

## E.3.8 Noise

### E.3.8.1 Environmental Setting

**Ambient Noise Levels.** Varying noise levels occur in the Route D Alternative area. Rural communities or unpopulated lands are the quietest, but noise can be sporadically elevated in localized areas where influenced by on-road traffic or aircraft. Natural noise levels absent human activity are generally low. Unpopulated natural areas are expected to be as low as 35 to 50 dBA, and ambient levels tend to be below 50 dBA in open areas. Noise levels in the region are the highest (over 80 dBA) adjacent to major transportation facilities like freeways and highways (such as I-8). Parallel to the existing 500 kV Southwest Powerlink transmission line, corona noise can be heard as a crackling or hissing sound at levels of approximately 50 dBA.

**Noise-Sensitive Receptors.** Residences are near the alternative route near Descanso, along Boulder Creek Road. Approximately 5 residences are within 1,000 feet of the alternative 500 kV line near Descanso. The remainder of the route occurs on national forest and open space, which provides a rural and natural setting, but is not noise-sensitive. Recreational land uses within the Cleveland National Forest (CNF) that would be noise-sensitive include: the California Riding and Hiking Trail near MP D-1.2; and the Trans-County Trail. Wildlife that is sensitive to noise and the related impacts are discussed as part of Biological Resources (see Section E.3.2.3, Impacts B-7 and B-12). See Table E.3.4-1, Land Use, for the land uses in the vicinity of this alternative, and Table E.3.4-2 identifies sensitive uses.

#### Applicable Regulations, Plans, and Standards

See Section D.8.3.3 for the noise ordinances and limitations within unincorporated San Diego County.

### E.3.8.2 Environmental Impacts and Mitigation Measures

Table E.3.8-1 summarizes the impacts of the Route D Alternative for noise.

**Table E.3.8-1. Impacts Identified – Alternatives – Noise**

Impact No.	Description	Impact Significance
<b>Route D Alternative</b>		
N-1	Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	Class I
N-2	Construction activity would temporarily cause groundborne vibration	Class III
N-3	Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components	Class I
N-4	Routine inspection and maintenance activities would increase ambient noise levels	Class I
<b>Central South Substation Alternative</b>		
N-1	Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances	Class I
N-2	Construction activity would temporarily cause groundborne vibration	No Impact
N-3	Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components	Class III
N-4	Routine inspection and maintenance activities would increase ambient noise levels	Class I

## Construction Impacts

### ***Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances (Class I)***

Construction of the Route D Alternative would temporarily substantially increase ambient noise levels in the vicinity of the alternative overhead line, along the alternative route, and along all transport access routes, and it would result in construction noise impacts identical to those of the proposed 500 kV transmission line but in the vicinity of otherwise unaffected residences and recreational uses. Construction noise would result in a significant impact by causing substantial noise increases at rural residences and other noise-sensitive uses. SDG&E would implement NOI-APM-1 to notify sensitive receptors. Although NOI-APM-1 includes steps to notify the affected community, this impact would be significant without additional measures. In addition to the notification process suggested in NOI-APM-1, Mitigation Measure L-1a would be implemented as it is more comprehensive (see Section D.4, Land Use). By establishing best management practices for activities likely to violate local noise standards, Mitigation Measure N-1a, in combination with the notification required by Mitigation Measure L-1a, would reduce this impact to the extent feasible, but the substantial noise increase from construction would be significant and unavoidable (Class I).

### ***Mitigation Measures for Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances***

**L-1a Prepare Construction Notification Plan.**

**N-1a Implement best management practices for construction noise.**

### ***Impact N-2: Construction activity would temporarily cause groundborne vibration (Class III)***

A groundborne vibration impact would occur in the immediate vicinity of construction sites. Absent advance notification, a nuisance or annoyance could occur with perceptible vibration, but physical damage would not occur because no vulnerable structures would be close enough to the drilling. Blasting is not expected to be necessary for the Route D Alternative. The notification process suggested in NOI-APM-1 would reduce the likelihood of a nuisance or annoyance occurring. With notification, the impacts from construction-related groundborne vibration would be adverse but not excessive, and this impact would be less than significant (Class III).

## Operational Impacts

### ***Impact N-3: Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components (Class I)***

Operational noise from the corona effect would cause a substantial permanent increase of more than 5 dBA within 500 feet of the alternative 500 kV ROW and in natural areas where existing noise levels could be as low as 35 dBA. This would result in a significant impact. Mitigation Measure N-3a would help to minimize the nuisance experienced at residences and recreational uses that are near the edge of the Route D Alternative ROW to the extent feasible, but the noise increase would remain and create an infrequent but significant and unavoidable impact (Class I).

### ***Mitigation Measure for Impact N-3: Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components***

**N-3a Respond to complaints of corona noise.**

***Impact N-4: Routine inspection and maintenance activities would increase ambient noise levels (Class I)***

Helicopter and ground-level inspection and maintenance, including occasional emergency repairs, would result in substantial temporary periodic increases in noise levels above existing levels identical to transmission line construction. Inspection and maintenance noise would be intermittent over the life of the line. However, helicopters and other equipment within 200 feet of sensitive receptors would periodically cause a substantial increase in noise over conditions occurring without the Proposed Project resulting in a significant impact. Because the need for emergency response cannot be predicted and advance notification or restricting the noise from work to daytime hours would not be practical, this would be a significant and unavoidable impact (Class I).

