

3.14 Noise

This section of the Draft Final Environmental Impact Report provides an overview of the existing noise environment in the proposed Eagle Mountain Pumped Storage Project (Project) area, a discussion of the applicable regulatory framework, and an analysis of potential noise impacts that could result from the short-term construction and long-term operation of the proposed Project. The noise analysis was conducted in accordance with published technical guidance, including Riverside County noise regulations and ordinances and the Federal Transit Administration.

3.14.1 Regulatory Setting

The proposed Project will be constructed and operated in conformance with all applicable federal, state, and local laws, ordinances, regulations, and standards (LORS). The following LORS apply to noise exposure standards.

Portions of the Project site are located on private lands which are not subject to federal or state land management requirements. Other portions of the Project site are located on federal land managed by the Bureau of Land Management (BLM) and therefore subject to the LORS of the agency. No federal or state regulatory settings pertaining to noise regulations apply to the proposed Project.

Most local jurisdictions have noise exposure standards designed to ensure that noise does not excessively impact the quality of life of its citizens. Regulation of noise in the proposed Project area is implemented through general plan policies and noise ordinances. The Riverside County General Plan (RCGP, 2003) identifies policies and standards intended to direct planning effects associated with new developments, while Riverside County's noise ordinances establish standards and procedures for addressing specific noise sources.

Riverside County General Plan. The Riverside County Noise Element identifies land use compatibility noise levels to ensure acceptable noise environments for each land use within unincorporated Riverside County (Table 3.14-1). The noise element also identifies the following noise compatibility, noise mitigation strategy, stationary noise, and temporary construction policies that may be applicable to the proposed Project.

Table 3.14-1. Riverside County Land Use Compatibility for Community Noise Exposure

Land Use Category	Community Noise Exposure Level L_{dn} or CNEL					
	55	60	65	70	75	80
Residential – Low Density Single Family, Duplex, Mobile Homes	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Residential - Multiple Family	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Transient lodging - Motels, Hotels	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Schools, Libraries, Churches, Hospitals, Nursing Homes	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Auditoriums, Concert Halls, Amphitheaters	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Sports Arenas, Outdoor Spectator Sports	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Playgrounds, Neighborhood Parks	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Office Buildings, Business, Commercial, and Professional	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable
Industrial, Manufacturing, Utilities, Agriculture	Normally Acceptable	Normally Acceptable	Normally Acceptable	Conditionally Acceptable	Conditionally Acceptable	Not Acceptable

3.14.1.1 Compatibility Categories



Normally Acceptable: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment will seem noisy.



Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made with needed noise insulation features included in the design. Outdoor areas must be shielded.



Clearly Unacceptable: New construction or development should generally not be undertaken. Construction cost to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

3.14.1.2 Noise Compatibility Policies

Policy N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or blockwalls shall be used.

Policy N 1.2 Guide noise-tolerant land uses into areas irrevocably committed to land uses that are noise-producing, such as transportation corridors or within the projected noise contours of any adjacent airports.

Policy N 1.3 Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL:

- Schools
- Hospitals
- Rest Homes
- Long-Term Care Facilities
- Mental Care Facilities
- Residential Uses
- Libraries
- Passive Recreation Uses
- Places of Worship

According to the state of California Governor’s Office of Planning and Research General Plan Guidelines, an acoustical study may be required in cases where these noise-sensitive land uses are located in an area of 60 CNEL or greater. Any land use that is exposed to levels higher than 65 CNEL will require noise attenuation measures. Areas around airports may have different noise standards than those cited above.

Policy N 1.4 Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

- Policy N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.
- Policy N 1.6 Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise sensitive uses.
- Policy N 1.7 Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and project design features that will adequately mitigate the noise problem.
- Policy N 1.8 Limit the maximum permitted noise levels that cross property lines and impact adjacent land uses, except when dealing with noise emissions from wind turbines.

