient noise levels are presented in Table B.3.12-1. Ambient noise levels were measured to be 64.5 dBA Leq daytime and 58.8 dBA Leq nighttime, with a day-night noise level of 66.5 dBA Ldn (SCE, 2010a).

Subtransmission and Telecommunication Line Routes. The dominant existing ambient noise sources along these linear routes include automobile, truck, and occasional bus traffic noise from adjacent roadways. Additional noise source contributions include aircraft operations associated with the CLNAWS airfield, Inyokern Airport (located 1.5 miles west of the westernmost segment of the proposed telecommunication route), and Trona Airport (located 2.5 miles northeast of the northernmost segment of the proposed telecommunication route). Additionally, in the Argus/Trona area, adjacent industrial uses and railway operations contribute to ambient noise levels along the route. Ambient noise measurement data is not available along the linear routes associated with the Proposed Project, but is assumed to be similar to that of daytime noise conditions presented in Table B.3.12-1 for the urban areas and slightly reduced for the rural locations.

Measured Ambient Noise Levels at Substation Site

Location	Date	Daytime Noise Level (dBA Leq)	Nighttime Noise Level (dBA Leq)	Ldn (dBA)
Southeastern Fence Line	7-14-2010	64.5	58.8	66.5

Source: SCE, 2010.

Figure B.3.12-1

Aerial Image Showing Ambient Noise Measurement Location and Data Results

Table B.3.12-1. Downs Substation Ambient Noise Levels

Recorded Time of Noise Level (a.m.)	Measured 1-hour Noise Level (dBA Leq)	Recorded Time of Noise Level (p.m.)	Measured 1-hour Noise Level (dBA Leq)
12:00 a.m.	56.3	12:00 p.m.	64.4
1:00 a.m.	54.8	1:00 p.m.	66.0
2:00 a.m.	55.2	2:00 p.m.	64.3
3:00 a.m.	54.6	3:00 p.m.	64.5
4:00 a.m.	55.6	4:00 p.m.	64.8
5:00 a.m.	58.9	5:00 p.m.	65.0
6:00 a.m.	61.1	6:00 p.m.	65.0
7:00 a.m.	60.9	7:00 p.m.	64.4
8:00 a.m.	68.1	8:00 p.m.	65.3
9:00 a.m.	62.6	9:00 p.m.	64.6
10:00 a.m.	60.1	10:00 p.m.	64.4
11:00 a.m.	64.5	11:00 p.m.	64.3

Notes: The 24-hour noise monitor was programmed to record continuously throughout a typical weekday on Wednesday, July 14, 2010
Source: SCE, 2010a.

Noise Sensitive Areas. Noise sensitive uses are distributed throughout the Project area. Residences can be found near many of the proposed work sites, especially within the city of Ridgecrest and the communities of Argus and Trona. Schools, religious facilities, and parks are also present and would be considered sensitive receptors. For a geographic reference to the following receptor descriptions, please refer to Figure B.9 (Proposed 115-kV Subtransmission Line Routes in the Vicinity of the Project area) and Figure B.11 (Overview of the Proposed Fiber Optic Telecommunication Cable Route) in Section B.1, Project Description.

Proposed Downs Substation Area. Most of the residentially zoned land parcels in the vicinity of the proposed Downs Substation expansion are currently vacant. The nearest residential sensitive receptor is located approximately 660 feet northwest of the northwest corner of the existing substation across Ridgecrest Boulevard; this receptor would be approximately 415 feet north-northwest of the proposed Downs Substation expansion (SCE, 2010b). Other residential sensitive receptors are located more than 900 feet to the south-southwest and south-southeast (SCE, 2010b). Non-residential sensitive receptors in the vicinity of the proposed Downs Substation expansion include students at the Ridgecrest Charter School (located 1,400 feet to the south) and children using the Kerr McGee Youth Sports Complex located immediately adjacent to the southern boundary of the proposed Downs Substation expansion site (SCE, 2010b). There are no identified health care facilities or concentrated populations of elderly people in the vicinity of the proposed Downs Substation expansion site.