### E.3.8.3 Central South Substation Alternative

#### Environmental Setting

**Noise-Sensitive Receptors.** One rural residence is located within 1,000 feet of the Central South Substation Alternative site. See Section E.3.8.2 for the noise-sensitive receptors that occur along the Route D Alternative, which includes this substation site.

#### Environmental Impacts and Mitigation Measures

The Central South Substation Alternative would cause construction and operational noise that could affect nearby receptors, but a groundborne vibration impact (Impact N-2) would not occur at any sensitive location because of sufficient distance.

#### Construction Impacts

***Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances (Class I)***

Construction of the Central South Substation Alternative would cause substantial noise from grading and access road construction along with other construction activities identical to those of the proposed Central East Substation (Section D.8). Noise from access road traffic would also occur, although not within 200 feet of a residence. Substation construction noise would result in a significant impact by causing substantial noise increases for the nearest rural residence. Although SDG&E would implement NOI-APM-1 to notify sensitive receptors, this impact would be significant without additional measures. In addition to the notification process suggested in NOI-APM-1, Mitigation Measure L-1a would be implemented as it is more comprehensive (see Section D.4, Land Use). By establishing best management practices for activities likely to violate local noise standards, Mitigation Measure N-1a, in combination with the notification required by Mitigation Measure L-1a, would reduce this impact to the extent feasible, but the substantial noise increase from construction would be significant and unavoidable (Class I).

***Mitigation Measures for Impact N-1: Construction noise would substantially disturb sensitive receptors and violate local rules, standards, and/or ordinances***

**L-1a Prepare Construction Notification Plan.**

**N-1a Implement best management practices for construction noise.**

## Operational Impacts

### ***Impact N-3: Permanent noise levels would increase due to corona noise from operation of the transmission lines and noise from other project components (Class III)***

The Central South Substation Alternative would introduce permanent noise sources such as transformers, reactors, circuit breakers, and other equipment to an existing rural and natural setting. The characteristic noise caused by the substation would be a low-frequency humming sound with occasionally louder impulse sounds during switching of a breaker. Noise from the substation would need to comply with San Diego County standards. The nearest residential property would be shielded by terrain and sufficiently distant from the substation equipment that the permanent increase in ambient noise from operation of the substation would not exceed five dBA, and operational substation noise would not cause a significant impact (Class III).

### ***Impact N-4: Routine inspection and maintenance activities would increase ambient noise levels (Class I)***

Routine inspection and maintenance, including occasional emergency repairs, of the Central South Substation Alternative would occasionally cause minor noise at the substation and along the access road to the substation. The light-duty crew trucks that would be used during inspection activities would typically generate noise levels under 75 dBA at 50 feet. Because maintenance activities would occasionally involve noise at levels identical to substation construction, maintenance would periodically cause a substantial increase in noise. This would result in a significant and unavoidable impact (Class I).

## E.3.8.4 Future Transmission System Expansion

For the Proposed Project and route alternatives along the Proposed Project route, Section B.2.7 identifies Future Transmission System Expansion routes for both 230 kV and 500 kV future transmission lines. These routes are identified, and impacts are analyzed in Section D of this EIR/EIS, because SDG&E has indicated that transmission system expansion is foreseeable, possibly within the next 10 years. For the SWPL alternatives, 500 kV and 230 kV expansions would also be possible. The potential expansion routes for the Route D Alternative are described in the following paragraphs.

### ***230 and 500 kV Future Transmission System Expansion***

The Route D Alternative would begin at approximately MP I8-70 and would head northward until it reached the Central South Substation Alternative at approximately MP 114.5 of the Proposed Project. The Route D Alternative would convert to 230 kV at the Central South Substation and a double-circuit 230 kV line would be constructed southwest from that substation to the Sycamore Canyon Substation. The Central South Substation would accommodate up to six 230 kV circuits and an additional 500 kV circuit. Only two 230 kV circuits are proposed at this time, but construction of additional 230 kV circuits and a 500 kV circuit out of the Central South Substation may be required in the future. There are two routes that are most likely for these future lines; each is addressed below. Figure E.1.1-6 illustrates the potential routes of the future transmission lines.

Additional 230 and 500 kV circuits could follow the Proposed Project corridor starting at MP 114.5. The routes could either: (1) follow the Proposed Project corridor southwest to the Chicarita Substation and then follow the Proposed Project's 230 kV Future Transmission Expansion System (see description in Section B.2.7) from Chicarita to the Escondido Substation; or (2) the Proposed Project northeast to the Proposed Central East Substation and then follow the Proposed Project's 500 kV Future Transmis-

sion Expansion route shown in Figure B-12b (see description in Section B.2.7). See Section D.8.2, D.8.7, D.8.8, and D.8.9 for the Noise setting, impacts, and mitigation measures for the Central, Inland Valley, and Coastal Links of the Proposed Project. See Section D.8.11 for the Noise setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.