

E.4.8 Noise

The Modified Route D Alternative route is described in Section E.4.1. It includes three main segments: a southwesterly segment that crosses BLM, CNF and private lands before reaching the Cameron Substation, a westerly segment that follows the southern boundary of the CNF, and a northerly segment that is primarily on CNF land and includes the Modified Route D Substation.

E.4.8.1 Environmental Setting

Ambient Noise Levels. Generally low noise levels occur in the area of the Modified Route D Alternative. 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. Near Interstate 8, noise levels are the highest (over 80 dBA).

Noise-Sensitive Receptors. Residences are near the alternative route near Pine Valley, Campo, Jamul, and Alpine. Approximately 90 residences are within 1,000 feet of the alternative 500 kV line in these communities and in the intervening rural areas. Recreational land uses within the BLM and the Cleveland National Forest (CNF) that would be noise-sensitive include: the Pacific Crest Trail (PCT) within CNF at MP-MD-10; and the CNF Hauser Wilderness South Expansion Area approximately 700 feet from the route near MP MD-13. The remainder of the route occurs on national forest land, which provides a rural and natural setting, but is not noise-sensitive. Wildlife that is sensitive to noise and the related impacts are discussed as part of Biological Resources (see Section E.4.2, Impacts B-7 and B-12). See Table E.4.4-1, Land Use, for the land uses in the vicinity of this alternative, and Table E.4.4-2 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.4.8.2 Environmental Impacts and Mitigation Measures

Table E.4.8-1 summarizes the noise impacts of the Modified Route D Alternative.

Table E.4.8-1. Impacts Identified – Alternatives – Noise

Impact No.	Description	Impact Significance
Modified Route D Alternative and Star Valley Option		
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 II, 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, III
N-4	Routine inspection and maintenance activities would increase ambient noise levels	Class I
Modified Route D Substation Alternative – <i>No Impact</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 Modified 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. Construction of the alternative 500 kV line would result in a significant impact by causing substantial noise increases for 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, the substantial noise increases 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). Establishing best management practices for activities likely to violate local noise standards, Mitigation Measure N-1a, and providing the advance 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). (See Appendix 12 for the full text of the mitigation measures.)

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)

Groundborne vibration 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 Modified 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, resulting 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 Modified 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 insulator washing, access road repair, and emergency response, would cause occasional noise at 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.4.8.3 Modified Route D Substation

Environmental Setting

Noise-Sensitive Receptors. No residences or otherwise noise-sensitive receptors are located within 1,000 feet of the Modified Route D Substation Alternative site, which is in a rural and natural setting.

Environmental Impacts and Mitigation Measures

Construction of the alternative substation would cause noise from grading and access road construction along with other construction activities identical to those for construction of the proposed Central East Substation. Noise from access road traffic would also occur, although not within 1,000 feet of a residence. Because no nearby noise-sensitive receptors would be affected, construction noise (Impact N-1, No Impact) would not cause any impact. Similarly, a groundborne vibration impact (Impact N-2) would not occur because of sufficient distance.

Operational activities would cause less than significant impacts because they would not cause any local ordinance to be violated or any notable change in existing noise levels. Noise from operating the new substation (Impact N-3, No Impact) and noise from inspection and maintenance (Impact N-4, No Impact) would not adversely affect any noise-sensitive receptors.

E.4.8.4 Star Valley Option

Environmental Setting

Noise-Sensitive Receptors. Two to three rural residences are located within about 400 feet of the overhead portion of the Star Valley Option, and approximately six additional residences along Star Valley Road would be within about 400 feet of the underground portion.

Environmental Impacts and Mitigation Measures

Construction Impacts

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

Construction noise would temporarily substantially increase ambient noise levels along the route of the Star Valley Option, at locations of excavation, and along all transport access routes. Tower construction for the overhead portion and excavation of the underground portion along Star Valley Road would occur

within 400 feet of rural residences. Construction noise would result in a significant impact by causing substantial noise increases at the rural residences. Establishing best management practices, Mitigation Measure N-1a, and providing the advance notification required by Mitigation Measure L-1a, would reduce the impact of construction noise to the extent feasible, but the substantial noise increase from construction would be significant (Class I). See Appendix 12 for the full text of the mitigation measures.

Mitigation Measure 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 II)

A significant groundborne vibration impact would occur in the immediate vicinity of construction sites, but with notification (Mitigation Measure L-1a) and a blasting plan that restores structures (Mitigation Measure N-2a), this impact would be reduced to a less than significant level (Class II).

Mitigation Measure for Impact N-2: Construction activity would temporarily cause groundborne vibration

L-1a Prepare Construction Notification Plan.

N-2a Avoid blasting where damage to structures could occur.

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)

Operational noise would not cause any local ordinance to be violated or any notable change in existing noise levels at any noise-sensitive receptor because the overhead 230 kV line would cause less than 40 dBA in corona noise, and no audible noise would be created by the underground portion. Corona noise from the overhead 230 kV line would be a less than significant impact (Class III).

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

Noise from maintenance activities, including occasional emergency repairs, would be identical to construction noise and would periodically cause a substantial increase in noise over conditions occurring without the alternative resulting in a significant and unavoidable impact (Class I).

E.3.8.5 PCT Reroute Option C/D

The PCT Reroute Option C/D is described in Section E.4.1.3 and illustrated on Figures E.4.1-1b and E.4.1-1c. This route option would diverge from the Modified Route D Alternative route at MP MRD-10.8 and rejoin the route at MP MRD-14.