3.14.1.3 Noise Mitigation Strategy Policies

- Policy N 2.3 Mitigate exterior and interior noises to the levels listed in the table below (Table 3.14-2) to the extent feasible, for stationary sources.

Table 3.14-2. Riverside County Stationary Source Noise Standards at Residential Uses

Time Period	Interior Standards	Exterior Standards
10:00 p.m. to 7:00 a.m.	40 L_{eq} (10 minute)	45 L_{eq} (10 minute)
7:00 a.m. to 10:00 p.m.	55 L_{eq} (10 minute)	65 L_{eq} (10 minute)

3.14.1.4 Stationary Noise Policies

- Policy N 4.1 Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:

(a) 45 decibel scale (dBA)¹ -10-minute Equivalent Sound Level (L_{eq})² between 10:00 p.m. and 7:00 a.m.

(b) 65 dBA-10-minute L_{eq} between 7:00 a.m. and 10:00 p.m.

- Policy N 4.4 Require that detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources.

¹ A decibel (dB) is a unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level commonly referred to as “sound level” measured in dB. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels.

² The Equivalent Sound Level (L_{eq}) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time-varying sound energy in the measurement period.

Policy N 4.5 Encourage major stationary noise-generating sources throughout Riverside County to install additional noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest extent practicable prior to the renewal of Conditional Use Permits or business licenses or prior to the approval and/or issuance of new Conditional Use Permits for said facilities.

Policy N 4.7 Evaluate noise producers for the possibility of pure-tone producing noises. Mitigate any pure tones that may be emitted from a noise source.

3.14.1.5 Temporary Construction Policies

Policy N 12.1 Minimize the impacts of construction noise on adjacent uses within acceptable practices.

Policy N 12.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.

Policy N 12.4 Require that all construction equipment utilizes noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

3.14.1.6 Riverside County Noise Ordinance

Riverside County Ordinance 847, Regulating Noise, identifies general noise level standards that are not to be exceeded within Riverside County (2009). For example, the maximum noise level standards that would be applicable to sensitive receptor locations in the vicinity of the proposed Project area (i.e., rural residences and the school in the Eagle Mountain townsite) are 55 dBA from 7:00 a.m. to 10:00 p.m. and 45 dBA from 10:00 p.m. to 7:00 a.m.

Pursuant to Ordinance 847, Section 6, part b., no person shall operate any power tools or equipment between the hours of 10:00 p.m. and 8:00 a.m. such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than 100 feet from the power tools or equipment.

Noise levels from the following sources are exempt from the provisions of Ordinance 847:

- a. Private construction projects located $\frac{1}{4}$ of a mile or more from an inhabited dwelling.
- b. Private construction projects located within $\frac{1}{4}$ of a mile from an inhabited dwelling, provided that:
 1. Construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September.

2. Construction does not occur between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May.
- c. Motor vehicles, other than off-highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems

3.14.2 Existing Conditions

The general Project vicinity is located approximately 10 miles north-northwest of Desert Center in Riverside County, California. The study area is remote with noise levels that are relatively low, estimated to average between 35 and 45 dBA. The main noise source in the area is vehicle noise on nearby roads, including Interstate 10 (I-10), Eagle Mountain Road, and Kaiser Road. Vehicle noises can range up to 80 dBA, depending on the distance from the source.

Ambient Leq noise measurement data were last collected in the Project area for the review for the proposed Eagle Mountain Landfill project (Riverside County and BLM, 1996). Although these data are more than 13 years old, the ambient conditions in the study area are largely the same, with the exception that at the time of the measurements, a state-run correctional facility utilized some of the buildings at the Eagle Mountain townsite. That state-run correctional facility has since relocated from the site. Ambient Leq noise levels at the Eagle Mountain townsite were measured to be between 38 and 63 dBA, depending on the distance of the measurement locations to Kaiser Road. Now that the correctional facility is not located at the site, it is anticipated that existing average ambient noise levels are closer to the lower level of the measured range. Ambient Leq noise levels in the vicinity of the communities of Lake Tamarisk and Desert Center were measured to be moderately higher than those in the immediate Project area, ranging between 54 and 60 dBA and 66 and 70 dBA, respectively. The ambient Leq noise level near I-10 at Kaiser Road was measured to be 73 dBA.