115-kV Subtransmission Line and Fiber Optic Telecommunications Cable within the city of Ridgecrest Planning Area. The proposed Downs-McGen-Searles 115-kV subtransmission line segment would be located adjacent to land designated and zoned for industrial, residential, commercial, and recreational uses. The land use along this segment is largely suburban in nature with zoning for single-family housing interspersed by multi-family residential, general commercial, and lands zoned for schools and recreational facilities. There are several identified non-residential sensitive receptors along this

segment: St. Ann's Catholic School and James Monroe Middle School are both located adjacent to the route on Church Avenue, and the Ridgecrest Charter School is located approximately 500 feet from the route; the center of the city of Ridgecrest's municipal building complex, which houses a senior center, is located approximately 650 feet north of the route; a dialysis center is located approximately 400 feet north of the route; and the Kerr McGee Youth Sports Complex is located immediately adjacent to the route (SCE, 2010b).

The Inyokern-McGen-Searles 115-kV subtransmission line, on which the fiber optic telecommunication cable would be installed, is located adjacent to land designated for industrial, natural open space, residential, and commercial uses; most of this route is not zoned by the city of Ridgecrest. Low-density residential characterizes the majority of this route; a short 1,800 foot-long stretch near South China Lake Boulevard is suburban in nature. There are three identified non-residential sensitive receptor locations: two assisted living centers located between 3,000 and 3,300 feet north of the line route, and the Calvary Christian School which is located adjacent to the corridor on Springer Avenue (SCE, 2010b).

115-kV Subtransmission Line and Fiber Optic Telecommunications Cable Routes outside the city of Ridgecrest Planning Area, Kern County Jurisdiction. The proposed Downs-Inyokern 115-kV subtransmission line segment outside the city of Ridgecrest runs through lands zoned by Kern County for agricultural, residential, commercial, and industrial uses. There are no identified sensitive receptors along this segment of the route. The Inyokern-McGen-Searles 115-kV subtransmission line, on which the fiber optic telecommunication cable would be installed, outside of the city of Ridgecrest would be located adjacent to and through undeveloped land designated for agriculture, open space, and residential uses. There are no identified sensitive receptors along this segment of the route (SCE, 2010b).

115-kV Subtransmission Line and Fiber Optic Telecommunications Cable Routes outside the city of Ridgecrest Planning Area, San Bernardino County. This segment includes the communities of Argus and Trona. There are no identified sensitive receptors along these sections (SCE, 2010b).

Applicable Regulations

Regulating environmental noise is generally the responsibility of local governments. The United States Environmental Protection Agency (USEPA) once published guidelines on recommended maximum noise levels to protect public health and welfare (USEPA, 1974), and the State of California maintains recommendations for local jurisdictions in the General Plan Guidelines published by the Governor's Office of Planning and Research (OPR, 2003). The following summarizes the local requirements.

Kern County. The two regulatory documents relating to noise in Kern County are the Noise Element of the General Plan and the Kern County Municipal Code.

General Plan Noise Element. The Noise Element provides regulations for stationary equipment associated with commercial or industrial sources (Kern County, 2004). With respect to the Proposed Project, the following policy of the Noise Element is intended to protect residents from excessive noise and to maintain moderate levels of noise:

- Policy 5. Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into the project design. Such mitigation shall be designed to reduce noise to the following levels:
    a. 65 dBA Ldn or less in outdoor activity areas.
    b. 45 dBA Ldn or less within living spaces or other noise sensitive interior spaces.