Environmental Setting

Noise-Sensitive Receptors. Two rural residences are located within approximately 800 feet of the PCT Route Option C/D at its eastern end along Big Potrero Truck Trail. Like the segment of Modified

Route D it would replace (PCT Option A), recreational land uses within the Cleveland National Forest (CNF) that would be noise-sensitive include: the Pacific Crest Trail (PCT); and the CNF Hauser Wilderness South Expansion Area approximately 2,000 feet north of the route. The remainder of the route occurs south of national forest land, which provides a rural and natural setting, but is not noise-sensitive.

Environmental Impacts and Mitigation Measures

Construction Impacts

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

Construction noise would temporarily substantially increase ambient noise levels along the route of the PCT Route Option C/D, at locations of excavation, and along all transport access routes. Tower construction would occur within 800 feet of rural residences. Construction noise would result in a significant impact by causing substantial noise increases at the rural residences. Establishing best management practices, Mitigation Measure N-1a, and providing the advance notification required by Mitigation Measure L-1a, would reduce the impact of construction noise to the extent feasible, but the substantial noise increase from construction would be significant (Class I).

Mitigation Measure 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 II)

A significant groundborne vibration impact would occur in the immediate vicinity of construction sites, but with notification (Mitigation Measure L-1a) and a blasting plan that restores structures (Mitigation Measure N-2a), this impact would be reduced to a less than significant level (Class II).

Mitigation Measure for Impact N-2: Construction activity would temporarily cause groundborne vibration

L-1a Prepare Construction Notification Plan.

N-2a Avoid blasting where damage to structures could occur.

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)

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. Because no sensitive receptor would be located within 500 feet of the ROW of the PCT Route Option C/D, corona noise from the overhead 500 kV line would be a less than significant impact (Class III).

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

Noise from maintenance activities, including occasional emergency repairs, would be identical to construction noise and would periodically cause a substantial increase in noise over conditions occurring without the alternative resulting in a significant and unavoidable impact (Class I).

Comparison of Impacts: Modified Route D Alternative and PCT Reroute Option C/D

The Modified Route D Alternative from MP MRD-10.8 to MP MRD-14 and the PCT Reroute Option C/D Reroute would have similar impacts to sensitive receptors because the sensitive receptors for both the PCT Reroute Option C/D and the segment of the Modified Route D Alternative it replaces are located at the easternmost portion of the reroute, where the two routes are in close proximity. Corona noise impacts to recreationists along the PCT trail would be slightly greater with the Modified Route D Alternative because the trail is within 500 feet of the ROW for longer with the Modified Route D Alternative than it would be for the PCT Option C/D.

E.4.8.56 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 Modified Route D Alternative would begin at approximately MP I8-47 and would head southwest then northward until it reached the Interstate 8 Alternative at approximately MP I8-71. A substation could be built to convert the 500 kV line to 230 kV at approximately MD-34, the Modified Route D Substation Alternative. The double-circuit 230 kV line would exit the substation overhead, then continue north into the CNF, joining the Interstate 8 Alternative at approximately MP I8-71 where it transitions to underground at the east end of Alpine Boulevard. The Modified Route D Substation would accommodate up to six 230 kV circuits and a 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 Modified Route D Substation may be required in the future. There are three routes that are most likely for these future lines; each is described below. Figure E.1.1-6 illustrates the potential routes of the future transmission lines.

- Two additional 230 kV circuits could be installed underground within Alpine Boulevard, with appropriate compact duct banks and engineering to avoid, or possibly relocate, existing utilities. This route would follow the Interstate 8 Alternative route from the Interstate 8 Alternative Substation until MP I8-70.8 where it would transition underground until MP I8-79 where it would transition overhead again. The future transmission line route would continue to follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131. See Section E.1.8.1 and E.1.8.2 for the noise setting, impacts, and mitigation measures along the I-8 route. The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. See Section D.8.2,

D.8.8, and D.8.9 for the noise setting, impacts, and mitigation measures for the Inland Valley and Coastal Links. It could then follow the Proposed Project's 230 kV Future Transmission Expansion route (see description in Section B.2.7) from Chicarita to the Escondido Substation shown in Figure B-12a. See Section D.8.11 for the noise setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.

- Additional 230 and 500 kV circuits could follow the Route D Alternative corridor (see description in Section E.3.1) to the north of Descanso, after following the Interstate 8 Alternative 230 kV route from the Interstate 8 Substation to MP I8 70.3. See Section E.3.8.1 and E.3.8.2 for the noise setting, impacts, and mitigation measures along Route D. The Route D corridor would connect with the Proposed Project corridor at Milepost 114.5, and could then follow either: (1) the Proposed Project southwest to the Chicarita Substation and then follow the Proposed Project's 230 kV Future Transmission Expansion route (see description in Section B.2.7) from Chicarita to the Escondido Substation; or (2) the Proposed Project northeastward to the Proposed Central East Substation and then follow the Proposed Project's 500 kV Future Transmission 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.
- The future 230 and 500 kV lines could follow the Modified Route D Alternative corridor (within the 368 Corridor identified by the Department of Energy's Draft West-wide Corridor Programmatic EIS) south for 8 miles to MP MD-26. See Section E.4.8.1 and E.4.8.2 for the noise setting, impacts, and mitigation measures along Modified Route D. At MP MD-26, new 230 or 500 kV circuits would turn west and connect with the northernmost segment of the West of Forest Alternative route as described in Section E.1.1. See Section E.1.8.5 for the noise setting, impacts, and mitigation measures along MP MD-26 to MP I8-79 corridor. This route would meet up with the Interstate 8 Alternative at approximately MP I8-79 and would follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131 (for a description of the Interstate 8 transmission corridor see Section E.1.1). The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. It could 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. See Section D.8.11 for the noise setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.