3.14.2.1 Sensitive Receptors

For the purposes of noise analyses, sensitive receptors are generally defined as land uses that are sensitive to noise, such as residential areas, schools, convalescent and acute care hospitals, some parks and recreational areas, and churches and other religious facilities.

The 460-acre remnants of the Eagle Mountain townsite are fenced with public access prohibited. The mostly vacated townsite is located adjacent to Kaiser Road, a two-lane county roadway which is the access road leading to the core Project area (reservoirs, powerhouse and switchyard). A school is still operated within the townsite. In the surrounding area, numerous unpaved roads intersect Kaiser Road, leading to rural residences.

Two other small communities in the area are Lake Tamarisk and Desert Center, located approximately 9 and 10 miles southeast of the general Project vicinity. Lake Tamarisk consists of approximately 70 single family dwellings, an executive golf course, and a recreational vehicle park. Desert Center is located at the junction of I-10 and State Route 177. Desert Center consists of a few small single-family dwellings and a few commercial buildings. Both communities, as

well as the Eagle Mountain townsite, are accessed by Kaiser Road, which connects to I-10 at Desert Center.

The closest sensitive receptors to the general Project vicinity is the Eagle Mountain townsite school, and residences approximately 4 miles to the south-southeast and southeast of the site, along Eagle Mountain Road/Phone Line Road and Kaiser Road, respectively. However, a few of these sensitive receptors are within approximately 200 feet of the proposed electric transmission line route along Eagle Mountain Road and the water supply line route that would parallel a segment of Kaiser Road.

In addition to the sensitive receptors described above, the general Project vicinity is located south and east of the Joshua Tree National Park (JTNP), which encompasses approximately 558,000 acres of land and is a popular location for recreational activities such as hiking and camping in solitude. The Project site is located approximately 1.5 miles from the closest JTNP boundary.

3.14.3 Potential Environmental Impact

3.14.3.1 Methodology

To describe noise environments and to assess impacts on noise-sensitive areas, a frequency weighting measure which simulates human perception is commonly used. It has been found that A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted dBA is cited in most noise criteria. Decibels are logarithmic units that conveniently compare the wide range of sound intensities to those that the human ear is most sensitive. Table 3.14-3 identifies dBA levels of typical noise environments.

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are the equivalent A-weighted sound level over a given time period (Leq); average day-night 24-hour average sound level (Ldn)³ with a nighttime increase of 10 dBA to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL),⁴ also a 24-hour average that includes both evening and nighttime weighting factors.

³ Ldn is the day-night average sound level that is equal to the 24-hour A-weighted equivalent sound level obtained by addition of 10 decibels to the sound levels in the night between 10:00 p.m. and 7:00 a.m.

⁴ CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels to sound levels in the evening from 7:00 to 10:00 p.m., and addition of 10 decibels to sound levels in the night between 10:00 p.m. and 7:00 a.m.

Table 3.14-3. A-Weighted (dBA) Sound Levels of Typical Noise Environments

A-Weighted	<u>Overall Level</u>	Noise Environment
120	Uncomfortably Loud (32 times as loud as 70 dBA)	Military jet takeoff at 50 feet
100	Very loud (8 times as loud as 70 dBA)	Jet flyover at 1,000 feet
80	Loud (2 times as loud as 70 dBA)	Propeller plane flyover at 1,000 feet; diesel truck 40 mph at 50 feet
70	Moderately loud	Freeway at 50 feet from pavement edge; vacuum cleaner (indoor)
60	Relatively quiet (1/2 as loud as 70 dBA)	Air conditioning unit at 10 feet; dishwasher at 10 feet (indoor)
50	Quiet (1/4 as loud as 70 dBA)	Large transformers; small private office (indoor)
40	Very quiet (1/8 as loud as 70 dBA)	Bird calls; lowest limit of urban ambient sound
10	Extremely quiet (1/64 as loud as 70 dBA)	Just audible
0	Threshold of hearing	