Municipal Code Section 8.36.020 - Prohibited Sounds. These regulations are designed to limit noise associated with construction equipment by limiting construction when occurring within 1,000 feet of an occupied residential dwelling to the hours between 6:00 a.m. and 9:00 p.m. on weekdays and between 8:00 a.m. and 9:00 p.m. on weekends, which is audible to a person with average hearing faculties or capacity at a distance of 150 feet from the construction site (Kern County, 2011). This section of the Municipal Code identifies that the development services agency director or his designated representative may for good cause exempt some construction work for a limited time (Kern County, 2011). Similarly, emergency work is exempt from these limitations (Kern County, 2011). This Municipal Code section does not provide thresholds for construction noise level limitations.

San Bernardino County. The two regulatory documents relating to noise in San Bernardino County are the Noise Element of the General Plan and the San Bernardino Code of Ordinances (Title 8).

General Plan Noise Element. The General Plan policies are primarily related to compatibility standards for occupied land uses as compared to the noise environment and do not apply to an unmanned substation, subtransmission lines, or fiber optic telecommunication cable (San Bernardino County, 2007a).

Code of Ordinances, Title 8. Code of Ordinances Section 83.01.080(g) exempts temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and federal holidays (San Bernardino County, 2007b). Regarding operational noise, Section 83.01.080(c) provides daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise standards for stationary sources affecting various land uses (San Bernardino County, 2007b). Since portions of the proposed fiber optic telecommunication cable would be located within unincorporated San Bernardino County in a residential area, the noise limits for industrial land uses (55 dBA Leq during daytime and 45 dBA Leq during nighttime) would be applicable (San Bernardino County, 2007b).

City of Ridgecrest. The city of Ridgecrest does not regulate noise associated with industrial or construction equipment, but defers to Kern County regulations.

B.3.12.2 Environmental Impacts and Mitigation Measures

a. Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED.

Construction. As discussed above, the Kern County Municipal Code limits construction to the hours between 6:00 a.m. and 9:00 p.m. on weekdays when occurring within 1,000 feet of an occupied residential dwelling. Construction noise is exempt between 7:00 a.m. and 7:00 p.m. within San Bernardino County. As discussed in Section B.1.11.1, All Components, construction efforts for the Proposed Project would occur between the hours of 6:00 a.m. and 9:00 p.m. on weekdays. As such, the scheduled construction hours would exceed the exemption limitations of San Bernardino County Code of Ordinances Title 8. To mitigate this inconsistency and serve in the event construction activities are necessary on days or hours outside of either applicable ordinance, Mitigation Measure N-1 (Obtain necessary variance for construction noise) is proposed to ensure SCE would obtain variances as necessary. With implementation of this measure, less-than-significant construction noise impacts would occur with regards to violations of applicable noise standards.

Operation. As discussed above, operational noise thresholds applicable to the Project include the Kern County General Plan Noise Element (65 dBA Ldn or less in outdoor activity areas), and the San Bernardino County Code of Ordinances Title 8 (55 dBA Leq during daytime and 45 dBA Leq during nighttime). Operational noise associated with the Project would be limited to the substation, corona discharge from the 115-kV subtransmission line, and routine maintenance or emergency repair activities. The proposed fiber optic telecommunication cable would not produce noise (SCE, 2010b).

Table B.3.12-2 identifies the calculated noise levels at the property line of the Downs Substation with incorporation of the proposed expansion. Figure B.3.12-2 provides a graphical representation of these noise levels as noise contours.

Table B.3.12-2. Downs Substation Operational Noise Levels

Number	Location	Operational Daytime Noise Levels (dBA Leq)	Operational Nighttime Noise Levels (dBA Leq)	Peak Operational Noise Levels (dBA Leq)
1	Southeastern Property Line	57.3	53.6	60.9
2	Southern Property Line	61.2	57.2	64.6
3	Southwestern Property Line	55.7	51.6	59.1
4	Western Property Line	57.4	53.4	60.8
5	Northwestern Property Line	56.8	52.6	60.1
6	Northern Property Line	65.2	61.2	68.6
7	Northeastern Property Line	59.2	55.9	63.2
8	Eastern Property Line	60.8	57.7	64.9

Note: Number corresponds to location on Figure B.3.12-2.
Source: SCE, 2010a.

