BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) for a Permit to Construct Electrical Facilities With Voltages Between 50 kV and 200 kV: Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project

Application No

PROPONENT'S ENVIRONMENTAL ASSESSMENT CIRCLE CITY SUBSTATION AND MIRA LOMA-JEFFERSON 66 kV **SUBTRANSMISSION LINE PROJECT VOLUME 6 of 6**

(Chapters 4.12 through 6)

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4.12 Noise

This section assesses the potential noise and vibration impacts associated with the construction, operation, and maintenance of the Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project) and its alternatives. Construction of the Proposed Project has the potential to temporarily impact noise-sensitive receptors in the area. The potential noise impacts associated with the operation and maintenance of the Proposed Project would be less than significant.

4.12.1 Environmental Setting

The Proposed Project is located in Riverside County, California, primarily in the City of Corona, with other components also located in the cities of Eastvale, Norco, and Ontario, as well as in unincorporated Riverside County, as depicted in Figure 1-2: Existing and Proposed System Configuration in Chapter 1 – Purpose and Need. The Proposed Project would include the following major components:

- Construction of a new 66/12 kilovolt (kV) substation (Circle City Substation). The
 proposed Circle City Substation would be an unstaffed, automated, low-profile 56
 megavolt-ampere (MVA) substation with a potential capacity of 112 MVA at final buildout.
- Construction of four new 66 kV subtransmission source lines, including:
 - Two source lines in a double-circuit configuration, which would be a combination of overhead and underground construction. Each source line would be approximately 1.2 miles in length and would be created by connecting to the existing Chase-Corona-Databank 66 kV Subtransmission Line to form the new Circle City-Corona No. 2 66 kV Subtransmission Line and the new Chase-Circle City-Databank 66 kV Subtransmission Line.
 - Two source lines in a double-circuit configuration, which would be constructed overhead. Each source line would be approximately 3.5 miles in length and would be created by connecting to the existing Mira Loma-Corona-Pedley 66 kV Subtransmission Line to form the Mira Loma-Circle City-Pedley 66 kV and the Circle City-Corona No. 1 66 kV subtransmission lines.
- Construction of a new 66 kV subtransmission line, which would be a combination of both overhead and underground construction. The proposed Mira Loma-Jefferson 66 kV Subtransmission Line would be approximately 10.9 miles in length and would be constructed from Southern California Edison's (SCE's) existing Mira Loma Substation to a location adjacent to SCE's existing Corona Substation.
- Upgrade Mira Loma Substation to accommodate the new Mira Loma-Jefferson 66 kV Subtransmission Line.

- Construction of approximately six new underground 12 kV distribution getaways exiting the proposed Circle City Substation.
- Relocation of approximately 1.9 miles of an existing overhead 33 kV distribution line to an underground position.
- Installation of telecommunications facilities to connect the Proposed Project to SCE's existing telecommunications system.

4.12.1.1 Noise in the Proposed Project Area

Noise Background

Noise is defined as an unpleasant or unwanted sound. Whether a sound is considered unpleasant depends on the individual who hears the sound, as well as the setting and circumstance under which the sound is heard. Because an individual's tolerance for noise varies by setting, some land uses are more sensitive to changes in the ambient noise environment. Noise-sensitive receptors include, but are not limited to schools, hospitals, convalescence homes, long-term care facilities, mental care facilities, residential uses, places of worship, libraries, and passive recreation areas.

The unit of sound measurement is the decibel (dB). The dB scale is a logarithmic measure used to quantify sound power or sound pressure. A number of factors affect the perception of sound. These factors include the actual level of noise, the frequencies involved, the period of exposure to the sound, and changes or fluctuations in the sound level during exposure. The human ear is not uniformly sensitive to all noise frequencies. In order to measure sound in a manner that accurately reflects human perception, several measuring systems or scales have been developed, and the "A-weighting" scale was devised to correspond with the ear's sensitivity. The A-weighting scale uses specific weighting of sound pressure levels from approximately 31.5 hertz to 8 kilohertz for the purpose of determining the human response to sound. The resulting unit of measure is the A-weighted decibel (dBA).

The subjective human perception of the loudness of a noise source is usually different than what is measured. Generally, a 3 dBA increase in ambient noise levels is considered the minimum threshold at which most people can detect a change in the noise environment; an increase of 10 dBA is perceived as a doubling of the ambient noise level. As a point of reference, a conversation between two people would typically measure 60 to 65 dBA, and prolonged noise levels above 85 dBA can cause hearing loss.

To reflect the fact that ambient noise levels from various sources vary over time, they are generally expressed as an equivalent noise level (L_{eq}), which is a computed steady noise level over a specified period of time as the noise level varies. L_{eq} values are commonly expressed for 1-hour periods, but different averaging times may be specified.

For the evaluation of community noise effects, Community Noise Equivalent Level (CNEL) is often used. It represents the average A-weighted noise level during a 24-hour day with a 5 dB addition for the period from 7:00 p.m. to 10:00 p.m., and a 10 dB addition for the period from 10:00 p.m. to 7:00 a.m. Another noise descriptor termed the Day-Night Average Sound Level

 (L_{dn}) is also used. The L_{dn} is similar to CNEL except there is no penalty to the noise level occurring during the evening hours.

Vibration is defined as a movement back and forth, particularly movement that is rhythmic and rapid. Construction activities could result in varying degrees of ground vibration, depending on the kind of equipment and operations involved, and the distances between the construction activities and the nearest receptors. The effects of construction vibration may be imperceptible at the lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and damage to nearby structures at the highest levels. Typically, groundborne vibration generated by manmade activities attenuates rapidly with distance from the source of the vibration.

Noise-Sensitive Land Uses in the Proposed Project Area

The Proposed Project is located in a region with a mix of urban residential and commercial development, rural residential development, and agricultural areas within Riverside and San Bernardino counties and the cities of Chino, Corona, Eastvale, Norco, and Ontario. Noise-sensitive land uses in the Proposed Project area include the following:

- Occupied residential dwellings located within approximately 20 feet of the proposed Source Line Route and the Mira Loma-Jefferson 66 kV Subtransmission Line
- Occupied residential dwellings located approximately 720 feet from Circle City Substation
- Auburndale Intermediate School, located adjacent to the Mira Loma-Jefferson 66 kV Subtransmission Line along River Road; George Washington Elementary School and Victress Bower Elementary, which are located within 0.25 mile of the Mira Loma-Jefferson 66 kV Subtransmission Line; and Colony High School, located approximately 0.2 mile north of the existing Mira Loma Substation
- Five city, county, and regional parks, including the following:
 - River Road Park, Butterfield Stage Trail Park, and Prado Regional Park, which are located adjacent to the Mira Loma-Jefferson 66 kV Subtransmission Line and managed by the San Bernardino Regional Parks District
 - American Heroes Park, crossed by the Mira Loma-Jefferson 66 kV Subtransmission Line for approximately 0.42 mile over the southern perimeter
 - James C. Huber Park, where a temporary pulling site for the Mira Loma-Jefferson 66 kV Subtransmission Line would be located

Existing Noise Sources

The primary existing sources of noise in the Proposed Project area are transportation facilities, such as airports, railroads, freeways, and highways. The existing noise environment in the Proposed Project area also includes contributions from commercial, industrial, manufacturing, and agricultural land uses; mining, sand, and gravel operations; and community activities.

A noise survey was conducted between May 24 and May 26, 2012 to document the existing noise environment at noise-sensitive receptors and to identify the existing noise sources within the Proposed Project area. Noise measurements were taken at four locations along the source line alignments and the subtransmission line alignment, as depicted in Figure 4.12-1: Noise Monitoring Location Map (Source Line Route) and Figure 4.12-2: Noise Monitoring Location Map (Subtransmission Line), respectively. The results of the community noise survey are presented in Attachment 4.12-A: Noise Monitoring Results. Table 4.12-1: Noise Monitoring Summary provides the highest and lowest hourly Leq measured at each monitoring location. The dominant noise source identified during the survey was vehicular traffic on adjacent public roads.

Table 4.12-1: Noise Monitoring Summary

Monitoring Location	Monitoring Results (dBA)		
_	Highest Hourly L _{eq}	Lowest Hourly Leq	
1	64.4	55.1	
2	60.7	53.4	
3	68.2	55.2	
4	73.0	62.7	

Note: Noise monitoring results are limited to measurements taken where the local wind speed was less than 10 miles per hour (mph).

4.12.2 Regulatory Setting

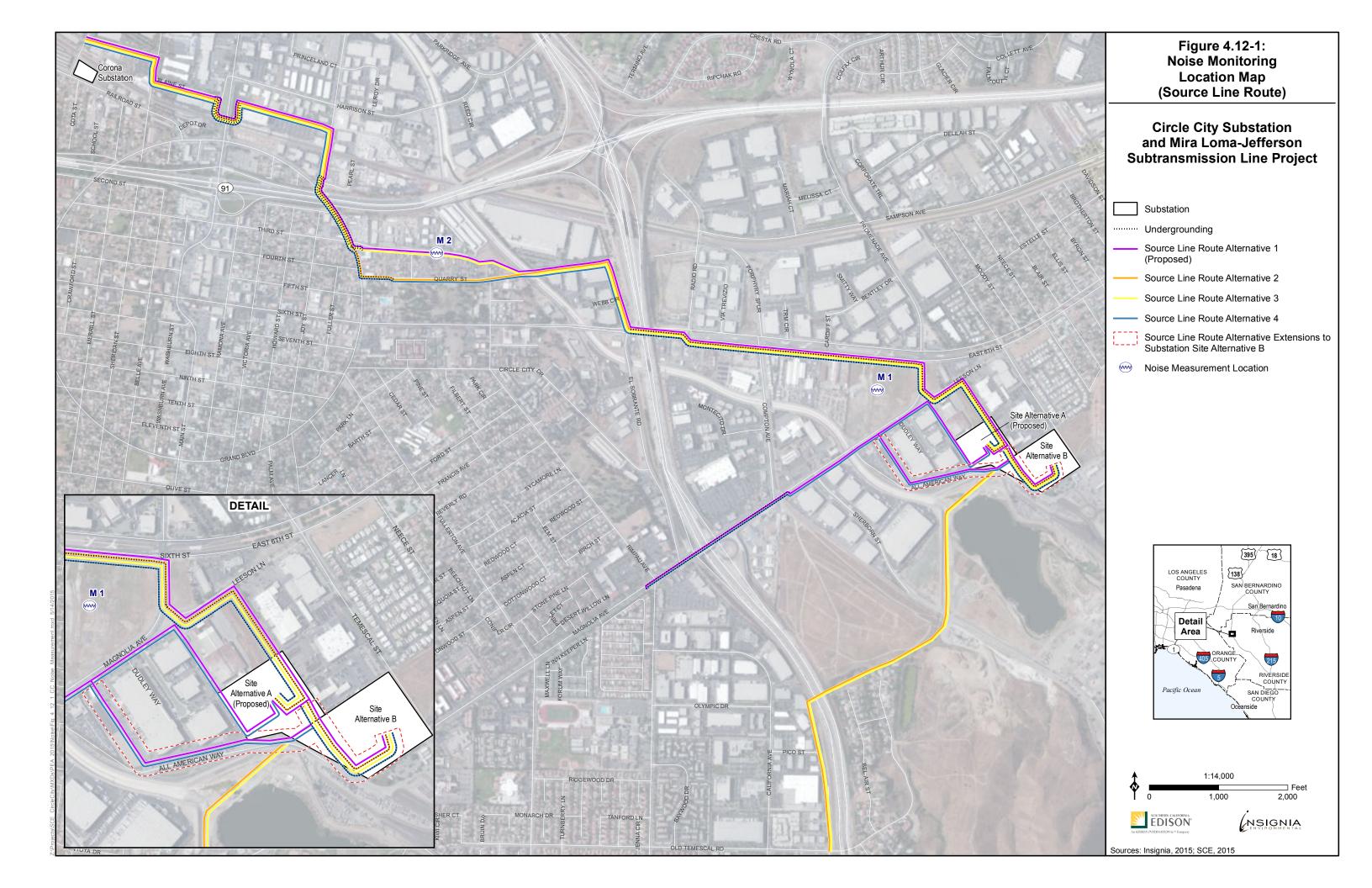
The following subsections discuss federal, state, and local regulations and policies related to noise that are relevant to the Proposed Project. Federal and state governments have yet to establish specific groundborne noise and vibration requirements. As a result, there are no federal and state groundborne noise and vibration regulations or guidelines directly applicable to the Proposed Project.

4.12.2.1 Federal

No federal noise standards directly regulate noise from operation of electrical power lines and substation facilities. However, in 1974, the United States (U.S.) Environmental Protection Agency (EPA) established guidelines for noise levels. The EPA transferred responsibilities for regulating noise control policies to the state and local government level in 1982.

Federal Transit Administration Transit Noise and Vibration Guidelines

Originally published in 1995 and updated in 2006, the Federal Transit Administration (FTA) has issued guidelines entitled *Transit Noise and Vibration Impact Assessment*. The document provides guidance for the methods and procedures to be used to assess noise and vibration caused by construction equipment and other sources. The guidelines regarding vibration serve as the basis for maximum vibration standards utilized by several state agencies, including the California Department of Transportation (Caltrans).





As described in the *Transit Noise and Vibration Impact Assessment*, no standard criteria have been developed for assessing construction noise impacts. Consequently, criteria must be developed on a project-specific basis unless local ordinances apply. Generally, local noise ordinances are not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of construction, and the adjacent land use. While it is not the purpose of the manual to specify standardized criteria for construction noise impacts, the construction noise limits in Table 4.12-2: Federal Transit Authority Construction Noise Limits can be considered reasonable criteria for assessment.

Table 4.12-2: Federal Transit Authority Construction Noise Limits

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Land Use	Day	Night	L _{dn} (30-day average)	
Residential	80	70	75	
Commercial	85	85	80	
Industrial	90	90	85	

Source: FTA, 2006

4.12.2.2 State

The State of California adopted noise standards in areas of regulation not preempted by the federal government. State standards primarily regulate motor vehicles' noise levels, land use/noise compatibility for non-stationary noise sources, sound transmission through buildings, and occupational noise control. The State of California land use/noise compatibility noise standards for non-stationary noise sources are commonly adopted and incorporated in the local jurisdictions' General Plans. There are no state noise regulations or guidelines directly applicable to the stationary noise sources of the Proposed Project. While there are no standards specifically applicable to the Proposed Project, the following guidelines are used to assess potential noise and vibration impacts.

California Department of Transportation- and Construction-Induced Vibration Guidance

This document provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. Continuous or frequent intermittent vibration sources, such as impact pile drivers, are significant when their peak particle velocity (PPV) exceeds 0.1 inch per second. More specific criteria for human annoyance have been developed by Caltrans and would be used to evaluate potential Proposed Project vibration sources. Table 4.12-3: Human Response to Transient Vibrationlists Caltrans' thresholds of perception.

Table 4.12-3: Human Response to Transient Vibration

Human Response	PPV (inches per second)
Severe	2.0
Strongly Perceptible	0.9
Distinctly Perceptible	0.24
Barely Perceptible	0.035

Source: Caltrans, 2013

Vibration and Groundborne Noise Impact Regulations

The California Environmental Quality Act (CEQA) states that the potential for excessive groundborne noise and vibration levels must be analyzed. While CEQA does not define the term "excessive" vibration, there are several different methods that are used to quantify vibration. The PPV is defined as the maximum instantaneous peak of the vibration signal and is typically expressed in units of inches per second. The PPV is most frequently used to describe vibration impacts to buildings.

Numerous public and private organizations and governing bodies have provided guidelines to assist in the analysis of groundborne noise and vibration. For example, Caltrans provides guidelines to address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. Potential impacts from continuous or frequent intermittent vibration sources, such as impact pile drivers, are significant when their PPV exceeds 0.1 inch per second. Table 4.12-4: Vibration Damage Threshold Guidance lists the maximum levels of vibration allowed by Caltrans, and Table 4.12-3: Human Response to Transient Vibration lists the Caltrans thresholds of perception for human response.

4.12.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order No. 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

Local governments outline requirements for noise abatement and control in the noise element of their general plans and municipal codes. These noise elements typically set noise goals and objectives, and the municipal codes set sound-level limits and time-of-day restrictions for activities.

Table 4.12-4: Vibration Damage Threshold Guidance

Structure Type/Condition	Maximum PPV ¹ (inches per second)		
Structure Type/Condition	Transient Sources	Continuous/Frequent Intermittent Sources	
Extremely fragile historic buildings, ruins, and ancient monuments	0.12	0.08	
Fragile buildings	0.2	0.1	
Historic and some old buildings	0.5	0.25	
Older residential structures	0.5	0.3	
New residential structures	1.0	0.5	
Modern industrial/commercial buildings	2.0	0.5	

Source: Caltrans, 2013

Riverside County General Plan

The Noise Element in the Riverside County General Plan contains specific goals and policies for evaluating a project's compatibility with surrounding land uses. The following goals and policies related to noise are relevant to the Proposed Project:

- Policy N 4.1: Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:
 - 45 dBA-10-minute L_{eq} between 10:00 p.m. and 7:00 a.m.
 - 65 dBA-10-minute L_{eq} between 7:00 a.m. and 10:00 p.m.
- Policy N 4.2: Develop measures to control non-transportation noise impacts.
- Policy N 4.3: Ensure any use determined to be a potential generator of significant stationary noise impacts be properly analyzed, and ensure that the recommended mitigation measures are implemented.
- 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.
- 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

¹ Transient sources create a single, isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

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 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.

Riverside County Code of Ordinances

Riverside County regulates noise in Ordinance 847 of Riverside County Code of Ordinances. Ordinance 847 defines a sensitive receptor as a land use that is sensitive to noise, which includes, but is not limited to residences, schools, hospitals, churches, rest homes, cemeteries, or public libraries.

Maximum noise levels for stationary noise sources created by a person to the property line of a sensitive receptor (e.g., residences, schools, and hospitals) are to remain below 45 dBA during nighttime hours (10:00 p.m. to 7:00 a.m.) and are not to exceed 55 dBA during daytime hours (7:00 a.m. to 10:00 p.m.).

The Riverside County Code of Ordinances also restricts the creation of special sound sources (e.g., power tools and equipment). The operation of power tools and equipment is restricted from occurring between 10:00 p.m. and 8:00 a.m. when 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 are located. In addition, operation of power tools or equipment is restricted from occurring at any other time when they are audible to the human ear at a distance greater than 100 feet from the power tools or equipment.

Noise from private construction is exempt from the provisions of Ordinance 847 if the construction activities occur 0.25 mile or more from an inhabited dwelling or the activities occur between 6:00 a.m. and 6:00 p.m. during the months of June through September, and between 7:00 a.m. and 6:00 p.m. during the months of October through May.

San Bernardino County General Plan

San Bernardino County published standards in its general plan that limit noise-generating stationary sources on private property, which cause noise levels measured on any property to exceed the levels listed in Table 4.12-5: San Bernardino County Stationary Source Noise Thresholds. Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m. are exempt from San Bernardino County noise regulations.

Table 4.12-5: San Bernardino County Stationary Source Noise Thresholds

Danish Danish	Sound Pressure Level Limit per Duration (dBA)				
Receiving Property	30 Minutes	15 Minutes	5 Minutes	1 Minute	Any Period of Time
Residential (7:00 a.m. to 10:00 p.m.)	55	60	65	70	75
Residential (10:00 p.m. to 7:00 a.m.)	45	50	55	60	65
Professional Services	55	60	65	70	75
Other Commercial	60	65	70	75	80
Industrial	70	75	80	85	90

Source: San Bernardino County, 2007b

San Bernardino County Code of Ordinances

The San Bernardino County Code of Ordinances (Title 8) governs 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. Because the components of the Proposed Project within San Bernardino County are in an industrial area, the noise limits for industrial land uses (70 dBA during both daytime and nighttime) would be applicable. 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.

The ordinance also establishes standards for maximum vibration levels, stating that no ground vibration will be allowed that can be felt without the aid of instruments at or beyond the lot line, nor will any vibration be permitted that produces a particle velocity greater than or equal to 0.2 inches per second measured at or beyond the lot line.