3.14.3.2 Thresholds of Significance

The State Water Resources Control Board (State Water Board) concludes that the Project may have significant noise impacts if it does any of the following:

- (a) Expose persons or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standard of other agencies
- (b) Expose persons or generate excessive ground-borne vibrations or ground borne noise levels
- (c) Substantially and permanently increase ambient noise levels in the Project vicinity above baseline levels
- (d) Result in a significant increase in noise levels at sensitive receptors in the area;
- (e) Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above baseline levels
- (f) Be located within an airport land use plan or, where such plan has been adopted, within 2 miles of a public airport and therefore expose people residing or working in the Project areas to excess noise levels and/or
- (g) Be located within the vicinity of a private airstrip and therefore expose people residing or working in the Project area to excessive noise levels

3.14.3.3 Environmental Impact Assessment

3.14.3.3.1 *Construction Noise, Central Project Site*

Construction traffic will utilize Kaiser Road to access the core Project site, and will pass by the school at the Eagle Mountain townsite. The core Project area in which construction will take place (Upper and Lower Reservoir sites, the proposed pressure and tailrace tunnel locations, and the proposed powerhouse, switchyard, and reverse osmosis treatment sites) lies within the mined lands in which there are no sensitive land uses, such as residences, schools/churches, or parks. These sites are in or beneath mountainous terrain and mine tailings, approximately 1.5 to 4 miles from the nearest sensitive receptors (i.e., the school and rural residences along Kaiser Road and Eagle Mountain Road) and approximately 1.5 miles to the closest boundary of the JTNP. As noted above, sensitive receptors would be within approximately 200 feet of the preferred locations of the electric transmission line along Eagle Mountain Road and the water supply line that would parallel a segment of Kaiser Road.

Construction of the proposed components in the vicinity of the Upper and Lower Reservoir sites would result in an increase of noise levels that could be audible in the JTNP. During construction of proposed components, including the electric transmission line and water supply line, the highest noise generating activities are expected to be earth moving, including excavation, grading, and filling. For purposes of this noise analysis, it is anticipated that the majority of construction equipment that would be used to construct the Project would be mobile off-road equipment, including dozers, backhoes, graders, dump trucks, etc., which generate maximum noise levels of up to 88 dBA at 50 feet (FTA, 2006). The loudest piece of construction equipment is anticipated to be a stationary rock drill, which would generate maximum noise levels of 98 dBA at 50 feet.

Based on the assumed noise levels at 50 feet from the construction equipment, a standard acoustical equation that calculates the noise attenuation rate of approximately 7.5 dBA per doubling of distance to account for the absorption of noise waves due to ground surfaces such as soft dirt and bushes (Caltrans, 1998) was used to estimate the attenuation of noise based on the distance from the construction site to the nearest JTNP boundary and the nearest sensitive receptors.

Table 3.14-4 presents the estimated construction noise levels that would affect people at the nearest sensitive land uses to the reservoir sites (the general Project vicinity) and the preferred pipeline/transmission line routes. It should be noted that the estimated noise levels shown in Table 3.14-4 represent the worst-case scenario because the estimates do not account for noise attenuation due to the presence of natural sound barriers. Noise levels associated with construction activities at the reservoir sites would be expected to be at least 5 to 10 dBA lower at the nearest sensitive receptors due to the fact that most of the work would be completed at the bottom of the proposed reservoir sites where the line of sight between the construction activities and the receptors would be blocked.