The Downs Substation is located within the city of Ridgecrest and is regulated by the Kern County General Plan Noise Element operational noise limitations. As shown, only modeling location number six located along the northern property line would exceed 65 dBA Ldn. The land located nearest to this location is separated from the substation by Ridgecrest Boulevard and is zoned for commercial use, which is not considered a noise sensitive land use receptor according to Section 3.2 of the Kern County General Plan Noise Element. As shown in Figure B.3.12-2, no adjacent parcels would be subject to a 65 dBA level contour. Therefore, operation of the substation would be consistent with the Kern County General Plan Noise Element performance standards. Less-than-significant noise impacts from Downs Substation operation would occur with regards to violations of applicable standards.

A transmission or subtransmission line in operation generates an electric field in the air surrounding the conductors forming a "corona." Audible noise generated by corona discharge is characterized as a hissing or crackling sound that may be accompanied by a 120 Hertz hum. The proposed 115-kV subtransmission line segments, which would go into and out of the Downs Substation would generate corona discharge with noise levels estimated at less than 33.5 dBA (SCE, 2010a). A noise level of this magnitude would be indistinguishable from background ambient noise within the existing environment, where ambient noise levels were measured to be 64.5 dBA Leq daytime and 58.8 dBA Leq nighttime (SCE, 2010a). Additionally, operation of the proposed fiber optic telecommunication cable and associated equipment would not generate noise (SCE, 2010a). Therefore, operation of the proposed 115-kV subtransmission and telecommunication lines would be in compliance with Kern County General Plan Noise Element and San Bernardino County Code of Ordinance Section 83.01.080(c) performance standards.

Operation of the Proposed Project would include routine short-term inspection and maintenance of the facilities. Although the proposed Downs Substation expansion would be unmanned and remotely monitored, routine maintenance activities would occur three to four times per month and would consist of testing, monitoring, and repairing equipment (SCE, 2010a). Maintenance of the 115-kV subtransmission line would occur on an as-needed basis, and activities would include repairing conductors, replacing insulators, replacing poles, and maintaining the access roads. Because these activities would involve limited amounts of activity for only brief amounts of time, they would not contribute to any permanent increase in ambient noise levels in the area. Therefore, maintenance and repair activities would have a less-than-significant impact with regards to violations of applicable standards.

Mitigation Measure for Construction Noise Standards

N-1 **Obtain necessary variance for construction noise**. SCE shall obtain a temporary variance (when necessary) for construction activities that would exceed allowable hours of construction equivalent to those of the Kern County Municipal Code Section 8.36.020 - Prohibited Sounds and San Bernardino County Code of Ordinances Title 8, Section 83.01.080(g)