City of Chino General Plan

The Noise Element in the City of Chino General Plan is included as part of both the Proposed General Plan and the Focused Growth Plan. The City of Chino also uses the compatibility guidelines documented by the State Office of Noise Control, the California Department of Housing and Community Development, and the Noise Ordinance of the Chino Municipal Code, which specify average noise limits for long-term, stationary noise sources. The Noise Element of the City of Chino General Plan exempts construction activities from exterior noise ordinance standards, provided that activities occur between the hours of construction defined in Section 15.44.030 of the City of Chino Municipal Code and remain below the noise standard of 65 dBA plus the limits specified in Section 9.40.040(B), as measured on residential property. Construction activities that occur in the vicinity of noise-sensitive land uses (e.g., residences, hospitals, or senior centers) are limited to daylight hours or between 7:00 a.m. and 7:00 p.m., as specified in the following policy:

• Policy P1: The City shall require a noise monitoring plan to be prepared and submitted prior to starting all construction projects. The noise monitoring plan shall identify

monitoring locations and frequency, instrumentation to be used, and appropriate noise control measures that will be incorporated.

- Policy P2: The City shall limit all construction in the vicinity of noise-sensitive land uses, such as residences, hospitals, or senior centers, to daylight hours or 7:00 a.m. to 7:00 p.m. In addition, the following construction noise control measures shall be included as requirements at construction sites to minimize construction noise impacts:
 - Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
 - Ensure that during construction, trucks and equipment are running only when necessary.
 - Shield all construction equipment with temporary noise barriers to reduce construction-related noise impacts.
 - Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
 - Utilize "quiet" air compressors and similar equipment, where available.

City of Chino Municipal Code

Section 15.44.030 of the City of Chino Municipal Code limits construction activities to between 7:00 a.m. and 8:00 p.m. Monday through Saturday and does not allow construction on Sundays or federal holidays. Noise emissions during these hours, as measured at any residential property boundary, are limited to the levels provided in Section 9.40.040(B) and are listed in Table 4.12-6: City of Chino Construction Noise Thresholds.

Table 4.12-6: City of Chino Construction Noise Thresholds

Maximum Time of Exposure	Level Not to Exceed, 7:00 a.m. to 10:00 p.m. (dBA)	Level Not to Exceed, 10:00 p.m. to 7:00 a.m. (dBA)
30 minutes per hour (L ₅₀)	55	50
15 minutes per hour (L ₂₅)	60	55
5 minutes per hour (L ₀₈)	65	60
1 minute per hour (L ₀₂)	70	65
Any period of time (L _{max})	75	70

Source: City of Chino, 2014

Note: L_{50} , L_{25} , L_{08} , and L_{02} are A-weighted noise levels that are exceeded 2, 8, 25, and 50 percent, respectively, of the time during the measurement period.

City of Corona General Plan

The Noise Element of the City of Corona General Plan adopts the compatibility guidelines documented by the State Department of Health Services, which specify average noise limits for long-term, stationary noise sources, but does not document specific thresholds for temporary

activities, such as construction noise. The following Noise Element policies from the City of Corona General Plan may be relevant to the Proposed Project:

- Policy 11.5.1: Require that in areas where existing or future ambient noise levels exceed an exterior noise level of 65 dBA L_{dn}, all development of new housing, health care facilities, schools, libraries, religious facilities, and other "noise sensitive" land uses shall include satisfactory buffering and/or construction mitigation measures to reduce noise exposure to levels within acceptable limits.
- Policy 11.5.2: Require new industrial and new commercial land uses or the major expansion of such uses to demonstrate that ambient noise levels will not exceed an exterior noise level of 65 dBA L_{dn} on areas containing "noise sensitive" land uses.
- Policy 11.5.3: Require development in all areas where the existing or future ambient noise level exceeds 65 dBA L_{dn} to conduct an acoustical analysis and incorporate special design measures in their construction, thereby, reducing interior noise levels to the 45 dBA L_{dn} level.
- Policy 11.5.6: Require construction activities that occur in close proximity to existing "noise sensitive" uses, including schools, libraries, health care facilities, and residential uses to limit the hours and days of operation in accordance with City of Corona Noise Ordinance.

City of Corona Municipal Code

Section 17.84.040 (D) (2) of the City of Corona Municipal Code limits construction activities to between 7:00 a.m. and 8:00 p.m. from Monday through Saturday and between 10:00 a.m. and 6:00 p.m. on Sundays and federal holidays. Section 17.84.040 (C) (1) of the City of Corona Municipal Code specifies standards for stationary noise sources (which are defined as inclusive of industrial or construction noise) that may be intrusive to a neighboring private property. The stationary noise source standards are listed in Table 4.12-7: City of Corona Stationary Noise Source Standards.

Table 4.12-7: City of Corona Stationary Noise Source Standards

	Maximum Allowable Noise Levels			
Type of Land Use	Exterior Noise Level (dBA)		Interior N (dF	
	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
Single-, Double-, and Multi-Family Residential	55	50	45	35
Other Sensitive Land Uses	55	50	45	35
Commercial Uses	65	60	Not Applicable (NA)	NA
Industrial, Manufacturing, or Agricultural	75	70	NA	NA

Source: City of Corona, 2014b

The City of Corona prohibits stationary noise sources from exceeding:

- the noise standard for a cumulative period of more than 30 minutes in any hour;
- the noise standard plus 5 dB for a cumulative period of more than 15 minutes in any hour:
- the noise standard plus 10 dB for a cumulative period of more than 5 minutes in any hour;
- the noise standard plus 15 dB for a cumulative period of more than 1 minute in any hour; or
- the noise standard plus 20 dB for any period of time.

City of Eastvale General Plan

The City of Eastvale General Plan provides noise guidelines and thresholds for stationary noise sources based on the State Department of Health Services' compatibility guidelines, which specify average noise limits for long-term, stationary noise sources. Though general policies restrict construction to daytime hours and require some general noise mitigation (e.g., mufflers), there are no descriptive thresholds for construction noise. The following policies related to construction noise are relevant to the Proposed Project:

- Policy N-22: 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-24: Require that all construction equipment be kept properly tuned and use noise reduction features (e.g. mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

City of Eastvale Municipal Code

Section 110.01.020 of the City of Eastvale Municipal Code limits construction equipment use to between 7:00 a.m. and 7:00 p.m., Monday through Saturday, except on national holidays. No construction is permitted on Sundays or on nationally recognized holidays unless approval is obtained from a city building official or city engineer.

City of Norco General Plan

As with the City of Corona, the City of Norco adopts the compatibility guidelines documented by the State Department of Health Services, which specify average noise limits for long-term, stationary noise sources, but does not document specific thresholds for temporary activities, such as construction noise. The following Noise Element policies regarding construction noise in the City of Norco General Plan are relevant to the Proposed Project:

- Policy 2.2.2 Construction Noise Control Policy: The City should consider adopting and updating, as necessary, regulations to minimize noise impacts from construction sites and equipment to residential areas.
 - Policy 2.2.2a: New development projects near developed and occupied residential areas should be evaluated for possible submittal of a noise reduction plan prior to the issuance of grading permits.

- Policy 2.2.2b: All construction equipment should be equipped with noise attenuation features including mufflers and engine shrouds that are at least as effective as original manufacturer equipment.
- Policy 2.2.2c: The City should regulate wherever feasible the hours of operation for construction areas including haul routes that may include residential streets and/or sensitive land uses.

City of Norco Municipal Code

Sections 15.01.110 and 15.30.020 of the City of Norco Municipal Code limit construction activity to between 6:30 a.m. and 7:00 p.m. from Monday through Friday and between 8:00 a.m. and 7:00 p.m. on Saturdays, Sundays, and federal holidays.

City of Ontario General Plan

The Noise Hazards Element for the City of Ontario General Plan contains goals and policies related to the city's noise environment for community development and transportation noise. The Noise Hazards Element defers to the city's Noise Ordinance for mitigation of noise impacts and does not provide specific thresholds for construction noise.

City of Ontario Municipal Code

The City of Ontario Municipal Code specifies exterior noise standards listed in Table 4.12-8: City of Ontario Exterior Noise Standards; however, construction activities are exempt from these noise standards provided that they occur between 7:00 a.m. and 6:00 p.m. on weekdays, and between 9:00 a.m. and 6:00 p.m. on weekends. Otherwise, construction activities must be limited to 65 dBA between 7:00 a.m. and 10:00 p.m. when measured at the outdoor boundary of any school, day care center, hospital (or similar health care institution), church, library, or museum while the facility is in use.

Table 4.12-8: City of Ontario Exterior Noise Standards

Type of Land Use	Allowed Equivalent Noise Level (dBA)		
, P	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.	
Single-Family Residential	65	45	
Multi-Family Residential, Mobile Home Parks	65	50	
Commercial Property	65	60	
Residential Portion of Mixed Use	70	70	
Manufacturing and Industrial, Other Uses	70	70	

Source: City of Ontario, 2015

4.12.3 Significance Criteria

The significance criteria for assessing the impacts from noise are determined from the CEQA Environmental Checklist. According to the CEQA Environmental Checklist, a project causes a potentially significant impact if it would cause:

- Exposure of people 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
- Exposure of people to, or generation of, excessive groundborne vibration or groundborne noise levels
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
- Exposure of people residing or working in the project area to excessive noise levels for a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport
- Exposure of people residing or working in the project area to excessive noise levels for a project within the vicinity of a private airstrip

4.12.4 Impact Analysis

4.12.4.1 Would the project result in the 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?

Construction – Less-than-Significant Impact

Construction activities would require the temporary use of various types of noise-generating construction equipment, including backhoes, augers, flatbed boom trucks, rigging and mechanic trucks, air compressors and generators, mobile cranes, concrete trucks, and hand tools. Line stringing (i.e., reconductoring) would require the use of pullers, tensioners, and cable reel trailers. Typical noise levels from construction equipment are listed in Table 4.12-9: Noise Levels Generated by Typical Construction Equipment. These values were used to determine the distance at which construction noise levels would reach approximately 80 dBA, the daytime 8-hour Leq construction noise limit for residential land uses in the FTA *Transit Noise and Vibration Impact Assessment*. Average hourly Leq construction noise levels would be lower than those in Table 4.12-9: Noise Levels Generated by Typical Construction Equipment due to both the equipment usage factors and the variable distances from the equipment to sensitive receptors. As these are the maximum noise levels at approximately 50 feet, the construction noise levels would not exceed 80 dBA at 50 feet. The resulting calculations are provided in Table 4.12-10: Circle City Substation Construction Noise Impact Analysis, Table 4.12-11: Source Line Route Construction Noise Impact Analysis, and Table 4.12-12: Mira Loma-Jefferson 66 kV Subtransmission Line Construction Noise Impact Analysis.

Table 4.12-9: Noise Levels Generated by Typical Construction Equipment

Equipment	Noise Level Range at Approximately 50 Feet (dBA)
Earth-Moving	
Front loader	79 – 80
Backhoe	78 – 80
Tractor, dozer	82 – 85
Scraper, grader	84 – 85
Paver	77 – 85
Truck	74 – 84
Material-Handling	
Concrete mixer truck	79 – 85
Concrete pump	81 – 82
Crane (movable)	81–85
Stationary	
Pump	77 – 81
Generator	70 – 82
Compressor	78 – 80

Source: U.S. DOT, 2006a

Table 4.12-10: Circle City Substation Construction Noise Impact Analysis

Construction Activity	Zone of Potential 80 dBA Exposure (feet)
Grading	48
Soil Import-Export	20
Fencing	19
Temporary Power Pole Installation	21
Civil	70
Mechanical and Electrical Equipment Room	14
Electrical	33
Wiring	27
Transformers	23
Asphalting	39

Source: Acentech, 2015

Table 4.12-11: Source Line Route Construction Noise Impact Analysis

Construction Activity	Zone of Potential 80 dBA Exposure (feet)
Marshaling Yard Use	64
Right-of-Way (ROW) Clearing	89
Road Work	91
Guard Structure Installation	54
Remove Existing Conductor and Ground Wire	47
Wood/H-Frame/Light-Weight Steel (LWS) Pole Removal	42
H-Frame Hybrid Pole Structure Removal	54
Tubular Steel Pole (TSP) Removal	54
Install TSP Foundation	54
TSP Haul	32
TSP Assembly	47
TSP Erection	47
Wood/LWS Pole Haul	32
Wood LWS Pole Assembly	47
Hybrid Pole Haul	32
H-Frame Hybrid Pole Structure Install	54
Transfer and Install Conductor	67
Guard Structure Removal	64
Restoration	107
Vault Installation	75
Duct Bank Installation	84
Underground Cable Installation	57

Source: Acentech, 2015

Table 4.12-12: Mira Loma-Jefferson 66 kV Subtransmission Line Construction Noise Impact Analysis

Construction Activity	Zone of Potential 80 dBA Exposure (feet)		
Marshaling Yard	64		
ROW Clearing	89		
Road Work	91		
Guard Structure Installation	54		
Wood/H-Frame/LWS Pole Removal	42		
Install TSP Foundation	54		
TSP Haul	32		
TSP Assembly	47		
TSP Erection	47		
Wood/LWS Pole Haul	32		
Install Conductor	47		
Guard Structure Removal	64		
Restoration	107		
Vault Installation	75		
Duct Bank Installation	84		
Underground Cable Installation	57		

Source: Acentech, 2015

As described in Section 4.12.2 Regulatory Setting, Riverside County, San Bernardino County, and the cities of Chino, Corona, Eastvale, Norco, and Ontario provide exemptions for noise related to construction activities under certain conditions. These conditions are summarized in Table 4.12-13: Construction Noise Exemptions and are typically related to the time of day the noise is being generated; however, they can also be related to the proximity of the construction activities to adjacent noise-sensitive receptors. Construction would be limited to the allowable times within these jurisdictions. In the event that construction activities are necessary on days or hours outside of what is specified by the ordinance, SCE would provide 5-day advanced notification—including a general description of the work to be performed, location, and hours of construction anticipated—to the CPUC, the local jurisdiction, and residents within 300 feet of the anticipated work. In addition, SCE would route all construction traffic away from residences, schools, and recreational facilities to the maximum extent feasible. Consequently, the Proposed Project's construction within the limits of these jurisdictions would not result in the exposure of people 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.

Table 4.12-13: Construction Noise Exemptions

6:00 a.m. to 6:00 p.m. (June through September) (June through May) (John a.m. to 5:00 p.m. (John a.m. to 8:00 p.m. (John a.m. to 7:00 p.m. (John a.m. to 7:00 p.m. (John a.m. to 6:00 p.m. (John a.m. to 7:00 p.m. (John a.m. to 6:00 p.m. (John a.m. to 7:00 p.m. (John a.m. to 7:00 p.m. (John a.m. to 6:00 p.m. (John a.m. to 7:00 p.m. (John a.m. to 6:00 p.m.	Jurisdiction	Weekdays	Saturdays	Sundays	Federal Holidays
7:00 a.m. to 6:00 p.m. (October through May) Ounty 7:00 a.m. to 7:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 7:00 p.m. 9:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m. 9:00 a.m. to 7:00 p.m.	D:::00	6:00 a.m. to 6:00 p.m. (June through September)	6:00 a.m. to 6:00 p.m. (June through September)	6:00 a.m. to 6:00 p.m. (June through September)	6:00 a.m. to 6:00 p.m. (June through September)
7:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m. 8:00 a.m. to 7:00 p.m. 9:00 a.m. to 6:00 p.m. 9:00 a.m. to 6:00 p.m.	riversine County	7:00 a.m. to 6:00 p.m. (October through May)	7:00 a.m. to 6:00 p.m. (October through May)	7:00 a.m. to 6:00 p.m. (October through May)	7:00 a.m. to 6:00 p.m. (October through May)
7:00 a.m. to 8:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 8:00 p.m. 7:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m. 8:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m.	San Bernardino County	7:00 a.m. to 7:00 p.m.	7:00 a.m. to 7:00 p.m.	Construction not allowed	Construction not allowed
7:00 a.m. to 8:00 p.m. 7:00 a.m. to 8:00 p.m. e 7:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m. 6:30 a.m. to 7:00 p.m. 8:00 a.m. to 7:00 p.m. 7:00 a.m. to 6:00 p.m. 9:00 a.m. to 6:00 p.m.	City of Chino	7:00 a.m. to 8:00 p.m.	7:00 a.m. to 8:00 p.m.	Construction not allowed	Construction not allowed
le 7:00 a.m. to 7:00 p.m. 7:00 a.m. to 7:00 p.m. 6:30 a.m. to 7:00 p.m. 8:00 a.m. to 7:00 p.m. 7:00 a.m. to 6:00 p.m. 9:00 a.m. to 6:00 p.m.	City of Corona	7:00 a.m. to 8:00 p.m.	7:00 a.m. to 8:00 p.m.	10:00 a.m. to 6:00 p.m.	10:00 a.m. to 6:00 p.m.
6:30 a.m. to 7:00 p.m. 8:00 a.m. to 7:00 p.m.	City of Eastvale	7:00 a.m. to 7:00 p.m.	7:00 a.m. to 7:00 p.m.	Construction not allowed	Construction not allowed
m n 00.9 ot m s 00.6 m n 00.9 ot m s 01.2	City of Norco	6:30 a.m. to 7:00 p.m.	8:00 a.m. to 7:00 p.m.	8:00 a.m. to 7:00 p.m.	8:00 a.m. to 7:00 p.m.
	City of Ontario	7:00 a.m. to 6:00 p.m.	9:00 a.m. to 6:00 p.m.	9:00 a.m. to 6:00 p.m.	Not specified

Sources: County of Riverside, 2008; County of San Bernardino, 2007b; City of Chino, 2014; City of Corona, 2014b; City of Eastvale, 2015; City of Norco, 2015a; City of Ontario, 2015 Note: The listed time limits for the County of Riverside do not apply if construction activities are being conducted more than 0.25 mile from a dwelling.

The City of Corona's noise standards require that exterior noise at residences and other sensitive land uses must be limited to 55 dBA. Construction-related noise may temporarily exceed this level; however, at no time may exterior noise levels exceed 75 dBA. Several residences are located adjacent to the proposed Source Line Route. As shown in Table 4.12-11: Source Line Route Construction Noise Impact Analysis, residences within 32 feet of the line would be exposed to noise levels in excess of 80 dBA and the exterior noise standards would be exceeded at these locations. The City of Chino restricts construction noise emissions to 65 dBA from 7:00 a.m. to 8:00 p.m. Monday through Saturday when measured at any residential property boundary. The city does not allow construction on Sundays or federal holidays.

Approximately 2.4 miles of the Mira Loma-Jefferson 66 kV Subtransmission Line would occur in the City of Chino. There are two residences on Hellman Avenue that are located directly adjacent to existing and proposed pole locations. As shown in Table 4.12-12: Mira Loma-Jefferson 66 kV Subtransmission Line Construction Noise Impact Analysis, receptors within 32 feet of construction of the subtransmission line would be exposed to noise levels in excess of 80 dBA. As described previously, SCE would provide 5-day advanced notification—including a general description of the work to be performed, location, and hours of construction anticipated—to the CPUC, the local jurisdiction, and residents within 300 feet of the anticipated work. In addition, SCE would route all construction traffic away from residences, schools, and recreational facilities to the maximum extent feasible; therefore, impacts would be less than significant.

Operation – Less-than-Significant Impact

As discussed in Section 4.12.2 Regulatory Setting, Riverside County, San Bernardino County, and the cities of Chino, Corona, and Ontario specify thresholds for noise generated from stationary noise sources or facility-related noise. The potential for impacts from operational noise emissions for each Proposed Project component are discussed in the subsections that follow.

Circle City Substation

The primary noise source associated with the operation of the proposed Circle City Substation would be from the transformer banks and their associated cooling fans. The cooling fans typically operate in stages, with their load increasing and decreasing with the temperature of the windings located in the main tank.