Table 3.14-4. Minimum Distances (in feet) and L_{max} Noise Levels (in dBA) at Sensitive Land Uses

Project Component	Closest Distance to the Sensitive Land Use	L_{max} at 50 feet (Rock Drill/Dump Truck)	L_{max} at School and Closest Residence (Rock Drill/Dump Truck)
Reservoir Sites	1 - 4 miles (residences)	98/88	32/22
Reservoir Sites	1.5 miles (JTNP)	98/88	43/33
Pipeline/ Transmission Line	200 feet (residences)	98/88	83/73

As indicated in Table 3.14-4, maximum construction noise from the vicinity of the reservoir sites at the nearest residences are estimated to be 32 dBA during rock drilling and 22 dBA associated with other construction activities. These noise levels would likely not be audible at the nearby residences. The same construction activities would generate noise levels at the boundary of JTNP that would be up to 43 dBA. However, it should be noted that rock drilling, if necessary, would only generate loud noises during early stages of the construction and would be attenuated to undetectable levels when the excavation would proceed deep into the ground. Rock drilling activities may be audible at the boundary of JTNP; however, noise levels would be temporary, resulting in less than significant impacts.

3.14.3.3.2 *Construction Noise, Linear Features*

Maximum construction noise at the nearest sensitive receptors attributed to the transmission line and water pipeline would be adverse; however, it is anticipated that construction of the facilities would proceed in a linear fashion and construction noise impacts at any one location along the pipeline or transmission line route would only last for up to several weeks.

Construction of the Project would also create increased traffic on local roads. Increased traffic would be generated from the movement of workers, materials, and equipment to the site. The primary routes used to access the Project site would be I-10 and Kaiser Road. Workers coming to the site would utilize these routes. Given the existing low volumes of traffic levels along Kaiser Road, construction traffic would result in an increase in noise levels at residences along the road, which would result in adverse temporary impacts. Based upon aerial photographs, about 20 residences would be affected by the increased traffic along Kaiser Road.

Standard compliance with the applicable County of Riverside noise ordinance codes during construction should minimize the effects of noise levels during construction (LORS). In addition, MM N-1 will reduce the effects of construction on noise levels include equipping all construction equipment with properly operating and maintained noise mufflers and intake silencers, consistent with manufacturers' standards.

3.14.3.3.3 *Operational Noise*

The long-term operation of the proposed Project would result in a minimal increase in road traffic and would not substantially increase ambient noise levels along Kaiser Road. The proposed powerhouse would be located underground and would not affect noise levels aboveground.

Under wet weather conditions, high-tension transmission lines may generate audible noises known as corona discharge. The audible noise emitted from high-voltage lines is caused by the discharge of energy that occurs when the electrical field strength on the conductor surface is greater than the “breakdown strength” (the field intensity necessary to start a flow of electric current) of the air surrounding the conductor. The degree or intensity of the corona discharge and the resulting audible noise are affected by humidity, air density, wind, and water in the form of rain, drizzle, and fog. Water increases the conductivity of the air and therefore increases the intensity of the discharge. Also, irregularities on the conductor surface such as nicks or sharp points and airborne contaminants can increase the corona activity. Aging or weathering of the conductor surface generally increases the significance of these factors.

The higher voltages at which modern transmission lines operate have increased the noise problem to the point to which they have become a concern to the power industry. Consequently, these lines are now designed, constructed, and maintained so that during dry conditions they would operate below the corona-inception voltage, meaning that the line would generate a minimal amount of corona-related noise. In foul weather conditions, however, corona discharges can be produced by water droplets, fog, and snow.

Based on a review of other high voltage power lines that have been proposed in California, corona noise at the edge of the right-of-way (i.e., 100 feet from the centerline of the transmission line) of a 500 kilovolt (kV) transmission line would range from 45 to 50 dBA. At 200 feet from the transmission line, this would equate to a noise level range of approximately 37 to 43 dBA. This low level hissing or crackling would only be noticeable in wet weather conditions in close proximity to the line and is considered to be less than significant, particularly in this desert environment in which wet weather is a rare exception.