b. Would the Project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

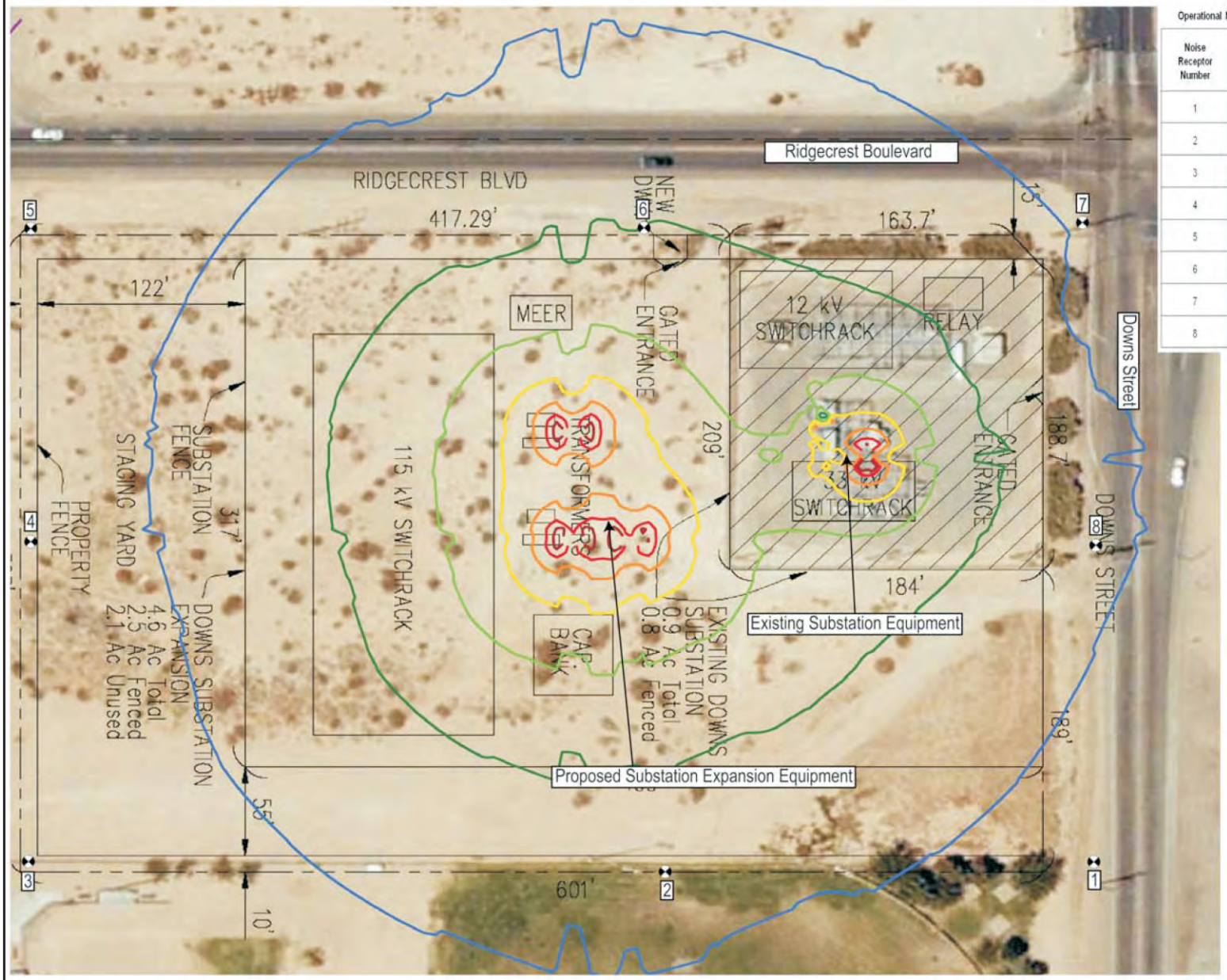
LESS THAN SIGNIFICANT.

Construction. Construction of the proposed Downs Substation expansion, installation of the new 115-kV subtransmission line into and out of the Downs Substation, replacement of six poles near Trona along the existing 115-kV subtransmission line, and installation of the fiber optic telecommunication cable along the existing 115-kV subtransmission line routes would all include the use of equipment that would generate a varying amount of groundborne vibration. Possible sources of vibration may include large trucks for equipment and material deliveries, graders, dump trucks, backhoes, and compactors, among others.

The applicable Kern County and San Bernardino County regulations do not include performance standards for vibration. According to Federal Transit Administration (FTA) guidelines a vibration level of 65 VdB[5] is the threshold of perceptibility for humans and 80 VdB is the level for a significant impact to occur (SCE, 2010a). Based on the estimated vibration levels published by the FTA for the types of construction equipment proposed for use, coupled with the distance to the existing identified noise sensitive receptors, analysis shows that all identified sensitive receptors would be below a vibration level of 65 VdB (SCE, 2010a). Therefore, construction of the Proposed Project is considered to have a less-than-significant vibration impact.