The proposed Circle City Substation is located in the City of Corona and would include two 66/12 kV transformer banks, each with a capacity of 28 megavolt-amperes. In accordance with the National Electrical Manufacturers Association (NEMA) Standards Publication No. TR 1-2013 Transformers, Regulators, and Reactors, the design sound level of each 66/12 kV transformer bank would not exceed 74 dBA. This 74 dBA sound level represents the transformer bank's average design sound pressure level, defined in NEMA Standards Publication No. TR 1-2013 and American National Standards Institute (ANSI)/Institute of Electrical and Electronics Engineers (IEEE) Standard C57.12.90-2010.

The transformer banks would be consistent with SCE Specification A1-2009, which requires the transformer banks' sound pressure level to be at least 6 decibels below the 74 dBA design sound

pressure level specified in NEMA Standards Publication No. TR 1. As a result, the highest average sound pressure level for each transformer bank is expected not to exceed 68 dBA. Using the calculation methodology outlined in the ANSI/IEEE Standard C57.12.90-2010, the calculated sound power level for the transformer banks would be 84 dBA.²

The substation property line would be located at approximately 250 feet from the transformer banks. Using the calculation methodology outlined in the ANSI/IEEE Standard C57.12.90-2010, the calculated combined sound pressure level of the two transformer banks with the inclusion of an 8-foot-tall block wall would be 39 dBA L_{eq} and 47 CNEL at the substation property line. As the nearest sensitive receptor to Circle City Substation is located approximately 720 feet from the substation property line, the noise level of the transformer banks at the nearest noise sensitive-receptor location would not exceed the City of Corona's stationary noise source standard of 65 dBA for commercial land uses.

Therefore, noise levels from operation of the Proposed Project's transformer banks would not result in the 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, and impacts would be less than significant.

Proposed Source Line Route and Mira Loma-Jefferson 66 kV Subtransmission Line

The sound of corona is a phenomenon associated with all energized overhead electric power lines. Modern power lines are designed, constructed, and maintained so that, during dry conditions, they operate below the corona-inception voltage and generate a minimum of corona-related noise. Corona levels (and audible noise levels) are highest during heavy rain, when the conductors are wet, but the noise generated by the rain is usually greater than the noise generated by corona. The Electric Power Research Institute has conducted several studies measuring the noise emissions from transmission line facilities due to corona. Table 4.12-14: Typical Transmission Line Corona Levels provides the typical noise levels for transmission lines with wet conductors.

Table 4.12-14: Typical Transmission Line Corona Levels

Transmission Line Voltage (kV)	Approximate Noise Level Directly Below the Conductors (dBA)
138	33.5
240	40.4
356	51.0

Source: CPUC, 2015

As the proposed Source Line Route and Mira Loma-Jefferson 66 kV Subtransmission Line would operate at 66 kV, lines can be predicted to generate less than the 33.5 dBA noise level for a 138 kV transmission line shown in Table 4.12-14: Typical Transmission Line Corona Levels.

² Sound Power Level is the sound energy radiated by the transformer, which produces a Sound Pressure Level at the receptor location.

At this noise level, the corona associated with the operation of the lines would also fall below the noise level criteria applicable to residential or other noise-sensitive land uses in the Proposed Project study area. Therefore, noise levels from the Proposed Project's lines would not result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or the applicable standards of other agencies. As a result, the noise impact from operation of the proposed lines would be less than significant.

4.12.4.2 Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction – Less-than-Significant Impact

Construction activities can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and decrease with distance from the source, as presented in Figure 4.12-3: Construction Vibration Amplitudes. Perceptibility of vibrations from construction equipment can be estimated by comparing the vibration thresholds provided in Table 4.12-3: Human Response to Transient Vibration to Figure 4.12-3: Construction Vibration Amplitudes. Vibration amplitudes with a PPV above 0.24 inch/second would be considered potentially significant. This amplitude corresponds with a distance of approximately 10 feet from construction activities. Table 4.12-4: Vibration Damage Threshold Guidance also states that intermittent vibration sources with amplitudes greater than 0.5 PPV and 1.0 PPV have the potential to significantly affect older residential structures and newer residential structures, respectively. When compared to Figure 4.12-3: Construction Vibration Amplitudes, typical construction activities would generate less than 0.5 PPV at a distance of approximately 10 feet.

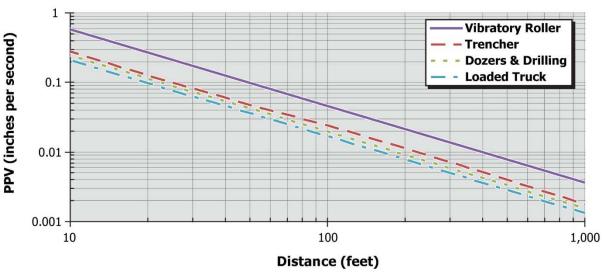


Figure 4.12-3: Construction Vibration Amplitudes

Source: Caltrans, 2013

While vibration due to construction may be slightly perceptible at some locations, there are no residences located within 10 feet of construction activities; therefore, the Proposed Project would

not generate distinctly perceptible vibrations and no structures would be damaged. Thus, the Proposed Project's construction would not result in the exposure of persons to, or generation of, excessive groundborne vibration or noise levels. As a result, the impact would be less than significant.

Operation – Less-than-Significant Impact

Operation of the Proposed Project would consist of routine maintenance activities and emergency repairs. It is unlikely that these activities would produce significant groundborne noise or vibration. Operation of transformers at the proposed Circle City Substation may produce groundborne vibration; however, groundborne vibrations would be perceptible only in the immediate vicinity (i.e., less than 25 feet) of the transformer pad, if at all. No other component of the Proposed Project would generate vibrations during operation. Therefore, the Proposed Project's operation would not result in the exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels, and impacts would be less than significant.

4.12.4.3 Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction – No Impact

The Proposed Project's construction would be of short duration and would not cause a permanent increase in ambient noise levels in the Proposed Project vicinity above levels existing without the Proposed Project. Therefore, no impact from construction would occur.

Operation – Less-than-Significant Impact

The Proposed Project's primary permanent noise sources would be limited to the Mira Loma-Jefferson 66 kV Subtransmission Line and transformer banks at the proposed Circle City Substation. Operation of the proposed distribution and the proposed telecommunication facilities would not generate significant noise levels.

As discussed previously, the proposed Source Line Route and Mira Loma-Jefferson 66 kV Subtransmission Line would generate less than 33.5 dBA when measured below the overhead conductors. Therefore, the operation of these facilities would not result in a substantial permanent increase over the nighttime lowest existing ambient noise level of 53.4 dBA that was monitored in the Proposed Project study area.³ As a result, the impact would be less than significant.

As discussed previously, the highest average sound pressure level for each transformer bank is not expected to exceed 68 dBA, resulting in a sound power level of 84 dBA. The transformer banks would be located near the center of the substation's approximately 420-foot by 387-foot footprint, and the substation property line would be located approximately 250 feet from the transformer banks. Using the calculation methodology outlined in the ANSI/IEEE Standard C57.12.90-2010, the calculated combined sound pressure level of the two transformer banks with

 $^{^3}$ As described in Attachment 4.12-A: Noise Monitoring Results, periods of high wind and wind gusts artificially inflated the L_{dn} and CNEL values from the noise survey. The lowest existing ambient noise level at Monitoring Location 2 was recorded between midnight and 1:00 a.m. where the recorded wind speed was less than 10 mph.

the inclusion of an 8-foot-tall block wall would be approximately 39 dBA L_{eq} and 47 CNEL at the substation property line. Therefore, the noise emissions from the transformer banks would not result in a substantial permanent increase over the nighttime lowest existing ambient noise level of 55.1 dBA that was monitored in the Proposed Project study area.⁴ Therefore, the Proposed Project's transformer banks would not result in a substantial permanent increase in ambient noise levels in the Proposed Project vicinity, and impacts would be less than significant.

4.12.4.4 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?

Construction – Less-than-Significant Impact

The CEQA Guidelines do not define a substantial increase in construction noise levels; therefore, in the absence of local guidance, Caltrans' definition for a substantial construction noise increase from the Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects has been used to evaluate the potential impacts from construction of the Proposed Project. According to Caltrans, a substantial noise increase is considered to occur when a project's predicted worst-hour design-year noise level exceeds the existing worst-hour noise level by 12 dBA or more.

Circle City Substation

The proposed Circle City Substation site is bordered by commercial uses immediately adjacent to the east and west, with the closest commercial structure located approximately 140 feet to the west. Table 4.12-10: Circle City Substation Construction Noise Impact Analysis indicates the potential zones of impact from the construction of the proposed Circle City Substation. Sensitive receptors located within 48 feet of the substation during the grading process (i.e., the loudest construction activity) could be subjected to noise in excess of 80 dBA. The nearest sensitive receptors to the proposed Circle City Substation consist of residences located approximately 720 feet east of the substation site. The loudest day of construction at the substation site would result in an average hourly Leq noise level of approximately 65 dBA at the nearest property line. When compared to the current lowest hourly Leq ambient noise level of 55.1 dBA measured at this residential area, an increase of approximately 9.9 dBA would not be significant.⁵ Therefore, ambient noise levels would not be substantially increased above existing levels without the Proposed Project, and impacts would be less than significant.

Source Lines and Mira Loma-Jefferson 66 kV Subtransmission Line

Table 4.12-11: Source Line Route Construction Noise Impact Analysis and Table 4.12-12: Mira Loma-Jefferson 66 kV Subtransmission Line Construction Noise Impact Analysis provide the approximate distances at which an 8-hour Leq of approximately 80 dBA would occur during various construction activities. Many residences are located adjacent to the areas where these

⁴ As described in Section 0 Existing Noise Sources, periods of high wind and wind gusts artificially inflated the L_{dn} and CNEL values from the noise survey. The lowest existing ambient noise level at Monitoring Location 1 was recorded between midnight and 1:00 a.m. where the recorded wind speed was less than 10 mph.

⁵ As described in Section 0 Existing Noise Sources, periods of high wind and wind gusts artificially inflated the L_{dn} and CNEL values from the noise survey. In order to be conservative, the lowest value from the 25-hour noise survey was compared to construction noise levels.

activities would occur. As a result, residences would be temporarily exposed to levels in excess of 80 dBA. Many of these residences have wood fences or block walls installed along their property lines, and these barriers may provide an additional 5 dBA of attenuation for noise sources near the ground (e.g., generators and air compressors), which would reduce noise exposure.

These construction activities would be dispersed across the entire Proposed Project alignment throughout the 18-month construction period. Because the Proposed Project would be constructed in a linear fashion, construction crews would move along the alignment, staying at one pole work area for 1 to 2 days at a time, then revisiting the same area later in the construction process. The underground portions of these alignments would also be constructed in a linear fashion, with crews excavating a small segment of trench, then returning to install the underground conduit and vaults. Stringing and cable installation activities would require approximately 1 week of activity at each designated site. This construction process would limit the duration of potential noise exposure at each receptor.

While construction noise would be noticeable, the noise levels identified in this analysis are typically considered acceptable for construction activities during daytime hours. In addition, noise associated with construction would be exempt from the noise regulations of Riverside County, San Bernardino County, and the cities of Chino, Corona, Eastvale, Norco, and Ontario. All construction would also occur in accordance with restrictions on construction hours as established by the local jurisdictions. If construction violates applicable noise regulations, SCE would provide 5-day advanced notification—including a general description of the work to be performed, location, and hours of construction anticipated—to the CPUC, the local jurisdiction, and residents within 300 feet of the anticipated work. In addition, SCE would route all construction traffic away from residences, schools, and recreational facilities to the maximum extent feasible, as needed. Therefore, a less-than-significant impact would occur.

Operation – Less-than-Significant Impact

As described previously, the Proposed Project is not anticipated to change SCE's existing operation and maintenance activities on its existing facilities in the area. Routine inspections and preventive maintenance would continue with approximately the same crew sizes and frequency. The proposed Circle City Substation would typically be operated remotely; therefore, additional temporary noise associated with the operation and maintenance of this facility would be limited to routine visits for electrical switching and maintenance. These activities would include equipment testing, monitoring, and repair, as needed. As a result, no substantial increase in noise would occur, and impacts would be less than significant.

4.12.4.5 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?

Construction – No Impact

As described in Section 4.8 Hazards and Hazardous Materials, the Proposed Project alignment is located approximately 0.7 mile southeast of the Chino Airport and approximately 1.1 miles

northeast of the Corona Municipal Airport. However, the Proposed Project is not located within the airport noise compatibility contours for either airport, as specified in the Riverside County Airport Land Use Commission's Airport Land Use Compatibility Plans for both the Chino Airport and Corona Municipal Airport. In addition, Ontario International Airport is located approximately 0.9 mile northeast of a potential staging yard located at the SCE Ontario Service Center. The potential staging yard is within the 60 to 65 dB CNEL noise impact zone for Ontario International Airport. Because the staging yard is an indoor/outdoor industrial storage yard, it is considered a compatible land use within this noise impact zone. Therefore, construction crews working on the Proposed Project would not be exposed to excessive airport noise levels. In addition, construction activities within the vicinity of each airport would be temporary and shortterm, lasting 1 to 2 days per pole. During construction activities, the noise emissions from the construction equipment would be the dominant noise source in the area. No residences would be constructed as part of the Proposed Project; therefore, residential exposure in these areas would not change as a result of the Proposed Project. As a result, people residing and working in these areas would not be exposed to excessive noise levels due to airport noise, and no impact would occur.

Operation – No Impact

As previously described, the Proposed Project is not located within the airport noise compatibility contours for the Chino Airport and the Corona Municipal Airport. In addition, operation and maintenance activities are currently occurring in the vicinity of these airports, and these activities would not change significantly as a result of the Proposed Project. Therefore, operation and maintenance activities associated with the Proposed Project would not expose people residing or working in the area to noise levels beyond that which is currently experienced, and no new impacts would occur.

4.12.4.6 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? – No Impact

The Proposed Project would not be located within the vicinity of a private airstrip. The nearest private-use airport is Lake Mathews Airport, which is located approximately 6.3 miles southeast of the nearest pole. Therefore, the Proposed Project would not expose people residing or working during construction or operation to excessive noise levels attributable to a private airstrip. Consequently, there would be no impact.

4.12.5 Applicant-Proposed Measures

Because less-than-significant impacts to noise would occur as a result of the Proposed Project, no avoidance and minimization measures have been proposed.

4.12.6 Alternative Substation Site

Substation Site Alternative B is located on a vacant lot adjacent to the proposed Circle City Substation site (i.e., Substation Site Alternative A). The closest sensitive noise receptor is located approximately 130 feet from this property. Therefore, impacts from noise during the construction

and operation of a substation at this site would be greater than the impacts from the proposed Circle City Substation site.

4.12.7 Alternative Source Line Routes

Impacts from construction noise resulting from the alternative source line routes would be similar to the proposed Source Line Route, as all routes would use similar construction techniques. The alternative source line routes also pass similar types and numbers of sensitive receptors. As a result, potential impacts to sensitive receptors from construction noise would not differ from the proposed Source Line Route. Source Line Route Alternatives 2 and 4 would place a greater portion of the line underground; therefore, corona noise in some areas would be eliminated. As a result, the operational noise would be reduced in some areas.

4.12.8 Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes

Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 2 would employ similar construction techniques as the Proposed Project; however, it would be located adjacent to a greater number of homes. As a result, more residences would be potentially impacted during this phase of the Proposed Project. Noise emissions during the operation and maintenance of the Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 2 would be similar to the Proposed Project.

Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 3 would follow essentially the same route as the proposed Mira Loma-Jefferson 66 kV Subtransmission Line. In addition, the construction techniques would be similar to those used for the Proposed Project. As a result, potential impacts from noise associated with constructing Alternative 3 would be similar to impacts from the Proposed Project. The short underground portion of the line would eliminate corona noise in this area; slightly reducing the operational noise when compared to the Proposed Project.

4.12.9 References

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ATTACHMENT 4.12-A: NOISE MONITORING RESULTS

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May 22, 2015

Erika Carrillo Insignia Environmental 258 High Street Palo Alto, California 94301

Subject: Circle City Substation Upgrades

Construction Noise Analysis Acentech Project No.: 617205

Erika:

This letter documents the construction noise analysis Acentech performed for the Circle City Substation and the Mira Loma-Jefferson Subtransmission Line (Proposed Project).

Executive Summary

A noise study was performed for the construction activities on the proposed Circle City Substation and Mira Loma-Jefferson Subtransmission Line and the proposed Circle City substation. The calculations show for short durations as the Proposed Project progresses past noise sensitive receptors, there will be short term unavoidable impacts. Beyond mufflers and quieter construction equipment, typical acoustical construction mitigation practices such as noise barriers are not practical since the construction will occur over large distances for short durations. No impacts are expected due to the proposed substation itself.

Proposed Project Description

The Proposed Project consists of the following major components:

- Construction of a new 66/12 kilovolt (kV) substation (Circle City Substation). Circle City Substation would be an unstaffed automated low profile 56 megavolt-ampere (MVA), substation with a potential capacity of 112 MVA at final build out.
- Construction of four new 66 kV subtransmission source lines, including:
 - Two source lines in a double-circuit configuration, which would be a combination of overhead and underground construction. Each would be approximately 1.2 miles in length and would be created by connecting to the existing Chase-Corona-Databank 66 kV Subtransmission Line to form the new Circle City-Corona No. 2 66 kV Subtransmission Line and the new Chase-Circle City-Databank 66 kV Subtransmission Line.
 - Two source lines in a double-circuit configuration, which would be constructed overhead. Each would be approximately 3.5 miles in length and would be created by connecting to the existing Mira Loma-Corona-Pedley 66 kV Subtransmission Line to

form the Mira Loma-Circle City-Pedley 66 kV and the Circle City-Corona No. 1 66 kV Subtransmission Lines.

- Construction of a new 66 kV subtransmission line, which would be a combination of both overhead and underground construction. The proposed Mira Loma-Jefferson 66 kV Subtransmission Line would be approximately 10.9 miles in length and would be constructed from SCE's existing Mira Loma 220/66 kV Substation to a location adjacent to SCE's existing Corona 66/12 kV Substation.
- Upgrade Mira Loma Substation to accommodate the new Mira Loma-Jefferson 66 kV Subtransmission Line.
- Construction of approximately six new underground 12 kV distribution getaways exiting the proposed Circle City Substation.
- Relocation of approximately 1.9 miles of an existing overhead 33 kV distribution line to an underground position.
- Installation of telecommunications facilities to connect the Proposed Project to SCE's existing telecommunications system.

Existing Conditions

The proposed substation area is surrounded by areas zoned as commercial and industrial. The source line between the two substations is located within areas zoned commercial, residential and agricultural.

Noise measurements were performed at four locations between May 24th, 2012 and May 26th, 2012. These locations are documented in figures 1, 2, 3, and 4. At location 1, a Larson Davis type 870 type 1 sound level meter was used, placing the microphone 5' above the ground. At location 2 a Larson Davis 820 type 1 sound level meter was used. For security reasons the sound level meter was attached to a telephone pole, approximately 10' above the ground. At location 3 a Larson Davis 820 type 1 sound level meter was secured to a telephone pole approximately 10' above the ground. At location 4 a Larson Davis type 870 type 1 sound level meter was secured to a telephone pole approximately 10' above the ground.

At the time of the measurements it was observed that high gusts of wind were impacting the microphone, causing the meters to report noise levels that were higher than the actual noise level. Section 3.6.1 of Caltrans Technical Noise Supplement restricts noise measurements from being performed when wind speeds exceed 11 mph. Historical data from the Corona airport weather station shows gusts above 25 mph with average wind speeds exceeding 15 mph during the time frame of the measurements which would contaminate the 25 hour measurement period.

A Community Noise Equivalent Level (CNEL) of 68.7 was measured at location 1. A CNEL of 63.9 was measured at location 2. A CNEL of 71.9 was measured at location 3 and a CNEL of 78.6 was measured at location 4. Hourly average (Leq) noise levels are reported in Appendix A.



Criteria

State of California

The California Environmental Quality Act (CEQA) was enacted in 1970 to help ensure all known environmental effects of a project are reviewed. CEQA does not indicate specific thresholds for evaluating noise impacts. Instead it permits local governments to document thresholds for triggering impact in their Zoning Document. If it is determined the project will introduce significant impacts, it is necessary to mitigate these impacts or determine if economic, social, environmental, legal, or other factors limit the extent to which the mitigation can be implemented.