Environmental Impact Assessment Summary:

- (a) *Would the project expose persons or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standard of other agencies?* No.
- (b) *Would the project expose persons or generate excessive ground-borne vibrations or ground borne noise levels?* No. The Project will not generate excessive ground-borne vibrations or noise.

- (c) *Would the project substantially and permanently increase ambient noise levels in the project vicinity above baseline levels?* No, noise will be generated primarily during construction.
- (d) *Would the project result in a significant increase in noise levels at sensitive receptors in the area?* There will be an increase in noise levels during construction, but this impact will be less than significant.
- (e) *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above baseline levels?* There will be a temporary increase in noise levels during construction, which will decline to near baseline conditions during Project operation.
- (f) *Would the project be located within an airport land use plan or, where such plan has been adopted, within two miles of a public airport and therefore expose people residing or working in the project areas to excess noise levels?* No.
- (g) *Would the project be located within the vicinity of a private airstrip and therefore expose people residing or working in the project area to excessive noise levels?* No.

Construction noise represents a temporary effect on ambient noise levels. The dominant source of noise from most construction equipment is engine noise. In a few cases, such as rock drilling or pavement breaking, noise generated by the process dominates (FTA, 2006).

Impact 3.14-1 Construction Noise, Central Project Site. The maximum construction noise coming from the Central Project Site would likely not be audible at the school or nearby residences. The same construction activities would generate noise levels at the boundary of JTNP that would be up to 43 dBA temporarily, resulting in a *less than significant* impact.

Impact 3.14-2 Construction Noise, Linear Features. The maximum construction noise at the nearest sensitive receptors attributed to the transmission line and water pipeline would be adverse for up to several weeks during construction, but due to the nature of linear facilities, only for several days at any one location. About 20 residences would be affected by noise from increased traffic along Kaiser Road during construction. This impact is *potentially significant impact and subject to the mitigation program* (MM N-1).

Impact 3.14-3 Operational Noise. The operation of the proposed Project would result in a minimal increase in road traffic and would not substantially increase ambient noise levels along Kaiser Road. This impact is *less than significant*. The proposed powerhouse would be located underground and would not affect noise levels aboveground. Noise from operation of the transmission line (low level hissing or crackling), could be adverse but would only be noticeable in wet weather conditions in close proximity to the line, and is a *less than significant* effect in this desert environment.

3.14.4 Mitigation Program

The mitigation program includes project design features (PDFs) and mitigation measures (MMs). PDFs are design elements inherent to the Project that reduce or eliminate potential impacts. Mitigation measures are provided to reduce impacts from the proposed Project to below a level of significance, where applicable. As appropriate, performance standards have been built into mitigation measures.

As mentioned under Regulatory Settings, LORS are based on local, state, or federal regulations or laws that are frequently required independent of the California Environmental Quality Act (CEQA) review, yet also serve to offset or prevent certain impacts. The proposed Project will be constructed and operated in conformance with all applicable federal, state, and local LORS.

MM N-1. The Contractor shall utilize construction equipment with properly operating and maintained noise mufflers and intake silencers, consistent with manufacturers' standards in order to reduce or avoid construction noise levels.

3.14.5 Level of Impact after Implementation of Mitigation Program

Impact 3.14-1 Construction Noise, Central Project Site. MM N-1 has been designed to reduce construction noise impacts. However, during construction there will be a temporary increase in noise along Kaiser Road. This temporary traffic noise increase will not exceed Riverside County standards, and is deemed to be a *less than significant impact*.

Impact 3.14-2 Construction Noise, Linear Features. There will be a short-term increase in noise during construction of the linear features. Implementation of MM N-1 will reduce construction noise impacts to a level of *less than significant*.

Impact 3.14-3 Operational Noise. This impact is *less than significant* and no mitigation is required.

No residual impacts to noise would occur with Project implementation.