Operation. Operation of transformers at the proposed Downs Substation expansion could produce groundborne vibration; however, groundborne vibrations would be perceptible only in the immediate vicinity (i.e., within 25 feet) of the transformer pad, if at all (SCE, 2010a). No other component of the Proposed Project would generate vibrations during operation. Routine maintenance activities and emergency repairs would be unlikely to produce groundborne vibration in excess of those described above for Project construction. Thus, impacts resulting from groundborne vibration during operation of the Proposed Project would not be significant.

[5] Vibration velocity level is reported in decibels relative to a level of $1x10^{-6}$ inches per second and is denoted as VdB.



Operational Noise Levels for the Proposed Expanded Facility at the Project Property Lines

Noise Receptor Number	Noise Receptor Location	Operational Daytime Noise Levels (dBA Leq)	Operational Nighttime Noise Levels (dBA Leq)	Operational Noise Levels (dBA Ldn)
1	Southeastern Property Line	57.3	53.6	60.9
2	Southern Property Line	61.2	57.2	64.6
3	Southwestern Property Line	55.7	51.6	59.1
4	Western Property Line	57.4	53.4	60.8
5	Northwestern Property Line	56.8	52.6	60.1
6	Northern Property Line	65.2	61.2	68.6
7	Northeastern Property Line	59.2	55.9	63.2
8	Eastern Property Line	60.8	57.7	64.9

Source: SCE, 2010.

Figure B.3.12-2

Aerial Image Showing Noise Impact Contours from Proposed Facility Operations

c. Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

LESS THAN SIGNIFICANT. As discussed above in Section B.3.12(a), permanent operational noise associated with Project equipment in excess of existing ambient noise levels is limited to modeling receptor number six located along the northern property line. The land located nearest to this location is separated from the substation by Ridgecrest Boulevard and is zoned for commercial use, which is not considered a noise sensitive land use receptor according to Section 3.2 of the Kern County General Plan Noise Element. As shown in Figure B.3.12-2, the adjacent parcels to the north and south of the Downs Substation would be subject to a 60 dBA level contour. The land located north is zoned for commercial use, and is not considered a noise sensitive land use receptor. While the land to the south is a recreational use, this contour extends only slightly into a baseball outfield and is not expected to be noticeable over existing ambient conditions (64.5 dBA Leq daytime and 58.8 dBA Leq nighttime). Because of this, both daytime and nighttime substation noise (as presented in Table B.3.12-2) is not expected to result in a significant increase to the ambient noise level over existing conditions.

As discussed above in Section B.3.12(a), operation of the proposed 115-kV subtransmission line segments and fiber optic telecommunication cable would generate less noise than ambient conditions. Because maintenance and repair activities would involve limited amounts of activities for only brief amounts of time, they would not contribute to any permanent increase in ambient noise in the area. In summary, less-than-significant noise impacts from Project operation would occur with regards to a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

d. Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. Typical maximum noise levels for anticipated construction equipment to be used for the Proposed Project at 50 feet from the source are shown in Table B.3.12-3.

Table B.3.12-3. Typical Construction Equipment Noise Levels

Equipment	Noise Level (dBA) at 50 Feet
Backhoe	80
Concrete Mixer	85
Pump Truck	82
Crane, Mobile	85
Dozer	85
Excavator	85
Generator	82
Grader	85
Man Lift	85
Loader	80
Paver	85
Roller	85
Scraper	85
Trucks	80-84

Source: SCE, 2010a.

As shown in Table B.3.12-3, the maximum intermittent construction equipment noise levels are expected to range between 80 and 85 dBA at approximately 50 feet. Based on construction noise modeling, the highest combined predicted noise level for construction equipment associated with the

Project would be 75.6 dBA at 50 feet from the grading operations at the proposed Downs Substation expansion and access road locations, and 84.0 dBA at 50 feet during the installation of wood poles, light weight steel poles, and tubular steel poles (SCE, 2010a). The removal of poles and other activities would be less intensive and would generate lower noise levels than the previously identified activities. Noise levels would be further attenuated due to the distance of existing residential noise sensitive receptors and by additional attenuation from intervening structures and/or vegetation.