Section 65302 (f) of the California Government Code requires each county and city to adopt a noise element within their General Plan. The noise element component must recognize the land use compatibility guidelines documented by the State Department of Health Services. However these thresholds are documented in terms of CNEL or Day-Night Level (L_{dn}). These are intended to evaluate long term changes to the environment, not to evaluate short term changes like construction noise.

County of San Bernardino

The County of San Bernardino published standards limiting noise-generating stationary sources on private property in their General Plan, which cause noise levels measured on another property to exceed the levels listed in the table below:

Table 1 – County of San Bernardino noise limits for stationary noise sources.

Receiving Property	Sound Pressure Level Limit per Duration				
	30 Min	15	5 Min	1 Min	Ever
		Min			
Residential (7 AM – 10 PM)	55	60	65	70	75
Residential (10 PM – 7 AM)	45	50	55	60	65
Professional Services	55	60	65	70	75
Other Commercial	60	65	70	75	80
Industrial	70	75	80	85	90

Construction noise thresholds are not indicated: "Exemptions from these standards include...temporary construction and repair or demolition activities taking place the hours of 7:00am and 7:00pm."

City of Corona

The Noise Element of Corona adopts the compatibility guidelines documented by the State Department of Health Services for long term stationary noise sources, but does not document

¹ County of San Bernardino 2007 General Plan, Page VII-2 Section VII "Noise Element," 3. "Summary of Existing Conditions."



specific thresholds for temporary activities like construction noise. The compatibility guidelines are documented in the table below:

Table 2 – Noise Compatibility Guidelines published by the California State Department of Health

Land Use Category	Noise Range (L _{dn} or CNEL)			
	Normally	Conditionally	Normally	Clearly
	Acceptable	Acceptable	Unacceptable	Unacceptable
Passively Used Open Spaces	50	50-55	55-70	70+
Auditoriums, Concert Halls,	45-50	50-65	65-70	70+
Amphitheaters				
Residential: Low-Density Single-	50-55	55-70	70-75	75+
Family, Duplex, Mobile Homes				
Residential: Multifamily	50-60	60-70	70-75	75+
Transit Lodging: Motel, Hotels	50-60	60-70	70-80	80+
Schools, Libraries, Churches,	50-60	60-70	70-80	80+
Hospitals, Nursing Homes				
Actively Used Open Space:	50-67	-	67-73	73+
Playgrounds, neighborhood parks				
Golf Courses, Riding Stables, Water	50-70	-	70-80	80+
Recreation, Cemeteries				
Office Buildings, Business	50-67	67-75	75+	-
Commercial and Professional				
Industrial, Manufacturing Utilities,	50-70	70-75	75+	-
Agriculture				
NT. 4 · · ·				

Notes:

Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are normal conventional construction, without any special noise insulation requirements. Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable – new construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable – New construction or development should generally not be undertaken.

L_{dn} – "Day Night Noise Level" A 24-hour-A-weighted average sound level which includes a 10 dB penalty for sound levels occurring between 10:00 p.m. and 7:00 a.m.

CNEL – "Community Noise Equivalent Level" A 24-hour-A-weighted average sound level which includes a 5 dB penalty for sound levels occurring between 7:00 p.m. and 10:00 p.m. and a 10 dB penalty between the hours of 10:00 p.m. and 7:00 a.m.

City of Norco

As with the City of Corona, the City of Norco adopts the compatibility guidelines documented by the State Department of Health Services for long term average noise limits, but does not document specific thresholds for temporary activities like construction noise.



City of Chino

The Noise Element is included as part of both the Proposed General Plan and the Focused Growth Plan. Chino also uses the compatibility guidelines documented by the State Department of Health Services for stationary long term average noise limits. There are no specific thresholds indicating impacts for construction noise. Construction activity is limited between the hours of 7:00 a.m. and 7:00 p.m.

City of Eastvale

The City of Eastvale has a "Working Draft General Plan" that provides noise guidelines and thresholds for stationary noise sources based off the State Department of Health Services compatibility guidelines. While general policies of restricting construction to daytime hours and requiring some general noise mitigation such as mufflers, there are no descriptive thresholds for construction noise.

Proposed Construction Thresholds

Since no specific thresholds are documented for evaluating the temporary noise generated by Construction Noise Acentech proposes adopting the thresholds for evaluating impact documented by the "FTA Noise and Vibration Manual". The documented "Detailed Assessment" limits are documented in the table below.

Table 3 – Construction Noise Limits published by the "FTA Noise and Vibration Manual"

Land Use	8 hour Leq		Ldn (30 Day Average)
	Day	Night	
Residential	80	70	75
Commercial	85	85	80
Industrial	90	90	85

It is assumed construction activities will only occur during daytime hours. Thus, this analysis will use the daytime 8 hour Leq criteria as the significance thresholds, 80 dBA for residential and 85 dBA for commercial areas.

Proposed Long Term Stationary Source Threshold

It was apparent at the time of the measurements that wind was impacting the sound meters. Because of this, the most stringent threshold grouping was used as the purpose of this evaluation. The area surrounding the proposed substation site consists of commercially, manufacturing, and industrial zoned properties. The highest noise level permissible in the lowest threshold grouping "Normally Acceptable" is 67 CNEL for commercially zoned



properties. Consequently a CNEL of 67 beyond the Proposed Project property line is used as the threshold of significance.

Construction Noise Calculations

Construction Noise levels were calculated using the noise levels published in the Roadway Construction Noise Model (RCNM) published by FHWA. The construction durations and equipment used for the calculations were taken from the distribution documentation included in Appendix C.

The tables below document the expected impact distances based on the various jurisdictions the Proposed Project moves through.

Table 4 – Construction Noise Impact Analysis using FTA Noise Limits for Commercial Properties (Proposed for the City of Corona for Construction of the Sub Station)

Construction Activity	Distance out from Construction Activity Noise Sensitive Areas will be Impacted	Expected Duration of Impact at any given Sensitive Receptor
Grading	48 feet	60 days
Soil Import-Export	20 feet	20 days
Fencing	19 feet	20 days
Temporary Power Pole- Installation	21 feet	3 days
Civil	70 feet	95 days
MEER	14 feet	30 days
Electrical	33 feet	80 days
Wiring	27 feet	40 days
Transformers	23 feet	30 days
Asphalting	39 feet	15 days

Table 5- Construction Noise Impact Analysis using FTA Noise Limits (Proposed for the Cities of Corona, Norco, Eastvale, and Chino) for the Mira Loma – Jefferson Subtransmission Line Proposed Project

Construction Activity	Distance out from Construction Activity Noise Sensitive Areas will be Impacted	Expected Duration of Impact at any given Sensitive Receptor
Marshalling Yard	64 feet	346 days at a single location
Right of Way Clearing	89 feet	30 minutes
Roadwork	91 feet	
Guard Structure Installation	54 feet	2 hours per 59 locations



Construction Activity	Distance out from Construction Activity Noise Sensitive Areas will be Impacted	Expected Duration of Impact at any given Sensitive Receptor
Remove Existing Conductor & GW	47 feet	1 Day
Wood/H-Frame LWS Pole Removal	42 feet	1 hour per pole 223 pole locations
H-Frame Hybrid Pole Structure Removal	54 feet	4 days per 2 locations
TSP Removal	54 feet	2 days per 2 locations
Install TSP Foundation	54 feet	2.6 days per 14 locations
TSP Haul	32 feet	3 hours per 14 locations
TSP Assembly	47 feet	1.3 days per 14 locations
TSP Erection	47 feet	1.3 days per 14 locations
Wood/LWS Pole Haul	32 feet	1.3 hours per 222 locations
Wood LWS Pole Assembly	47 Feet	2 hours per 222 locations
Hybrid Pole Haul	32 feet	2 days per 2 locations
H-frame Hybrid Pole Structure Install	54 feet	8 days per 2 locations
Transfer & Install Conductor	67 feet	1.2 days per 28 Locations
Guard Station Removal	64 feet	1.2 days per 59 locations
Restoration	107 feet	
Vault Installation	75 feet	2.2 hours
Duct Bank Installation	84 feet	40 minutes
Install Underground Cable	57 feet	2.4 hours



Table 6 - Construction Noise Impact Analysis using FTA Noise Limits (Proposed for the City of Corona for the Subtransmission Source Line

Construction Activity	Distance out from Construction Activity Noise Sensitive Areas will be Impacted	Expected Duration of Impact at any given Sensitive Receptor
Marshalling Yard	64 feet	226 days at a single location
Right of Way Clearing	89 feet	5 minutes
Roadwork	91 feet	
Guard Structure Installation	54 feet	1 hour 42 minutes per 32 locations
Wood/H-Frame LWS Pole Removal	42 feet	37 minutes per 13 pole locations
Install TSP Foundation	54 feet	3.14 days per 60 locations
TSP Haul	32 feet	3.4 hours per 19locations
TSP Assembly	47 feet	1.6 days per 19 locations
TSP Erection	47 feet	1.6 days per 19 locations
Wood/LWS Pole Haul	32 feet	1.7 hours per 86 locations
Install Conductor	47 feet	3.3 hours per 26 Locations
Guard Station Removal	64 feet	2 hours per 32 locations
Restoration	107 feet	
Vault Installation	75 feet	1.7 days at 13 locations
Duct Bank Installation	84 feet	40 minutes
Install Underground Cable	57 feet	2.4 hours

Stationary Noise Sources Analysis

Appendix B documents the proposed layout of the substation. The noise sources on the substation are the two 28 MVA transformer banks. SCE specifications limit noise levels from 28 MVA to 66 dBA 10 feet from the unit. Since the transformers will operate continuously, this translates to 24-hour noise level of CNEL 72.7 at 6 feet and CNEL 66.6 at 20 feet.

Since the transformers are more than 250 feet from the closest property line there will be no significant impacts due to stationary noise sources introduced into the Proposed Project. The inclusion of a continuous sound wall on the Proposed Project will further reduce the noise amplitude at the closest property site.



Discussion

Substation Construction

Table 4 presents the expected duration and distance of impact beyond the property line of the construction site. As can be seen the greatest distance of impact is 70 feet. Although there is a vacant lot to the left of the Proposed Project site, the closest structure is 123 feet to the south. Since this is beyond the distance of impact, there are no impacts expected during the construction of the substation.

Subtransmission Line between Mira Loma and Jefferson

The new subtransmission line between Mira Loma and Jefferson will travel through residentially zoned properties. As with the distribution circuit getaway portion of the Proposed Project, this portion contains no significant stationary noise sources so there will be no significant impact to the community after construction is completed. Because there are residential communities that are adjacent to the line, construction noise was evaluated. As can be seen in Table 5 above, there will be significant unavoidable impacts during construction activities. The majority of the impacts will occur for no longer than 2 days, and the greatest distance to impact will be no more than 107 feet from the construction activities.

Potentially longest duration of impact is the Marshalling Yard. This facility should be located away from residences, no closer than 64 feet to any noise sensitive receptors, to avoid triggering a significant impact.

The H-Frame Pole is located more than 54 feet from noise sensitive receptors. Since demolition and construction will only trigger significant impacts within 54 feet, no significant impacts will occur due to these activities.

Distribution Circuit Getaways

The six distribution circuit getaways are located within the City of Corona. The first 4,150 feet of the source line segment is again located within commercial and industrial areas, which have no noise sensitive receptors. As the work travels further west it will travel through residential communities. This portion of the Proposed Project contains no significant stationary noise sources so there will be no significant impact to the community after construction is completed. However, noise from construction activities was calculated to determine impact. As can be seen in Table 6 above, for short durations, not exceeding 2 days, construction will have a significant unavoidable impact on these receptors.

Potentially longest duration of impact is the Marshalling Yard. This facility should be located no closer than 64 feet to any noise sensitive receptors to avoid triggering a significant impact.



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Summary

The Proposed Project will result in impacts due to construction noise for short durations to the noise sensitive receptors. Careful location of the construction Marshalling Yard will eliminate construction noise impacts extending beyond a 3 day period at a specific noise sensitive receptor.

Calculations show there will be no significant impacts to any noise sensitive receptors after construction for the Proposed Project is completed.

Sincerely,

ACENTECH INCORPORATED

Aaron Bétit Senior Consultant



Figure 1- Measurement Location 1





Figure 2 – Measurement Location 2

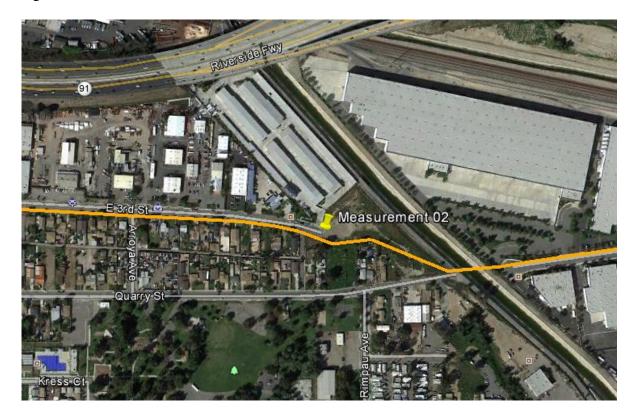
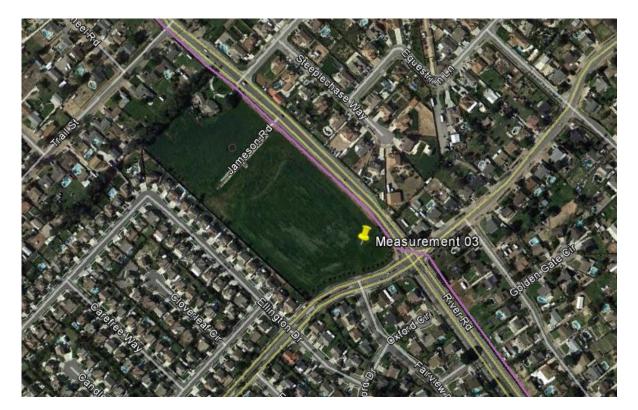
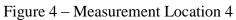


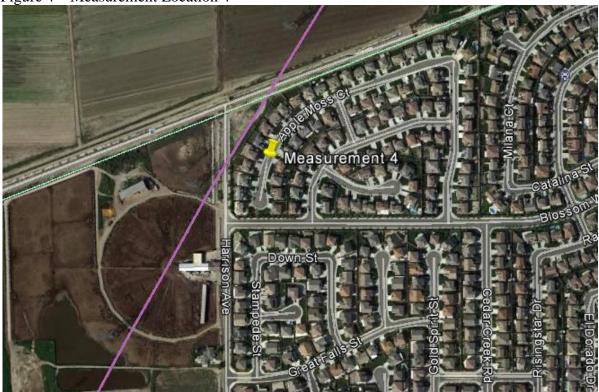


Figure 3 – Measurement Location 3









Appendix A – Hourly Noise Levels Measured between 5/24/12 and 5/26/12

Table A.1

Table A.1		Location 1	Location 2	Location 4	Location 5
Date	Time	Leq			
24May 12	13:00:00	63.4			
24May 12	14:00:00	65.2	60.6		
24May 12	15:00:00	63.5	60.6		
24May 12	16:00:00	64.4	59.5	73.3	78.4
24May 12	17:00:00	64.2	59.5	72	76.9
24May 12	18:00:00	63.8	61.8	70.9	75.4
24May 12	19:00:00	62.6	61.8	70.3	75
24May 12	20:00:00	62	61	68.7	73
24May 12	21:00:00	61.2	60.3	68.9	69.3
24May 12	22:00:00	58.5	57.2	67.8	67.1
24May 12	23:00:00	58.5	56.1	64.4	66.6
25May 12	0:00:00	55.1	56.2	63.2	68.6
25May 12	1:00:00	55.1	53.4	60	66.6
25May 12	2:00:00	57.7	53.7	55.2	67.9
25May 12	3:00:00	55.9	53.6	54.4	63.1
25May 12	4:00:00	58.4	59.6	55.2	62.7
25May 12	5:00:00	61.3	59.1	60.9	68.2
25May 12	6:00:00	62.7	59.5	64.2	70.4
25May 12	7:00:00	64.4	60.7	66.9	71.2
25May 12	8:00:00	63.7	59.8	67.3	73
25May 12	9:00:00	62.5	57	66.8	75.2
25May 12	10:00:00	64.9	56.2	67	78.4
25May 12	11:00:00	65.5	69.4	68.7	78.8
25May 12	12:00:00	65.6	55.9	69.9	78.6
25May 12	13:00:00	64.9	56.1	68.5	80.5
25May 12	14:00:00	67.8	55.7	69.8	83
25May 12	15:00:00	72.8	56.2	70.9	82.4
25May 12	16:00:00	72	56.4	74.1	82.1
25May 12	17:00:00	70.6	56	72.5	80.2
25May 12	18:00:00	69.7	56.9	73.6	77.6
25May 12	19:00:00	66	55.8	71.3	72.9
25May 12	20:00:00	63.5	54.9	70	72.8
25May 12	21:00:00	63.3	53.4	68.2	70



25May 12	22:00:00	59.6	53.6	65.6	64.9
25May 12	23:00:00	57.7	54	64.2	69.2
26May 12	0:00:00	57.2	51.3	61.8	64.8
26May 12	1:00:00	55.9	51.9	61.7	64.2
26May 12	2:00:00	55.2	51.5	59.5	66.5
26May 12	3:00:00	51.8	53	56	64.8
26May 12	4:00:00	54.2	54.8	56	63.4
26May 12	5:00:00	57	57.2	55.3	67.5
26May 12	6:00:00	58	57.9	58.4	70
26May 12	7:00:00	60.7	59	62.4	74.2
26May 12	8:00:00	61.3	59.9	64.2	73
26May 12	9:00:00	61.2	58	66	74.1
26May 12	10:00:00	62.5	54.7	66.8	73.5
26May 12	11:00:00	69.5	59.9	66.4	76



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 $A4ppendix \ B-Substation \ Layout$



Appendix C – Construction Activity Used for Noise Calculations

Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Substation				
Survey	45		1-Survey Truck	8
Grading	60		2-Earth Movers	8
Ç			2-Water Trucks	8
			1-Tracker	8
			2-Dump Trucks	8
			1-Water Tower	8
Soil Import / Export	20		10-Haul Trucks	8
Fencing	20		1-Bobcat	8
			1-Flatbed Truck	8
			1-Crewcab Truck	8
Temporary Power- Pole Installation	3		1-Work Truck with attached Auger	8
Civil	95		1-Excavator	8
			1-Dump Truck	8
			1-Skip Loader	8
			2-Forklift	8
			2-17 Ton Crane	8
			1-Concrete Pump Truck	8
			2-Drill Rig	8
			3-Bob Cat	
			2-Backhoe tracker	
			2-Tool Trailer	
			2-Pickup Truck	
			2-Crew Truck	
			2-Water Truck	
MEER	30		1-Carry all Truck	2
			1-Stake Truck	2



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Electrical	80		2-Scissor Lifts	8
			2-15 Ton Crane	8
			1-20 Ton Crane	8
			1-50 Ton Crane	8
			1-Flatebed Truck	8
			2-Tool Trailer	8
			1-Commander Truck	8
			2-Pickup Truck	
			2-Crew Truck	
			3-Manlift	
			2-Forklift	
Wiring	40		2-Manlift	1
C			2-Tool Trailer	2
Transformers	30		2- 15 Ton Crane	4
			1-Forklift	2
			2-Manlift	2
			2-Crew Truck	2
			1-Low bed Truck	
Maintenance Crew Equipment Check			1-Maintenance Truck	8
Testing	60		2-Crew Truck	8
Asphalting	15		1-Paving Roller	8
			1-Asphalt Paver	8
			2-Dump Truck	8
			1-Crew Truck	8
			1-Asphalt Curb Machine	8
			1-Tractor	8
Mira Loma Substatio	on Work to Aco	commodate Mira Lor	na-Jefferson Subtransmission Line	
Civil	20		1-Drill Rig	8
			1-Backhoe	8
			1-Bobcat	2
			1-Crew Truck	2
			1-Pickup Truck	
Electrical	20		1-Crew Truck	2
			1-Crane/Boom Truck	8
			2-Manlift	