Noise impacts associated with construction would primarily affect those receptors located closest to the proposed Downs Substation expansion location and construction staging areas. Calculations show that noise traveling 900 feet to the nearest existing residential structure from the proposed Downs Substation expansion location would be attenuated to a noise level of 58.2 dBA (SCE, 2010a).

Installation of new poles along the existing 115-kV subtransmission line routes may occur as close as 100 feet from residences; however, calculations show that this added distance when compared to the noise levels presented in Table B.3.12-3 (shown at 50 feet) would attenuate to approximately 78.5 dBA (SCE, 2010a). Noise levels associated with pole installation would be short in duration, as it typically takes one to three days to erect poles depending on the type of pole selected (SCE, 2010a). Additionally, noise would be generated at pulling locations of fiber optic cable and at subtransmission line stringing locations.

While construction noise performance standards are not identified by either Kern County or San Bernardino County applicable plans or regulations, construction noise would be noticeable over existing ambient conditions to nearby receptors. To ensure that construction noise is reduced to the maximum extent feasible, Mitigation Measure N-2 (Avoid unnecessary construction noise) is proposed. In addition, Mitigation Measure N-1 (Obtain necessary variance for construction noise) would require a variance be obtained for construction noise not occurring in accordance with the time restrictions established by the Counties of Kern and San Bernardino. Therefore, with the implementation of these measures, less-than-significant temporary construction impacts would occur as a result of the Proposed Project.

Mitigation Measure for Construction Noise

N-2 Avoid unnecessary construction noise. During construction SCE shall implement the following appropriate noise controls during construction:

- Limit noise generating activities to the hours of 7:00 a.m. and 7:00 p.m. when occurring within 500 feet of a residence or other noise-sensitive land use.
- Use only internal combustion engine-driven equipment equipped with intake and exhaust mufflers in good condition and appropriate for the equipment.
- Limit unnecessary idling of construction equipment.
- Where feasible, construction traffic shall be routed to avoid noise-sensitive areas, such as residences, schools, religious facilities, hospitals, and parks.
- Inform property owners within 300 feet of the project area of anticipated noise disturbances at least two to four weeks prior to construction, including a contact number to register noise complaints.
- Provide a project hotline where residents can call with questions or issues. All calls shall be returned by SCE and/or its contractor within 24 hours to answer noise questions and handle complaints. Documentation of the complaint and resolution shall be submitted to the CPUC monthly.

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

LESS THAN SIGNIFICANT. Inyokern Airport (public) is located 1.5 miles west of the westernmost segment of the proposed telecommunication cable route within Kern County, while China Lakes Naval Weapons Center Airport (private military) is located 2.2 miles north of the northernmost segment of the proposed telecommunication cable route within the city of Ridgecrest. Additionally, Trona Airport (public) is located 2.5 miles northeast of the northernmost segment of the proposed telecommunication cable route in Trona.

Aviation related noise hazards for people working in the Project area are expected to be less than significant with respect to the Project's proximity to a public or military use airport. Due to the distance of the work areas from these airport facilities, noise from aircraft operations (while a part of the ambient noise conditions) would not pose a risk from excessive noise levels. Additionally, the Project does not include the construction of any residential/commercial use or require permanent employment stationed at any Project facility. Therefore, less-than-significant impacts from public or private airport use noise to construction workers would occur.

f. For a Project within the vicinity of a private air strip, would the Project expose people residing or working in the Project area to excessive noise levels?

NO IMPACT. A review of the Project area did not identify any private air strip facilities. Therefore, no impacts from private use air strip noise to workers would occur.