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Maintenance Commission	5		1-Maintenance Truck	1
Test	20		1-Test Truck	1
66 kV Subtransmiss	ion Source Line	Construction		
Survey	5		2-1 Ton Truck, 4X4	8
Marshaling Yard	Duration		1-1 Ton Crew Cab, 4x4	4
_			1-Boom/Crane Truck	2
			1-Rough Terrain Forklift	6
			1-Truck, Semi-Tractor	2
ROW Clearing	1		1-1 Ton Crew Cab, 4x4	8
			1-Road Grader	6
			1-Water Truck	8
			1-Backhoe/Front Loader	4
			1-Track Type Dozer	6
			1-Lowboy Truck/Trailer	4
Road Work	1	XX	1-1 Ton Crew Cab, 4x4	8
			1-Road Grader	6
			1-Water Truck	8
			1-Backhoe/Front Loader	4
			1-Drum Type Compactor	4
			1-Track Type Dozer	4
			1-Excavator	4
			1-Lowboy Truck/Trailer	3
Guard Structure	7	32	1-3/4-Ton Truck, 4x4	8
Installation			1-1 Ton Crew Cab, 4x4	8
			1-Bucket Truck	4
			1-Boom/Crane Truck	6
			1-Auger Truck	4
			1-Compressor Trailer	4
			1-Extendable Flat Bed Pole Truck	8
Wood/H-	1	13	1-1 Ton Truck, 4x4	8
Frame/LWS Pole			1-Compressor Trailer	4
Removal			1-Manlift/Bucket Truck	6
			1-Boom/Crane Truck	6
			1-Flat Bed Pole Truck	8



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Install TSP	60	19	1-1 Ton Crew Cab, 4x4	4
Foundation			1-Boom/Crane Truck	4
			1-Auger Truck	6
			1-Water Truck	8
			1-Backhoe/Front Loader	4
			1-Dump Truck	6
			3-Concrete Mixer Truck	2
TSP Haul	8	19	1-3/4-Ton Truck, 4x4	4
			1-Boom/Crane Truck	6
			1-Flat Bed Pole Truck	8
TSP Assembly	30	19	2-3/4-Ton Truck, 4x4	4
151 Passemery	30		2-1 Ton Crew Cab, 4x4	4
			1-Compressor Trailer	4
			1-Boom/Crane Truck	6
TSP Erection	30	19	2-3/4-Ton Truck, 4x4	4
15F Election	30	19	2-3/4-10ff Truck, 4x4 2-1 Ton Crew Cab, 4x4	4
			1-Compressor Trailer	4
			1-30 Ton Rough Terrain	6
			Crane	0
Install Wood/LWS	18	86	1-1 Ton Crew Cab, 4x4	8
Pole	10	00	1-Bucket Truck	6
			1-Boom/Crane Truck	6
			1-Auger Truck	4
			1-Backhoe/Front Loader	8
			1-Extendable Flat Bed Pole	8
			Truck	
Install Conductor	11	26	3-1 Ton Crew Cab, 4x4	4
			4-Bucket/Truck	8
			1-Boom/Crane Truck	8
			2-Wire Truck/Trailer	6
			1-Dump Truck	2
			1-3 Drum Sock Line Puller	6
			1-Bull Wheel Puller	6
			1-Static Truck/ Tensioner	6
			1-Backhoe/Front Loader	2
			2-Lowboy Truck/Trailer	4



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Guard Structure	8	32	1-3/4-Ton Truck, 4x4	8
Removal			1-1 Ton Crew Cab, 4x4	8
			1-Bucket Truck	4
			1-Boom/Crane Truck	6
			1-Compressor Trailer	4
			1-Extendable Flat Bed Pole Truck	8
Restoration	5		2-1 Ton Crew Cab, 4x4	4
			1-Road Grader	6
			1-Water Truck	8
			1-Backhoe/Front Loader	2
			1-Drum Type Compactor	4
			1-Lowboy Truck/Trailer	3
Vault Installation	22	13	2-1 Ton Crew Cab, 4x4	6
			1-Backhoe/Front Loader	6
			1-Excavator	6
			2-Dump Truck	6
			1-Water Truck	8
			1-165 Ton Crane	6
			3-Concrete Mixer Truck	2
			1-Lowboy Truck/Trailer	4
			3-Flat Bed Truck/Trailer	4
Duct Bank	19	0.9	2-1 Ton Crew Cab, 4x4	4
Installation			1-Backhoe/Front Loader	6
			2-Dump Truck	6
			1-Pipe Truck/Trailer	6
			1-Water Truck	8
			3-Concrete Mixer Truck	2
			1-Compressor Trailer	4
			1-Lowboy Truck/Trailer	4
Mira Loma-Jefferson	n 66 kV Subtra	nsmission Line Constru	ction	
Survey	12	NA	2-1 Ton Truck, 4X4	8



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Marshaling Yard	Duration		1-1 Ton Crew Cab, 4x4	4
			1-Boom/Crane Truck	2
			1-Rough Terrain Forklift	6
			1-Truck, Semi-Tractor	2
			1-Water Truck	8
ROW Clearing	21		1-1 Ton Truck, 4x4	8
			1-Backhoe/Front Loader	6
			1-Track Type Dozer	6
			1-Motor Grader	6
			1-Water Truck	8
			1-Lowboy Truck/Trailer	4
Road Work	6	XX	1-1 Ton Crew Cab, 4x4	8
			1-Backhoe/Front Loader	4
			1-Track Type Dozer	4
			1-Motor Grader	6
			1-Water Truck	8
			1-Drum Type Compactor	6
			1-Excavator	4
			1-Lowboy Truck/Trailer	4
Guard Structure	13	59	1-3/4 Ton Truck, 4x4	8
Installation			1-1 Ton Truck, 4x4	8
			1-Compressor Trailer	4
			1-Manlift/Bucket Truck	4
			1-Boom/Crane Truck	6
			1-Auger Truck	4
			1-Extendable Flat Bed Pole Truck	8
Remove Exiting	1		2-1 Ton Truck, 4x4	4
Conductor & GW			2-Manlift/Bucket Truck	8
			2-Boom/Crane Truck	8
			1-Bull Wheel Puller	6
			1-Sock Line Puller	6
			1-Static Truck/ Tensioner	6
			2-Lowboy Truck/Trailer	4



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Wood/H-	25	223	2-1 Ton Truck, 4x4	8
Frame/LWS Pole			1-Compressor Trailer	4
Removal			1-Manlift/Bucket Truck	6
			1-Boom/Crane Truck	6
			1-Flat Bed Pole Truck	8
H-Frame Hybrid	8	2	2-1 Ton Truck, 4x4	4
Pole Structure			1-Compressor Trailer	8
Removal			1-Rough Terrain Crane (M)	6
			1-Boom/Crane Truck	6
			1-Flat Bed Truck/Trailer	4
TSP Removal	4	2	2-1 Ton Truck, 4x4	4
			1-Compressor Trailer	8
			1-Rough Terrain Crane (M)	6
			1-Boom/Crane Truck	6
			1-Flat Bed Truck/Trailer	4
TSP Foundation	6	2	1-3/4 Ton Truck, 4x4	4
Removal			1-Compressor Trailer	8
			1-Backhoe/Front Loader	6
			1-Dump Truck	6
			1-Excavator	4
Install TSP	36	14	1-3/4 Ton Truck, 4x4	4
Foundations			1-Boom/Crane Truck	4
			1-Backhoe/Front Loader	6
			1-Auger Truck	6
			1-Water Truck	8
			1-Dump Truck	4
			3-Concrete Mixer Truck	2
TSP Haul	5	14	1-3/4 Ton Truck, 4x4	8
			1-Boom/Crane Truck	6
			1-Flat Bed Pole Truck	8
TSP Assembly	18	14	2-3/4 Ton Truck, 4x4	4
			2-1 Ton Truck, 4x4	4
			1-Compressor Trailer	6
			1-Boom/Crane Truck	8



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
TSP Erection	18	14	2-3/4 Ton Truck, 4x4	4
			2-1 Ton Truck, 4x4	4
			1-Compressor Trailer	4
			1-Boom/Crane Truck	8
Wood/LWS Pole	37	222	1-3/4 Ton Truck, 4x4	8
Haul			1-Boom/Crane Truck	6
			1-Flat Bed Pole Truck	8
Wood/LWS Pole	56	222	2-3/4 Ton Truck, 4x4	4
Assembly			2-1 Ton Truck, 4x4	4
			1-Compressor Trailer	6
			1-Boom/Crane Truck	8
Hybrid Pole Haul	4	2	1-3/4 Ton Truck, 4x4	8
			1-Boom/Crane Truck	6
			1-Flat Bed Pole Truck	8
Install H-frame	16	2	1-1 Ton Truck, 4x4	8
Hybrid Pole			1-Manlift/Bucket Truck	6
Structure			1-Boom/Crane Truck	6
			1-Auger Truck	4
			1-Backhoe/Front Loader	8
			1-Extendable Flat Bed Pole Truck	8
Transfer & Install	33	28	3-1 Ton Truck, 4x4	4
Conductor			4-Manlift/Bucket Truck	8
			1-Boom/Crane Truck	8
			1-Dump Truck	2
			2-Wire Truck/Trailer	6
			1-Sock Line Puller	6
			1-Bull Wheel Puller	6
			1-Static Truck/ Tensioner	6
			1-Backhoe/Front Loader	2
			2-Lowboy Truck/Trailer	4



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Guard Structure	9	59	1-3/4-Ton Truck, 4x4	8
Removal			1-1 Ton Crew Cab, 4x4	8
			1-Compressor Trailer	4
			1-Manlift/Bucket Truck	4
			1-Boom/Crane Truck	6
			1-Extendable Flat Bed Pole Truck	8
Restoration	11		2-1 Ton Truck, 4x4	4
			1-Backhoe/Front Loader	8
			1-Motor Grader	6
			1-Water Truck	8
			1-Drum Type Compactor	4
			1-Lowboy Truck/Trailer	4
Vault Installation	3	11	2-1 Ton Truck, 4x4	4
			1-Backhoe/Front Loader	8
			1-Excavator	6
			2-Dump Truck	8
			1-Water Truck	8
			1-Crane (L)	6
			3-Concrete Mixer Truck	2
			1-Lowboy Truck/Trailer	4
			3-Flat Bed Truck/Trailer	4
Duct Bank	2	0.7 mile	2-1 Ton Truck, 4x4	4
Installation			1-Compressor Trailer	4
			1-Backhoe/Front Loader	6
			2-Dump Truck	6
			1-Pipe Truck/Trailer	6
			1-Water Truck	8
			3-Concrete Mixer Truck	2
			1-Lowboy Truck/Trailer	4
Install Underground	2	0.7 mile	2-1 Ton Truck, 4x4	4
Cable			1-Manlift/Bucket Truck	6
			1-Boom/Crane Truck	6
			2-Wire Truck/Trailer	6
			1-Puller	6
			1-Static Truck/ Tensioner	6



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Fiber Optic Cable	25		2-One Ton Pick Up Truck	8
Installation			2-Bucket Trucks	8
			1-Flatbed Truck	4
			1-Arrow Board Trailer	8
Fiber Optic Cable	10		1-One Ton Pick Up Truck	8
Splicing			2 Medium Duty Splicing Lab Truck	8
Underground	15		1-Dump Truck	8
Conduit			1-Flatbed Truck	8
			1-Backhoe	8
			1-One Ton Pick Up Truck	4
			1-Water Truck	4
			1-Cement Truck	4
Distribution Constru	ction – Getawa	ys		
Vault Installation	48		1-Backhoe	8
			1-Dump Truck with triple-	8
			axle trailer	8
			1-One Tone Pick Up Truck with single-axle trailer	
			1-Water Truck	8
			2-Cement Truck	8
			1-40 Ton Crane	8
			1-Flatbed Truck	8
m 1.m	20			
Trench/Duct Installation	20		1-Backhoe	8
mstanatiOli			1-Dump Truck with triple- axle trailer	8
			1-One Tone Pick Up Truck	8
			with single-axle trailer	
			1-Water Truck	8
			2-Cement Truck	8
Distribution Constru	ction – Relocat	ion of Existing Struct	tures (Mira Loma-Jefferson Subtransmis	sion Line)
Location 1 –	11		2-Bucket Truck	8
Construction Line			1-Single axle Trailer	8
			1-One Tone Pick Up Truck	8
			1-½ Ton Pickup Truck	4



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Location 1 – Stringing Crew	4		1-Truck Pulling Stinging Dolly	8
			1-Truck Pulling Reel Dolly 1 ½-Ton Pickup Truck	8
			-	4
Location 2 – Construction Line	57		2-Bucket Truck	8
Construction Line			1-Single axle Trailer	8
			1-One Ton Pickup Truck 1-Half Ton Pickup Truck	8 4
Location 2- Stringing Crew	4		1-Truck Pulling Stinging Dolly	8
building ere			1-Truck Pulling Reel Dolly	8
			1-Half Ton Pickup Truck	4
Location 3-	13		2-Bucket Truck	8
Construction Line			1-Single axle Trailer	8
			1-One Ton Pickup Truck	8
			1-Half Ton Pickup Truck	4
Location 3 – Stringing Crew	5		1-Truck Pulling Stringing Dolly	8
			1-Truck Pulling Reel Dolly	8
			1-Half ton Pickup	4
Location 4-	62		2-Bucket Truck	8
Construction Line			1-Single axle Trailer	8
			1-One Ton Pickup Truck	8
			1-Half Ton Pickup Truck	4
Location 4- Stringing Crew	62		1-Truck Pulling Stringing Dolly	8
			1-Truck Pulling Reel Dolly	8
			1-Half ton Pickup	4
Location 5- Vault	96		1-Backhoe	8
Installation			1-Dump Truck with Triple- Axle Trailer	8
			1-One Ton Pickup Truck	8
			1-Water Truck	8
			2-Concrete Mixer Trucks	8
			1-40 Ton Crane	8
			1-Flatbed Truck	8



Activity and Number of Personnel	Number of Work Days	Quantity	Equipment and Quantity	Duration of Use (Hours/Day)
Location 5-	165		1-Backhoe	8
Trench/Duct Installation			1-Dump Truck with Triple- Axle Trailer	8
			1-One ton Pickup Truck	8
			1-Water Truck	8
			2-Cement Trucks	8
Distribution Construc	ction – Relocati	on of Existing Structu	res (Source Line Route 1)	
Location 1	45		2-Bucket Truck	8
			1-Single axle Trailer	8
			2-One Tone Pick Up Truck	8
			1-Half Ton Pickup Truck	4
Location 2	3		2-Bucket Truck	8
			1-Single axle Trailer	8
			1-One Tone Pick Up Truck	8
Distribution Construc	ction – Relocati	on of Existing Structu	res (Source Line Route 2)	
Location 1	10		2-Bucket Truck	8
			1-One Tone Pick Up Truck	8
			1-Splicing Van	8
			2-Cable-pulling Trucks with	8
			single axle cable dolly	8
			1-Cable Chopping Truck	8
			1-Dump Truck	8
			1-Backhoe	8
			1-Arrow Board Trailer	8
			1 Backhoe	8
			1 Dump Truck with Triple- Axle Trailer	8
Location 2	7		1 1-Ton Pickup Truck with Single-Axle Trailer	8
Location 2	,		1 Water Truck	8
			2 Concrete mixer truck	8
			1 40-Ton Crane	8
			1 Flatbed Truck	8



4.13 Population and Housing

This section describes the existing population and housing characteristics in the area of the Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project). The potential impacts and alternatives are also discussed. Construction, operation, and maintenance of the Proposed Project would not result in any impacts to population and housing.

4.13.1 Environmental Setting

A description of the population trends within the Proposed Project area and the types of available housing are described in the subsections that follow.

4.13.1.1 Population

The Proposed Project would cross the cities of Corona, Eastvale, and Norco in Riverside County, as well as the cities of Chino and Ontario in San Bernardino County. The Proposed Project would also cross a portion of one parcel of land in unincorporated Riverside County within the sphere of influence of the City of Norco. The population of Chino, Corona, Norco, and Ontario grew by approximately 23 percent between 2000 and 2010 and is projected to grow an additional 33 percent by 2035. Table 4.13-1: Historic Population Trends and Table 4.13-2: Forecasted Population Trends summarize the historic, current, and forecasted populations in these areas.

4.13.1.2 Housing

Approximately 141,071 total housing units are located in the cities that would be crossed by the Proposed Project. Of these, approximately 8,711 were vacant in 2013, resulting in a vacancy rate of approximately 6 percent. Single-family, detached homes dominate the area, accounting for approximately 69 percent of all housing units. Table 4.13-3: Housing Units in the Proposed Project Area summarizes the number of housing units in each of the jurisdictions that would be crossed by the Proposed Project. Table 4.13-4: Housing Units Adjacent to the Proposed Project summarizes the housing units that are adjacent to the Proposed Project.

4.13.1.3 Temporary Housing

Approximately 41 hotels, motels, and long-term temporary housing units are located in the cities in the Proposed Project area. Approximately 19 of these units have more than 50 rooms. The Residence Inn by Marriott – Corona is located approximately 0.13 mile south of the proposed Source Line Route and is the nearest temporary housing unit to the Proposed Project.

4.13.2 Regulatory Setting

There are no regulations for population and housing that are relevant to the Proposed Project.

4.13.2.1 Federal

No federal regulations related to population and housing are relevant to the Proposed Project.

¹ Eastvale is not included in this list because it was not incorporated until 2010.

Table 4.13-1: Historic Population Trends

	Popul	Growth Between	
Jurisdiction	2010	2013	2010 and 2013 (percent)
Riverside County	2,189,641	2,228,528	1.78
San Bernardino County	2,035,210	2,056,915	1.07
City of Chino	77,983	79,342	1.74
City of Corona	152,374	155,227	1.87
City of Eastvale	53,668	61,689	14.95
City of Norco	27,063	27,079	0.06
City of Ontario	163,924	165,702	1.08

Source: United States (U.S.) Census Bureau, 2015a; U.S. Census Bureau, 2015b; U.S. Census Bureau, 2015c; U.S. Census Bureau, 2015d; U.S. Census Bureau, 2015e

Table 4.13-2: Forecasted Population Trends

Jurisdiction	2020	2035	Projected Growth Between 2020 and 2035 (percent)
Riverside County	2,592,000	3,324,000	28
San Bernardino County	2,268,000	2,750,000	21
City of Chino	88,800	107,200	21
City of Corona	155,800	164,600	6
City of Eastvale	61,500	68,300	11
City of Norco	30,300	32,700	8
City of Ontario	203,800	307,600	51

Sources: Southern California Association of Governments (SCAG), 2012; U.S. Census Bureau, 2015a; U.S. Census Bureau, 2015b; U.S. Census Bureau, 2015c; U.S. Census Bureau, 2015d; U.S. Census Bureau, 2015e

Table 4.13-3: Housing Units in the Proposed Project Area

Jurisdiction	Housing Units in 2013
Riverside County	805,142
San Bernardino County	701,332
City of Chino	22,529
City of Corona	46,871
City of Eastvale	15,354
City of Norco	7,468
City of Ontario	48,849

Sources: U.S. Census Bureau, 2015a; U.S. Census Bureau, 2015b; U.S. Census Bureau, 2015c; U.S. Census Bureau, 2015d; U.S. Census Bureau, 2015e

Table 4.13-4: Housing Units Adjacent to the Proposed Project

Jurisdiction	Location	Approximate Distance from the Proposed Project (miles) ²
City of Corona	Along North Cota Street from River Road to Corporation Yard Way	0.02
City of Corona	Along East 3rd Street from East Grand Boulevard to its termination	0.02
City of Eastvale	Bellgrave Avenue to Archibald Avenue	0.01
City of Eastvale	Bright Gem Court to Hellman Avenue and along Hellman Avenue to Outback Way	0.01
City of Eastvale	The corner of River Road and Baron Drive	0.01
City of Norco and City of Corona	From the River Road Bridge along River Road to North Cota Street	<0.01

Source: Google, 2015

 2 The distance to these housing units was measured from the proposed Source Line Route and the Mira Loma-Jefferson 66 Kilovolt (kV) Subtransmission Line.

4.13.2.2 State

No state regulations related to population and housing are relevant to the Proposed Project.

4.13.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local regulations is provided for informational purposes only.

Riverside County General Plan

The Housing Element of the Riverside County General Plan identifies the existing and projected housing needs for the existing and future residents within the county. In addition, the Housing Element establishes goals, policies, and programs related to housing needs. The Riverside County General Plan does not contain any policies that are relevant to the Proposed Project.

San Bernardino County General Plan

The Housing Element of the San Bernardino County General Plan sets forth goals and policies that address existing and future housing needs for the unincorporated communities of San Bernardino County. The San Bernardino County General Plan does not contain any policies that are relevant to the Proposed Project.

City of Chino General Plan

The Housing Element of the City of Chino General Plan identifies existing and projected housing needs for the residents of the city. In addition, the Housing Element sets forth policies, programs, and objectives related to housing needs. The City of Chino General Plan does not contain any policies that are relevant to the Proposed Project.

City of Corona General Plan

The Housing Element of the City of Corona General Plan sets forth the city's strategy to identify opportunities to meet the housing needs of existing and future residents. The City of Corona General Plan does not contain any policies that are relevant to the Proposed Project.

City of Eastvale General Plan

The Housing Element of the City of Eastvale General Plan identifies and establishes the city's policies to meet the housing needs of existing and future residents in the city. The City of Eastvale General Plan does not contain any policies that are relevant to the Proposed Project.

City of Norco General Plan

The Housing Element of the City of Norco General Plan provides an inventory of the existing conditions of the city's housing stock and identifies where the city needs to improve its programs to provide adequate housing opportunities for the community. In addition, the Housing Element establishes goals, policies, and programs related to housing needs. The City of Norco General Plan does not contain any policies that are relevant to the Proposed Project.

City of Ontario General Plan

The Housing Element of the City of Ontario General Plan sets forth ongoing strategies to address the city's housing needs. In addition, the Housing Element provides an inventory of the city's existing housing stock and establishes the city's policies to meet the housing needs of existing and future residents in the city. The City of Ontario General Plan does not contain any policies that are relevant to the Proposed Project.

4.13.3 Significance Criteria

The significance criteria for assessing the impacts to population and housing are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Environmental Checklist, a project causes a potentially significant impact if it would:

- Induce substantial population growth in the area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of new roads or other infrastructure)
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere

4.13.4 Impact Analysis

4.13.4.1 Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Construction – No Impact

Proposed Project construction would be largely conducted within and along existing rights-of-way (ROWs). However, a few temporary and permanent roads would be constructed to provide access to limited areas of the Mira Loma-Jefferson 66 kV Subtransmission Line Route. However, these access roads would not be open to public use, and the temporary roads would be returned to near pre-construction conditions following the completion of construction. As a result, these access roads would not induce indirect population growth by increasing access to new areas for development. In addition, no new housing or businesses would be constructed as part of the Proposed Project.

During the peak construction periods, a maximum of 100 people are anticipated to be working at any given time, and some of these crew members would likely be local residents commuting from the surrounding areas. Regardless, there is sufficient temporary housing available in the Proposed Project area to accommodate temporary construction personnel. Because construction would be temporary—lasting approximately 18 months—and the workforce would be relatively small, the Proposed Project would not result in a permanent increase in the area's population. Therefore, no permanent or long-term population growth in the area would occur due to construction of the Proposed Project, and there would be no impact.

Operation – No Impact

Southern California Edison (SCE) currently conducts operation and maintenance activities on existing transmission lines and substations within the Proposed Project area. These existing activities would not change significantly as a result of the Proposed Project, and no additional personnel would be hired for operation of the Proposed Project. Therefore, no impact would occur.

4.13.4.2 Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Construction – No Impact

Proposed Project construction would primarily be conducted within existing subtransmission line corridors or existing public roads. SCE's existing ROW along River Road may need to be expanded in some locations; however, no residential dwellings are located in the areas that would be expanded. In addition, construction of the proposed Circle City Substation would not require the displacement of any existing housing units. As a result, no housing would be displaced from Proposed Project construction, and there would be no impact.

Operation – No Impact

The operation and maintenance of the Proposed Project would continue to be conducted within existing utility corridors and along existing public roads. The proposed Circle City Substation would typically be operated remotely and maintenance would occur within its fence line. Therefore, no housing would be affected as a result of the operation and maintenance of the Proposed Project, and there would be no impact.

4.13.4.3 Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Construction – Less-than-Significant Impact

Though some residents may be temporarily relocated during construction, this relocation would be temporary, short-term, and in close proximity to their homes, and would not require the construction of replacement housing elsewhere. As a result, the impact would be less than significant.

Operation – No Impact

The operation and maintenance of the Proposed Project would be conducted within existing utility corridors, public roads, and substation boundaries. Therefore, no permanent displacement of residents would occur as a result of Proposed Project operation and maintenance activities, and no impact would occur.

4.13.5 Applicant-Proposed Measures

Because no impacts or less-than-significant impacts to population and housing would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.13.6 Alternative Substation Site

Similar to the proposed Circle City Substation site (i.e., Substation Site Alternative A), no existing housing units are located within Substation Site Alternative B, and no housing units would be displaced. As a result, impacts would be the same for the two potential substation locations.

4.13.7 Alternative Source Line Routes

The alternative source line routes would be constructed along or within existing public roads or existing utility corridors. As a result, the impacts from the alternatives would be similar to that of the proposed Source Line Route.

4.13.8 Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes

Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 3 would share a significant portion of its route with the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route. The differing portion would be located in a street ROW along Archibald Avenue and would not induce population growth or displace housing or residents. Likewise, an approximately 0.4-milelong portion of Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 2, which is different from the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route, would be located underground along an existing public road. As a result, no housing would be displaced by Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 2, and impacts would be similar to those of the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route.

4.13.9 References

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4.14 Public Services

This section describes public services in the area of Southern California Edison's (SCE's) Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project), as well as the potential impacts and alternatives. Several public services have the potential to be affected by construction of the Proposed Project; however, such impacts would be temporary and less than significant.

4.14.1 Environmental Setting

The following subsections describe existing public services, including fire protection, police protection, schools, hospitals, parks, and other public services, such as libraries and community centers, in the Proposed Project area. The Proposed Project would be located primarily in the City of Corona, with other components also located in the cities of Chino, Eastvale, Norco, and Ontario. The cities of Corona, Eastvale, and Norco are located in Riverside County, and the cities of Chino and Ontario are located in San Bernardino County.

4.14.1.1 Fire Protection

The Proposed Project would be located within the protection area of three municipal fire departments, two county departments, and one special service area. Four fire stations are located within 1 mile of the Proposed Project; their locations, jurisdictions, and distances from the Proposed Project are provided in Table 4.14-1: Fire Protection within 1 Mile. Figure 4.14-1: Public Services Map (Source Line Route) and Figure 4.14-2: Public Services Map (Subtransmission Line) depict the locations of these stations.

Table 4.14-1: Fire Protection within 1 Mile of the Proposed Project

Station and Address	Jurisdiction	Nearest Proposed Project Component	Approximate Distance from the Proposed Project (miles)
Corona Fire Station #2 225 East Harrison Street, Corona	City of Corona, Fire Department	Source Line Route	0.06
Corona Fire Department Headquarters 735 Public Safety Way, Suite 201, Corona	City of Corona, Fire Department	Mira Loma-Jefferson 66 kilovolt (kV) Subtransmission Line	0.10
Station #13 (Home Gardens) 3777 Neece Street, Corona	California Department of Forestry and Fire Protection (CAL FIRE)/Riverside County Fire Department (RCFD)	Circle City Substation	0.26
Station #14 (Corona) 1511 Hamner Avenue, Norco	CAL FIRE/RCFD	Mira Loma-Jefferson 66 kV Subtransmission Line	0.75

Sources: RCFD, 2015; City of Corona, 2015a

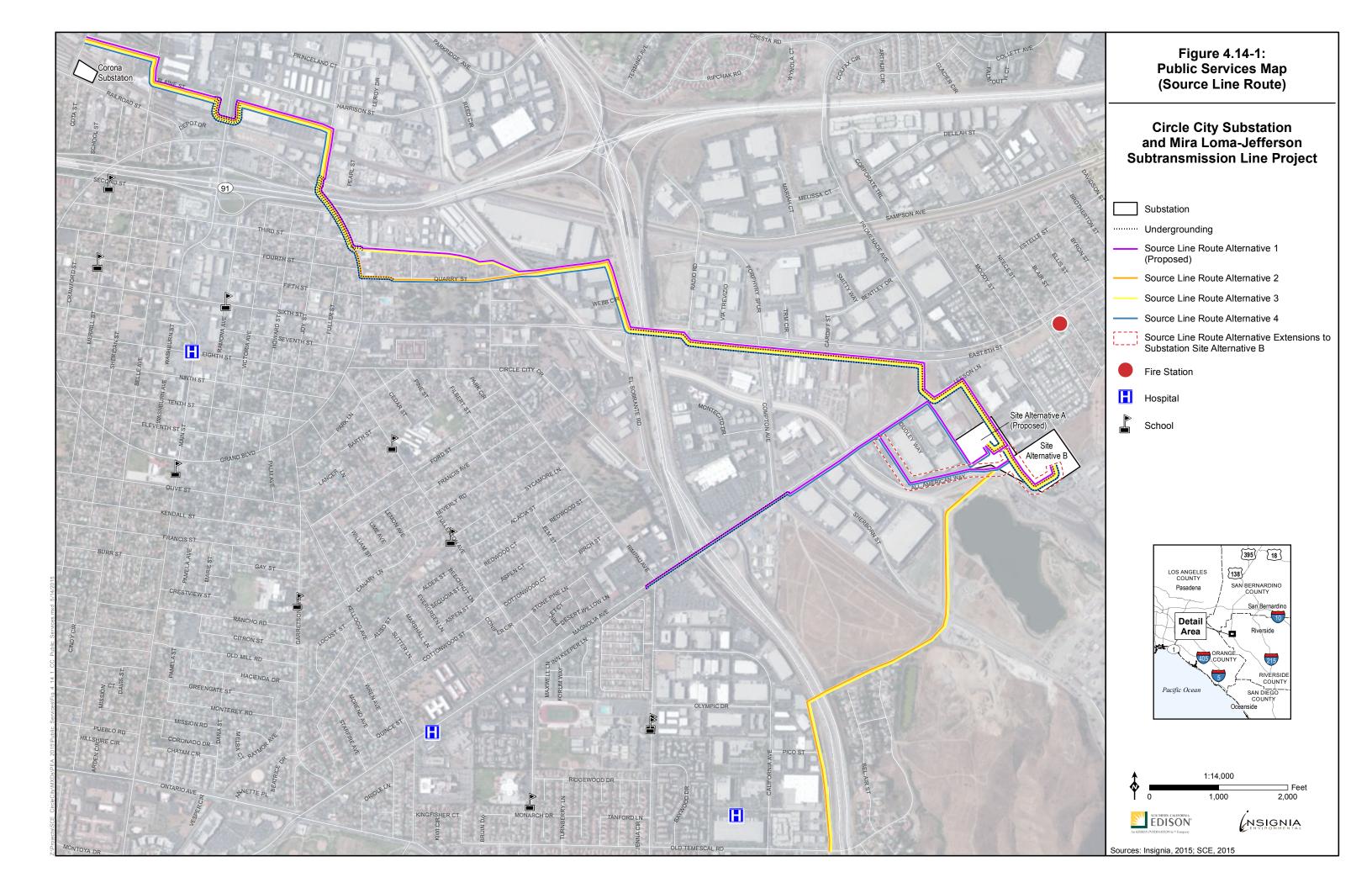
The Chino Valley Fire District is responsible for providing fire protection for the City of Chino. The Chino Valley Fire District employs more than 120 staff and operates seven fire stations, one training center, and an administration facility. The district's goal is to respond in 5 minutes 90 percent of the time; the average response times in 2014 were 6.88 minutes for fire calls and 5.88 minutes for emergency medical services (EMS) calls. The nearest Chino Valley Fire District station to the Proposed Project is Station #63, which is located at 7550 Kimball Avenue, south of the Chino Airport, and approximately 1.8 miles west of the Mira Loma-Jefferson 66 kV Subtransmission Line. When needed, Division I of the San Bernardino County Fire Department (SBCFD) provides additional services to the City of Chino.

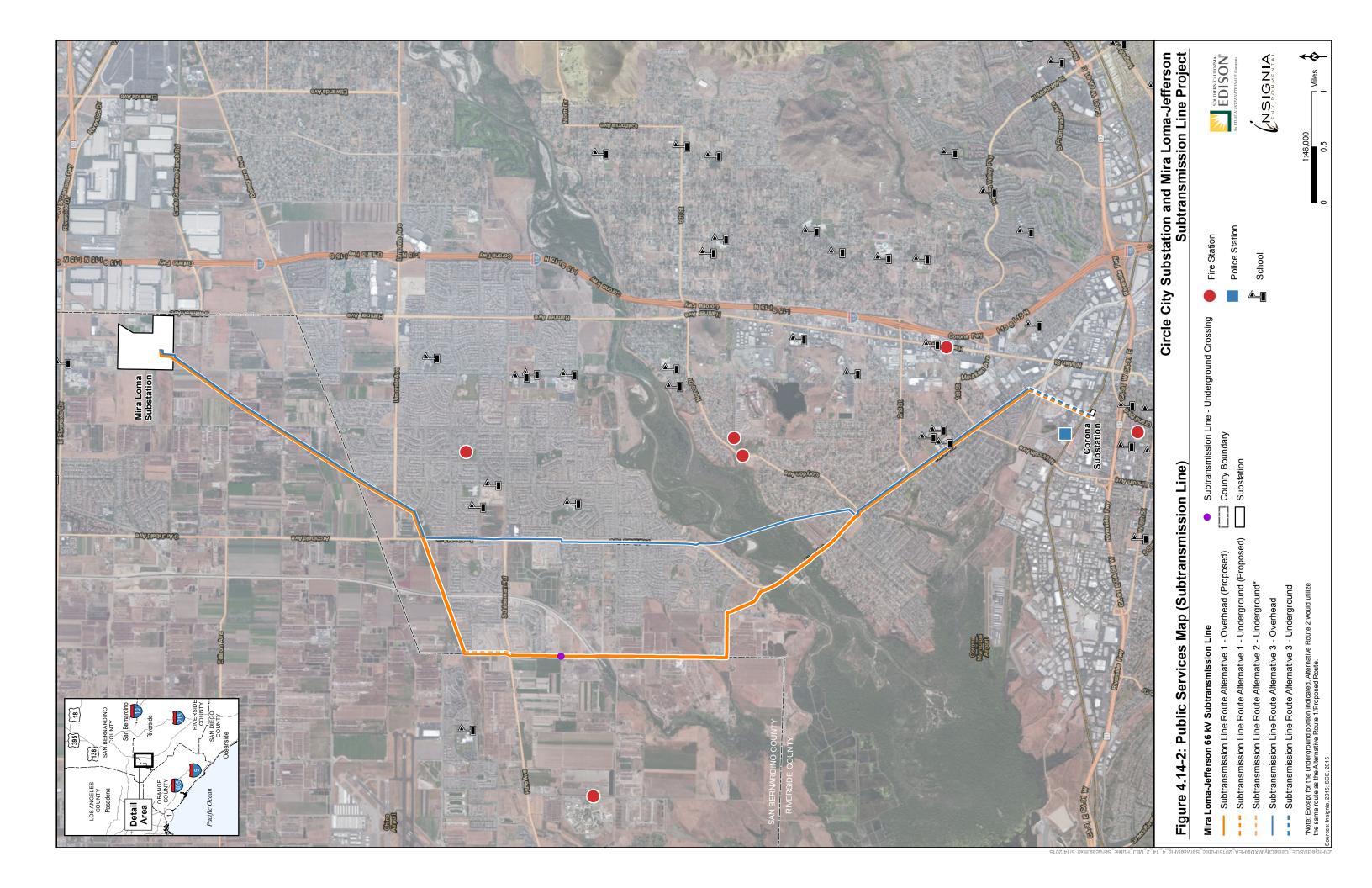
The Corona Fire Department has seven active fire stations and a department headquarters staffed by 117 fire suppression and prevention professionals. The Corona Fire Department emergency response time objectives range from 5.83 minutes 90 percent of the time to 10.87 minutes 90 percent of the time for EMS and Fire and Special Operations, respectively. The nearest station to the Proposed Project is Corona Fire Station #2, which is located on East Harrison Street and approximately 0.06 mile from the proposed Source Line Route. The Corona Fire Department Headquarters is located approximately 0.10 mile from the proposed Mira Loma-Jefferson 66kV Subtransmission Line. A CAL FIRE/RCFD station, Station #13, is also located in the City of Corona, approximately 0.26 mile from the proposed Circle City Substation.

The City of Eastvale does not operate a municipal fire department; instead, it also receives fire protection from CAL FIRE/RCFD. CAL FIRE/RCFD maintains Station #27 in the City of Eastvale at 7067 Hamner Avenue, approximately 1.95 miles east of the Mira Loma-Jefferson 66 kV Subtransmission Line. Average response times for CAL FIRE/RCFD within the City of Eastvale were not available.

The City of Norco Fire Department contracts with CAL FIRE/RCFD. CAL FIRE/RCFD provides fire and emergency services throughout Riverside County, including in the cities of Eastvale and Norco. In addition, CAL FIRE/RCFD are responsible for emergency planning, preparation, and assessment of major emergency threats throughout the county. In total, CAL FIRE/RCFD operate 101 stations throughout Riverside County. CAL FIRE/RCFD maintain three active fire stations in the City of Norco: Station #14, Station #47, and Station #57. The nearest fire station to the Proposed Project in the City of Norco is Station #14 (Corona), which is located at 1511 Hamner Avenue and approximately 0.75 mile east of the Mira Loma-Jefferson 66 kV Subtransmission Line. Station #14 has a daily staff of four firefighters and Stations #47 and #57 have a daily staff of three firefighters and are located farther than one mile from the Proposed Project. The average response time for CAL FIRE/RCFD in the City of Norco is 5 minutes.

The City of Ontario maintains its own municipal fire department, with eight stations staffed by approximately 150 personnel. The closest station to the Proposed Project is Station #7 at 4901 East Vanderbilt Street, approximately 2.9 miles from the existing Mira Loma Substation. Response times for the City of Ontario municipal fire stations were not available.





The nearest SBCFD station is Station #74 (Fontana) at 11500 Live Oak Road in the City of Fontana. Station #74 is staffed daily with three personnel. The SBCFD and the City of Ontario Fire Department typically operate under a Master Mutual Aid Agreement, which provides resources to the requesting agency if and when the resources are available and if the request order is approved. Currently, the SBCFD and the City of Ontario do not have an approved Automatic Aid agreement; therefore, various circumstances could delay the SBCFD's response time to the City of Ontario. Additional information regarding response times for the SBCFD was not available. The Office of Emergency Services, a division of the SBCFD, is responsible for disaster planning and emergency management and coordination for the entire county.

4.14.1.2 Police Protection

The Riverside County Sheriff's Department provides police protection throughout the county from 10 stations and employs more than 4,000 personnel. The average response time for priority-one calls is approximately 9.5 minutes for unincorporated areas of Riverside County. The Riverside County Sheriff's Department also provides the primary police presence in the cities of Eastvale and Norco. In 2014, the average response times for the City of Norco were 7.16 minutes for priority-one calls¹ and 15.49 minutes for priority-two calls. The average response times for the City of Eastvale in 2014 were 8.10 minutes for priority-one calls and 20.69 minutes for priority-two calls. The Jurupa Valley Station, which serves northwestern Riverside County, is the closest station to the Proposed Project and is approximately 6.77 miles east of the Mira Loma-Jefferson 66 kV Subtransmission Line. There is also a Sheriff's Station in the City of Norco, which is located at 2870 Clark Avenue and is open from 10:00 a.m. to 2:00 p.m., Monday through Friday.

The cities of Chino, Corona, and Ontario all maintain their own municipal police forces. The Corona Police Department Headquarters is the nearest station to the Proposed Project; it is located approximately 0.18 mile from the Mira Loma-Jefferson 66 kV Subtransmission Line, and it is the only police station located within 1 mile of the Proposed Project. The average response time for priority-one calls for the Corona Police Department was 5.25 minutes in 2014. The nearest Chino Police Department station is located more than 5 miles away from the Proposed Project. The average response time for priority-one calls for the City of Chino Police Department was 6.67 minutes in 2014. The nearest Ontario Police Department facility is the Police Department Headquarters, which is located approximately 2.38 miles from the Proposed Project. The average response time for Priority E² calls for the City of Ontario Police Department was 1.83 minutes in 2014. Table 4.14-2: Police Stations Providing Service to the Proposed Project Area lists the locations of all the stations that provide service to the cities near the Proposed Project, as well as their distance from the Proposed Project. The location of each station is also shown in Figure 4.14-2: Public Services Map (Subtransmission Line).

¹ A priority-one call is critical and of highest priority. A priority-two call is an emergency.

² A Priority E call in the City of Ontario includes an aircraft crash, Cod-3 Assist Other Jurisdiction, Code-3 Pursuit Assist, shooting, stabbing, officer down, Code-3 Fire Department Assist, and earthquake.

Table 4.14-2: Police Stations Providing Service to the Proposed Project Area

Station and Address	Jurisdiction	Nearest Proposed Project Component	Approximate Distance from the Proposed Project (miles)
Corona Police Department Headquarters 730 Corporation Yard Way, Corona	Corona Police Department	Mira Loma-Jefferson 66 kV Subtransmission Line	0.18
Ontario Police Department Headquarters 2500 South Archibald Avenue, Ontario	Ontario Police Department	Mira Loma-Jefferson 66 kV Subtransmission Line	2.38
Chino Police Department 5450 Walnut Avenue, Chino	Chino Police Department	Mira Loma-Jefferson 66 kV Subtransmission Line	> 5
Jurupa Valley Station 7477 Mission Boulevard, Jurupa Valley	Riverside County Sheriff's Department	Mira Loma-Jefferson 66 kV Subtransmission Line	> 5

Sources: Corona Police Department, 2015; Riverside County Sheriff-Coroner, 2015; City of Ontario, 2015c; City of Chino, 2015

4.14.1.3 Schools

The Proposed Project is located within four school districts—one in Riverside County and three in San Bernardino County. The Corona-Norco Unified School District serves the cities of Corona, Eastvale, and Norco in Riverside County. In San Bernardino County, the Proposed Project would cross the Chaffey Joint Union High School District, the Ontario-Montclair School District and the Chino Valley Unified School District. The Proposed Project would be located along the street in front of the parking lot entrance for the Auburndale Intermediate School. Two schools—George Washington Elementary School and the Victress Bower Elementary—are located within 0.25 mile of the Proposed Project. All three schools are part of the Corona-Norco Unified School District. Colony High School is located approximately 0.20 mile from the existing Mira Loma Substation and is part of the Chaffey Joint Union High School District.

Descriptions of the schools within 0.25 mile of the Proposed Project are provided in Table 4.14-3: Schools within 0.25 Mile of the Proposed Project. The locations of all schools in the Proposed Project area are shown on Figure 4.14-1: Public Services Map (Source Line Route) and Figure 4.14-2: Public Services Map (Subtransmission Line). All four of the schools that are located within 0.25 mile of the Proposed Project are on traditional school year calendars. For the 2015-2016 school year, each of the three elementary and/or intermediate schools will be in session from August 11, 2015 through June 02, 2016. Additionally, both George Washington Elementary School and Victress Bower Elementary provide extended school year schedules for special education students and hold classes from 9:00 a.m. to 1:00 p.m. from June 15 to July 10. Colony High School will be in session from August 5, 2015 through May 19, 2016 during the 2015-2016 school year. Additionally, summer school for Colony High school will be in session from May 23, 2016 through June 30, 2016.

Table 4.14-3: Schools within 0.25 Mile of the Proposed Project

School and Address	Type/ Grades	Schedule ³	Approximate Distance from the Proposed Project (miles)
Auburndale Intermediate School 1255 River Road, Corona	Traditional/ Intermediate	Grades 7-8: 7:45 a.m. to 2:08 p.m. Early Dismissal: 1:08 p.m.	Adjacent
George Washington Elementary School 1220 West Parkridge Avenue, Norco	Traditional/ Elementary	AM Kindergarten: 7:45 a.m. to 11:32 p.m. Early Dismissal: 10:32: a.m. PM Kindergarten: Early Dismissal: Grades 1-6: 7:45a.m. to 1:57 p.m. Early Dismissal: 12:57 p.m.	0.15
Victress Bower Elementary 1250 West Parkridge Avenue, Norco	ntary Vest Parkridge Special Education/ Elementary PM Kindergarten: Grades 1-12: 8:50 a.a.		0.15
Colony High School 3850 East Riverside Drive, Ontario	Traditional/High School	Regular Schedule Monday through Thursday: 6:27 a.m. to 2:20 p.m. Friday Schedule: 6:36 a.m. to 2:20 p.m. Minimum Day Schedule: 6:49 a.m. to 11:45 a.m.	0.20

Sources: Corona-Norco Unified School District, 2014; California Department of Education, 2015; Colony High

School, 2015

Notes: "--" = Information Not Available

4.14.1.4 Hospitals

The major hospitals serving the communities that would be spanned by the Proposed Project are located in the City of Corona and include the Corona Regional Medical Center at 800 South Main Street and Kaiser Permanente at 1850 California Avenue. Additionally, Kaiser Permanente at 2295 South Vineyard Avenue in Ontario is approximately 3.12 miles from the Proposed Project. The Kaiser Permanente in the City of Corona is the nearest hospital and is approximately 0.23 mile from the Proposed Project, as shown in Figure 4.14-1: Public Services Map (Source Line Route). Table 4.14-4: Hospitals within 5 Miles of the Proposed Project provides the locations of all hospitals within 5 miles of the Proposed Project and their distance to the Proposed Project.

³ The Corona-Norco Unified School District has an Early Dismissal Day for elementary and intermediate schools every Wednesday during the regular school year.

Table 4.14-4: Hospitals within 5 Miles of the Proposed Project

Hospital and Address	Nearest Proposed Project Component	Approximate Distance from the Proposed Project (miles)
Kaiser Permanente 1850 California Avenue, Corona	Source Line Route	0.46
Corona Regional Medical Center 800 South Main Street, Corona	Source Line Route	0.63
Kaiser Permanente 2295 South Vineyard Avenue, Ontario	Mira Loma-Jefferson 66 kV Subtransmission Line	3.12

Sources: United States (U.S.) Geological Survey (USGS), 2012; Cal-Atlas Geospatial Clearinghouse, 2010; Google Earth, 2015

4.14.1.5 Parks

The Proposed Project would cross, or run directly adjacent to, the following four city, county, and regional parks:

- The Proposed Project would run directly adjacent to River Road Park, an urban park managed by the City of Corona Parks and Community Services Department, which covers approximately 5.5 acres and offers picnic benches, sports fields, and several playgrounds.
- The Proposed Project would be directly adjacent to Prado Regional Park, which is managed by the San Bernardino Regional Parks District. The park covers approximately 2,368 acres of the Chino Basin and is the only regional park in the immediate vicinity of the Proposed Project. The park offers fishing, camping, hiking, biking, and nature trails, as well as an 18-hole golf course, shooting range, archery range, disc golf course, and picnicking facilities.
- The Proposed Project would cross approximately 0.42 mile of the southern perimeter of American Heroes Park. The park is managed by the Jurupa Community Services District (JCSD) and offers approximately 18 acres of recreation space, including a dog park, playgrounds, picnic benches, and sports fields.
- One temporary pulling site would cross approximately 0.1 mile of the northeastern portion of James C. Huber Park, an urban park in the City of Eastvale. Construction areas would be located within the park. The park is managed by JCSD and covers approximately 13 acres, including sports fields, tennis courts, and a skateboard park.

Section 4.15 Recreation provides more information on the parks near the Proposed Project, and Figure 4.15-1: Recreation Facilities Map (Source Line Route) and Figure 4.15-2: Recreation Facilities Map (Subtransmission Line) show all recreation features within 0.25 mile of the Proposed Project.

4.14.1.6 Other Services

The nearest library branch to the Proposed Project is the Home Gardens Library, which is part of the Riverside County Library System at 3785 Neece Street in the City of Corona and is located approximately 0.30 mile from the proposed Source Line Route. Additionally, Corona Public Library on 650 South Main Street is located approximately 0.49 mile from the proposed Source Line Route. Riverside County also operates branch libraries at 7447 Scholar Way in the City of Eastvale (approximately 2.44 miles from the Mira Loma-Jefferson 66 kV Subtransmission Line) and 3954 Old Hamner Road in the City of Norco (approximately 2.40 miles from the Mira Loma-Jefferson 66 kV Subtransmission Line). The Chino Branch Library, operated by San Bernardino County, is located approximately 5.61 miles from the Proposed Project. The City of Ontario operates several branch libraries, the closest of which is located at 3850 East Riverside Drive and approximately 0.89 mile away from the Mira Loma-Jefferson 66 kV Subtransmission Line.

The Auburndale Community Center, located at 1045 Auburndale Street in the City of Corona, is approximately 0.17 mile from the Mira Loma-Jefferson 66 kV Subtransmission Line. There are no other public facilities within 0.25 mile of the Proposed Project.

4.14.2 Regulatory Setting

4.14.2.1 Federal

A search of the Code of Federal Regulations and the websites of the Federal Emergency Management Agency, U.S. Department of Health and Human Services, and the U.S. Department of Education revealed no federal regulations or policies related to public services that are relevant to the Proposed Project.

4.14.2.2 State

Title 14, Sections 1250 to 1258 "Fire Prevention Standards for Electric Utilities" of the California Code of Regulations

These sections provide specific clearance standards to be maintained by utility companies between electric power lines and all vegetation.

California Public Utilities Commission General Order 95 Section 35 "Rules for Overhead Electric Line Construction"

This section of the California Public Utilities Commission rules covers all aspects of design construction, operation, and maintenance of electrical power lines, as well as fire safety hazards.

California Public Resources Code Sections 4292 and 4293

California Public Resources Code (PRC) Section 4292 states the following:

"... any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for fire protection of

such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightning arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of such pole or tower. This section does not, however, apply to any line which is used exclusively as telephone, telegraph, telephone or telegraph messenger call, fire or alarm line, or other line which is classed as a communication circuit by the Public Utilities Commission. The director or the agency which has primary fire protection responsibility for the protection of such areas may permit exceptions from the requirements of this section which are based upon the specific circumstances involved.

California PRC Section 4293 states the following:

"... any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such areas, maintain a clearance of the respective distances which are specified in this section in all directions between all vegetation and all conductors which are carrying electric current:

- (a) For any line which is operating at 2,400 or more volts, but less than 72,000 volts, four feet.
- (b) For any line which is operating at 72,000 or more volts, but less than 110,000 volts, six feet.
- (c) For any line which is operating at 110,000 or more volts, 10 feet.

In every case, such distance shall be sufficiently great to furnish the required clearance at any position of the wire, or conductor when the adjacent air temperature is 120 degrees Fahrenheit, or less. Dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard. The director or the agency which has primary responsibility for the fire protection of such areas may permit exceptions from the requirements of this section which are based upon the specific circumstances involved."

4.14.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order No. 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

The following policy and action from the Land Use Element of the City of Eastvale General Plan is relevant to the Proposed Project regarding public services and infrastructure:

- Policy LU-31: The City will work with other agencies to coordinate development with supporting infrastructure and services, such as water and sewer service, libraries, parks and recreational facilities, transportation systems, and fire/police/medical services.
 - Action LU-31.1: Monitor the capacities of infrastructure systems and public services in coordination with service providers, utilities, and outside agencies.

There are no additional relevant policies pertaining to public services and electric infrastructure that were identified within the general plans for Riverside County, San Bernardino County, or the cities of Chino, Corona, Norco, or Ontario.

4.14.3 Significance Criteria

The significance criteria for assessing the impacts to public services are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities—the construction of which could cause significant environmental impacts—in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- Fire protection
- Police protection
- Schools
- Parks
- Other public facilities

4.14.4 Impact Analysis

4.14.4.1 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

Construction

Fire Protection - Less-than-Significant Impact

The Proposed Project would be primarily located in urban and agricultural areas that have a low potential for fire. To further minimize the risk of a fire starting during construction of the Proposed Project, SCE would clear dry vegetation from work areas so that vehicle catalytic converters would not come into contact with dry vegetation and potentially ignite a fire. Though fires are not anticipated due to the urban setting and cleared vegetation, SCE crews or its contractors would carry portable firefighting equipment at all times in accordance with

Applicant-Proposed Measure HAZ-02 to control the spread of a fire, should one be started. As a result, the need for firefighting services from a local fire protection agency is not anticipated, and no impacts would result.

The Proposed Project would not cross or be located along or within any roadways on which fire stations are located. As a result, direct impacts to stations or their access would not be caused by the Proposed Project. The closure of lanes on local roads—most of which would be limited in duration—would be expected to cause traffic delays, which may impact the response times of emergency vehicles. Emergency vehicles would be allowed to pass lane closures, when possible. In order to reduce the potential impacts to response times, SCE would coordinate road closures with the local jurisdiction through the encroachment permit process and prior to construction. Flaggers may briefly hold back traffic for construction equipment, but emergency vehicles would be provided access even in the event of temporary road closures. The Proposed Project would not result in an increase in the temporary demand for or alter the required level of local fire services. Emergencies could arise as a result of Proposed Project construction; however, such incidents are unlikely to occur. As construction activities would only last for approximately 18 months, the Proposed Project would not create an additional burden on existing emergency services beyond their current capabilities. Emergency service providers would not need to hire additional personnel to maintain acceptable service ratios and response times. As a result, impacts to fire protection services would be less than significant.

Police Protection - Less-than-Significant Impact

The Proposed Project would not require the direct assistance of local law enforcement agencies; however, equipment storage during construction does carry some risk of theft or vandalism. To minimize this risk, crews would clean up work areas and store all construction equipment overnight at staging yards. Twenty-four-hour security would be provided for the staging areas, which would minimize the need for local law enforcement assistance.

The Proposed Project would not cross or be located along or within any roadways where police stations are located. As a result, direct impacts to stations or their access would not result from the Proposed Project. As described previously for fire protection, the Proposed Project may cause traffic delays as a result of lane closures associated with pole and conductor installation. In order to reduce the potential impacts to response times, SCE would coordinate road closures with the local jurisdictions through the encroachment permit process and prior to construction. Flaggers may briefly hold traffic back for construction equipment, but emergency vehicles would be provided access even in the event of temporary road closures. In addition, and as discussed previously for fire protection, the Proposed Project would not result in an increase in the temporary demand for or alter the required level of local police services. As a result, impacts to police protection services would be less than significant.

Hospitals - No Impact

No hospitals would be directly spanned or located along a road that would be affected by construction activities. As a result, there would be no adverse physical impact to a hospital from the Proposed Project. Given the limited, approximately 18-month construction timeframe of the Proposed Project and the relatively small crew (i.e., approximately 100 workers on any given day), the Proposed Project would not significantly increase the local population, nor would it

cause a significantly increased demand for hospital services. As a result, hospitals would not be impacted by the Proposed Project.

Schools - Less-than-Significant Impact

Construction of the Proposed Project would last approximately 18 months, during which time it is not expected that any of the approximately 100 crew members—who would be on site at any given time—would move their families to the area. Therefore, school enrollment would not be affected, and no new schools would be constructed as a result of the Proposed Project.

The Proposed Project would be constructed along the roadway in front of the parking lot entrances to Auburndale Intermediate School. Noise and dust from construction of the Proposed Project could impact the school while classes are in session. These impacts are discussed further in Section 4.3 Air Quality and Section 4.12 Noise. Lane closures along River Road could impact traffic flow and access to the schools. SCE would coordinate road closures with the local jurisdictions prior to Proposed Project construction in order to reduce potential impacts to traffic flow. In addition, SCE would reduce potential impacts to local schools by conducting work along River Road between North Lincoln Avenue and 2nd Street either outside of the scheduled school year or outside of peak drop-off and pick-up hours for the standard school day, as specified in the encroachment permits issued by the local jurisdictions. Therefore, impacts to schools would be less than significant.

Parks - No Impact

Proposed Project construction activities would cross portions of two local parks for a total of approximately 0.52 mile, and are expected to require partial closure of facilities in American Heroes Park. Where the Proposed Project crosses American Heroes Park, access to the area of the park within the SCE right-of-way (ROW) would likely be temporarily restricted for the duration of construction in that location. However, the closure would be temporary and short term, lasting for a total of up to 5 weeks. Section 4.15 Recreation provides more information on this closure.

Proposed Project construction would not significantly increase local population growth, resulting in the need for new parks or park expansion. In addition, as construction for the Proposed Project would be relatively short-term at approximately 18 months, and would largely involve work within existing ROWs in existing utility corridors, no long-term reductions to the availability of recreational resources would occur. The construction of new parks or the expansion of existing parks would not be required in order to maintain acceptable service ratios. As a result, no impacts to parks would occur.

Other Public Facilities - No Impact

Because the Proposed Project would not facilitate population growth, there would not be an increased demand for libraries and other public facilities. Further, no facilities would be crossed by the Proposed Project, nor would the Proposed Project be constructed along or within any roadways on which these facilities are located. As a result, there would be no impact to other public facilities.

Operation – No Impact

The proposed Circle City Substation would be automated and monitored from the existing Mira Loma Substation. SCE would not need to hire any additional employees to maintain Circle City Substation, the proposed Source Line Route, or the Mira Loma-Jefferson 66 kV Subtransmission Line. Demand for public services would be similar to existing conditions. Increased service reliability and pole stability along the Mira Loma-Jefferson 66 kV Subtransmission Line would be beneficial. Therefore, there would be no adverse impact.

4.14.5 Applicant-Proposed Measures

Because no potentially significant impacts to public services would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.14.6 Alternative Substation Site

Substation Site Alternative B is located in a vacant lot adjacent to the southeast corner of the proposed Circle City Substation site (i.e., Substation Site Alternative A); thus, Substation Site Alternative B would have a similar setting. No impacts to public services from Substation Site Alternative B or the proposed Circle City Substation site are anticipated.

4.14.7 Alternative Source Line Route

Source Line Route Alternative 2 and Source Line Route Alternative 4 would involve undergrounding approximately 2.0 miles along East Grand Boulevard to Quarry Street, within East 6th Street under Interstate 15, and along Magnolia Avenue to Leeson Lane. Trenching for the underground lines would require additional time for lane closures as compared to the Proposed Project (i.e., the proposed Source Line Route), which may interfere with emergency vehicle access. As with the Proposed Project, SCE would coordinate road closures with the local jurisdictions prior to construction activities in order to reduce these potential impacts from slowing response times. Likewise, flaggers may briefly hold back traffic for construction equipment, but emergency vehicles would be provided access even in the event of temporary road closures. Consequently, impacts from these portions of Source Line Route Alternative 2 and Source Line Route Alternative 4 would be similar to the Proposed Project.

Source Line Route Alternative 2 and Source Line Route Alternative 3 would involve installation of an overhead configuration south of the alternative substation site or the proposed Circle City Substation site. Because these segments would be constructed entirely overhead, lane closures for this portion of Source Line Route Alternative 2 and Source Line Route Alternative 3 would be slightly reduced. Either route would be located in a similar setting and would have similar impacts to the Proposed Project overall.

4.14.8 Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes

The Proposed Project would require the temporary closure of American Heroes Park in the City of Eastvale. Mira Loma-Jefferson 66 kV Subtransmission Line Alternative 3 would cross through two additional local parks in the City of Norco—Sundance Park and Ted Brooks Park. Closures would be expected to occur in both parks as a result of Proposed Project construction. Thus, impacts resulting from Alternative 3 would not differ substantially from the Proposed

Project. Mira Loma-Jefferson 66 kV Subtransmission Line Alternative 2 would follow the same route as the Proposed Project, though approximately 0.4 mile of the subtransmission line would be installed underground along Hellman Avenue near American Heroes Park. Construction of the additional underground section of Alternative 2 would require a slightly longer construction period compared to the Proposed Project, though the difference would not be substantial. Regardless of the route, the Proposed Project would not facilitate population growth, resulting in the need for expanded or additional public services. As a result, impacts would be similar between each of the Mira Loma-Jefferson 66 kV Subtransmission Line alternatives.

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4.15 Recreation

This section describes recreation facilities and uses in the area of the Proposed Project, as well as the potential impacts and alternatives. Recreational facilities may be disrupted or users may be inconvenienced for a short period of time during construction activities; however, any potential impacts to recreation resources would be less than significant.

4.15.1 Environmental Setting

The following subsections describe recreational facilities located within 0.25 mile of the Proposed Project.¹

4.15.1.1 Public Recreational Facilities

Federal

There are no federally managed recreational facilities within 0.25 mile of the Proposed Project. The nearest federally managed recreation area is the Cleveland National Forest (CNF), which is located approximately 3.5 miles west of the proposed Source Line Route. The CNF is managed by the United States Forest Service.

The existing Mira Loma Substation is partially located within the Juan Bautista de Anza National Historic Trail corridor, as designated by the National Park Service. However, no trails, historic sites, or other recreational features associated with the trail are located within 0.25 mile of any portion of the Proposed Project.

State

There are no state parks or other state-managed recreational facilities within 0.25 mile of the Proposed Project. The nearest state park is Chino Hills State Park, which is located approximately 3 miles west of the Proposed Project.

Local

Recreational facilities within 0.25 mile of the Proposed Project are described in the following subsections, as well as in Table 4.15-1: Recreation Facilities within 0.25 Mile, which provides a summary of each facility's amenities, the address, and the proximity to the Proposed Project. The locations of these recreational areas in relation to the Proposed Project are shown in Figure 4.15-1: Recreation Facilities Map (Source Line Route) and Figure 4.15-2: Recreation Facilities Map (Subtransmission Line).

¹ These recreational facilities do not include those within 0.25 mile of the potential staging areas at the Ontario Service Center or Jefferson Substation because these are existing facilities and no ground disturbance is proposed at these sites.

Table 4.15-1: Recreation Facilities within 0.25 Mile

Facility Name and Address	Agency	Amenities	Nearest Proposed Project Component	Approximate Distance from the Proposed Project (miles)
American Heroes Park 6608 Hellman Avenue, Eastvale	JCSD	Soccer fields, basketball courts, playground, restrooms, picnic tables, picnic shelters, barbecues, dog park	Mira Loma- Jefferson 66 kV Subtransmission Line	Crossed
James C. Huber Park 6411 Rolling Meadows Street, Eastvale	JCSD	Soccer fields, basketball courts, playgrounds, baseball fields, lighted tennis court, skateboard park, concession building, restrooms, picnic tables, picnic shelters, barbecues	Mira Loma- Jefferson 66 kV Subtransmission Line	Crossed
River Road Park 1100 West River Road, Corona	City of Corona	Barbecue, covered shelter, playground equipment, picnic area, restrooms, drinking fountains, bicycle rack	Mira Loma- Jefferson 66 kV Subtransmission Line	Adjacent
Fairview Park 1804 Fairview Drive, Corona	City of Corona	Softball field, basketball court, barbecue, covered shelter, playground equipment, picnic area, restrooms, drinking fountain	Mira Loma- Jefferson 66 kV Subtransmission Line	0.03
City Park 930 East 6th Street, Corona	City of Corona	Volleyball court, soccer field, basketball court, swimming pool, horseshoe pit, playground equipment, picnic area, restrooms, drinking fountains, bicycle racks	Source Line Route	0.06
Dairyland Park 14520 San Remo Drive, Eastvale	JCSD	Restrooms, picnic tables, water play area, dog park	Mira Loma- Jefferson 66 kV Subtransmission Line	0.06
Auburndale Recreation Center 1045 Auburndale Street, Corona	City of Corona	Tennis court, basketball court, swimming pool, barbecue, covered shelter, picnic area, restrooms	Mira Loma- Jefferson 66 kV Subtransmission Line	0.11
Prado Regional Park 16700 South Euclid Avenue, Chino	County of San Bernardino Regional Parks	Fishing, camping, hiking, biking, nature trails, disc golf, golfing, shooting, horseback riding, archery, group shelters, open picnic areas, barbecue grills, pedal boating, recreational vehicle camping, playground, horseshoe pits, water play park	Mira Loma- Jefferson 66 kV Subtransmission Line	0.13

Facility Name and Address	Agency	Amenities	Nearest Proposed Project Component	Approximate Distance from the Proposed Project (miles)
Forest Park 8706 Bridle Path, Chino	City of Chino	Playground, picnic areas, barbecues, basketball court, open space	Mira Loma- Jefferson 66 kV Subtransmission Line	0.21
Avonlea Park	JCSD	Basketball courts, playground, covered shelter	Mira Loma- Jefferson 66 kV Subtransmission Line	0.22
Contreras Park 902 Railroad Street, Corona	City of Corona	Basketball court, horseshoe pit, barbecue, picnic area, drinking fountain	Mira Loma- Jefferson 66 kV Subtransmission Line	0.22
Kips Korner Park Southwest corner of Kips Korner Road and Parkridge Avenue, Norco	City of Norco	Playground, tennis court, open space	Mira Loma- Jefferson 66 kV Subtransmission Line	0.22
Sundance Park 4047 Sundance Lane, Norco	City of Norco	Playground, picnic shelter, restroom, basketball court	Mira Loma- Jefferson 66 kV Subtransmission Line	0.22

Sources: Google, 2015; Green Info Network, 2015; City of Norco, 2015a; City of Norco, 2015b; City of Corona, 2015b; City of Chino, 2015a; City of Chino, 2015b; JCSD, 2015; County of San Bernardino Regional Parks, 2015a; County of San Bernardino Regional Parks, 2015b

Riverside County

The Riverside County Regional Park and Open Space District operates 15 community recreational facilities, 8 campgrounds, 5 water parks, 2 natural resource areas, and a variety of trails that are open to public access. None of these recreational facilities are located within 0.25 mile of the Proposed Project.

San Bernardino County

The San Bernardino County Regional Parks Department operates 10 regional recreational facilities offering hiking trails, boating, historic sites, and other recreational opportunities. None of these recreational facilities are located within 0.25 mile of the Proposed Project.

City of Chino

The City of Chino Department of Community Services operates 21 recreational facilities serving the City of Chino. Combined amenities include amphitheaters, pergolas, playground equipment, picnic areas, ball fields, and walking trails. One recreational facility—Forest Park—is located approximately 0.21 mile from the Proposed Project.

City of Corona

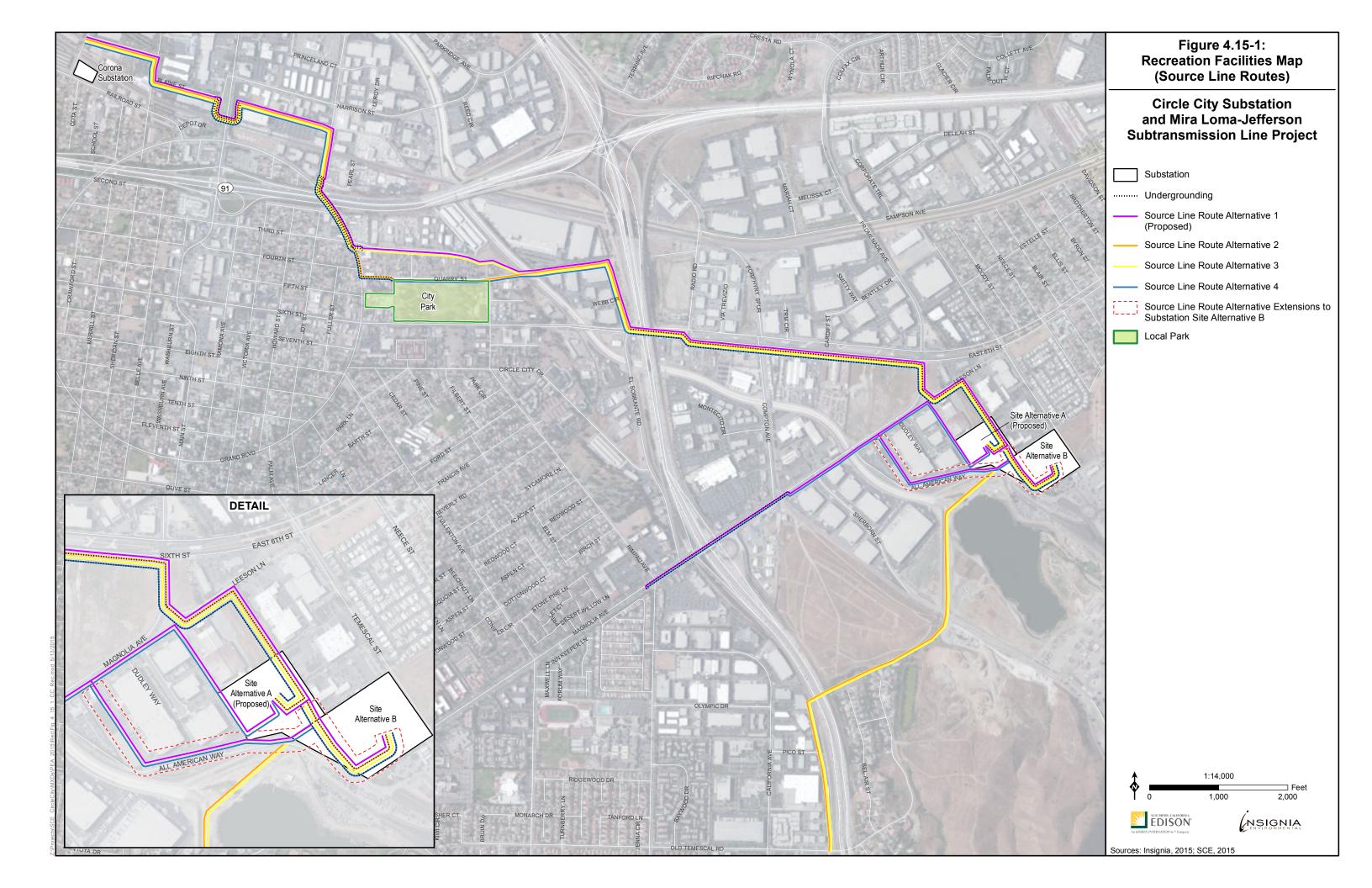
The City of Corona Parks and Recreation Department operates 7 community parks, 28 neighborhood parks, 4 special-use parks, 11 recreational facilities, and 17 ball fields. Combined amenities include picnic areas, dog parks, trails, playgrounds, ball fields and courts, and other recreational features. One recreational facility—River Road Park—would be directly adjacent to the Proposed Project, but the Proposed Project would not span or cross the recreational facility. Three recreational facilities—Fairview Park, City Park, and Contreras Park—are located approximately 0.03 mile, 0.06 mile, and 0.22 mile, respectively, from the Proposed Project. One additional recreational facility—Auburndale Recreation Center—is located approximately 0.11 mile from the Proposed Project.

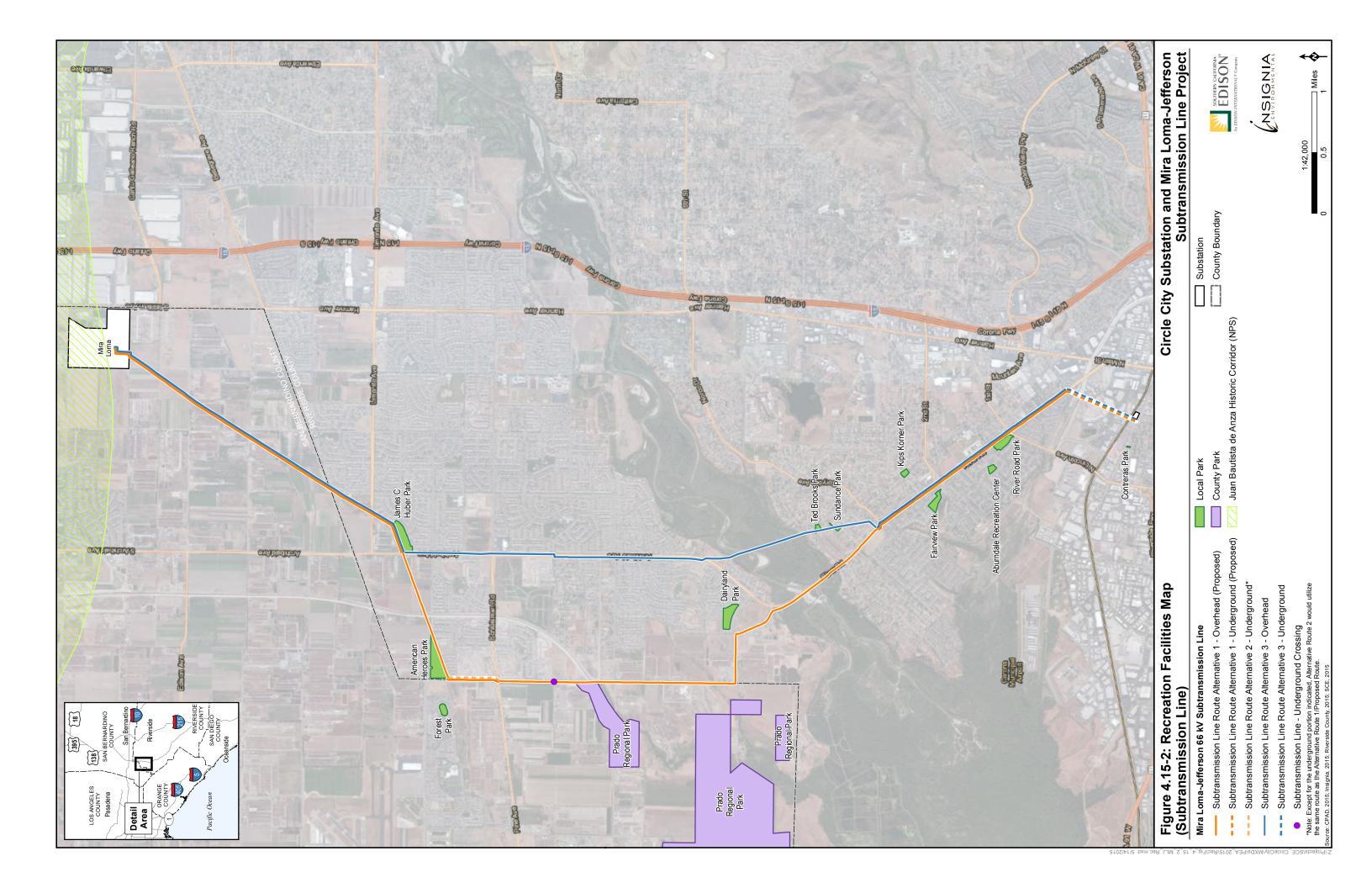
City of Eastvale

The Jurupa Community Services District (JCSD) serves the cities of Jurupa Valley and Eastvale, and operates 13 local recreational facilities. Two JCSD-managed recreational facilities— American Heroes Park and James C. Huber Park—would be crossed by the Mira Loma-Jefferson 66 kilovolt (kV) Subtransmission Line. A third recreational facility—Avonlea Park—is located approximately 0.22 mile from the Proposed Project.

City of Norco

The City of Norco Parks and Recreation Department operates 15 recreational facilities with amenities that include open park space, play areas, picnic shelters, and lighted sports fields. Two recreational facilities—Kips Korner Park and Sundance Park—are each located approximately 0.22 mile from the Proposed Project.





City of Ontario

The City of Ontario Department of Recreation and Community Services operates 21 city-owned parks, 5 non city-owned parks, 8 community centers, and 2 other recreational facilities. None of these parks or facilities are located within 0.25 mile of the Proposed Project.

4.15.1.2 Other Recreational Facilities

Three private recreational features are located within 0.25 mile of the Proposed Project. These features include a privately owned reservoir located off of All American Way in Corona near the proposed Circle City Substation; the Corona Driving Range, located along Radio Road in the City of Corona across an undeveloped field from the proposed Source Line Route; and Pole Position Raceway, an indoor go-kart track located off of Bentley Drive in the City of Corona and approximately 0.15 mile from the proposed Source Line Route.

4.15.2 Regulatory Setting

4.15.2.1 Federal

No federal policies regarding recreation resources are relevant to the Proposed Project.

4.15.2.2 State

No state policies regarding recreation resources are relevant to the Proposed Project.

4.15.2.3 Local

As discussed in Section 4.10 Land Use and Planning, the California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local recreational is provided for informational purposes only.

As described previously, the Proposed Project would cross through two counties, five cities, and several specific plan areas. The following local policies are relevant to the Proposed Project.

Riverside County General Plan

The Multipurpose Open Space Element of the Riverside County General Plan sets forth goals and policies that address protection and preservation of natural resources, agriculture and open areas, management of mineral resources, preservation and enhancement of cultural resources, and recreational opportunities for the citizens of Riverside County. The Riverside County General Plan does not contain policies that are relevant to the Proposed Project.

San Bernardino County General Plan

The Open Space Element of the San Bernardino County General Plan sets forth goals and policies addressing existing and future recreational opportunities for the communities within San Bernardino County. In addition, the Open Space Element sets forth policies, programs, and objectives related to protection and preservation of open space. The San Bernardino County General Plan does not contain policies that are relevant to the Proposed Project.

City of Chino General Plan

The Parks and Recreation Element of the City of Chino General Plan sets forth goals, objectives, policies, and actions addressing the comprehensive and long-range preservation and management of parks and recreational facilities throughout the City of Chino. The City of Chino General Plan does not contain policies that are relevant to the Proposed Project.

City of Corona General Plan

The Parks, Schools, and Libraries Element of the City of Corona General Plan contains the following policy regarding recreation resources that is relevant to the Proposed Project:

• **Policy 8.3.5:** Develop additional parks and recreation facilities by upgrading or converting existing open space areas and through the acquisition and conversion of available public or quasi-public properties in the community (e.g. schools, utility rights-of-way, etc.).

The Land Use Element of the City of Corona General Plan contains the following policy regarding recreation resources that is relevant to the Proposed Project:

• **Policy 1.15.2:** Allow for development of new schools, parks, government, fire and police facilities, utility and institutional uses in any location of the City, regardless of the Land Use Plan's designation, provided that the use is environmentally suitable and compatible with adjoining land uses, and adequate infrastructure can be provided.

City of Eastvale General Plan

The Circulation and Infrastructure Element of the City of Eastvale General Plan contains the following policies regarding recreation resources that are relevant to the Proposed Project:

- **Policy C-22:** Examine the use of public access utility easements for trail linkages to the regional trail system and/or other open space areas.
- **Policy C-29:** Locate new and relocated utilities underground when possible. All remaining utilities shall be located or screened in a manner that minimizes their visibility by the public.

The Design Element of the City of Eastvale General Plan contains the following policy regarding recreation resources that is relevant to the Proposed Project:

• **Policy DE-16:** They City will seek to reduce the unsightly appearance of overhead or aboveground utilities by placing them underground as new development occurs.

City of Norco General Plan

The Conservation Element of the City of Norco General Plan sets forth goals and policies regarding the preservation, development, and utilization of natural resources within the City of Norco. The City of Norco General Plan does not contain policies that are relevant to the Proposed Project.

City of Ontario Policy Plan

The Parks and Recreation Element of the City of Ontario Policy Plan establishes goals for the Ontario park system and recreation programs. The City of Ontario Policy Plan does not contain policies that are relevant to the Proposed Project.

4.15.3 Significance Criteria

The significance criteria for assessing the impacts to recreational resources are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Environmental Checklist, a project causes a potentially significant impact if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated
- Include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment

4.15.4 Impact Analysis

4.15.4.1 Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Construction – Less-than-Significant Impact

Southern California Edison (SCE) anticipates that a maximum of 100 crew members would be required at any given time during the approximately 18 months of construction for the Proposed Project, though individual crew members are not expected to be involved in construction of the Proposed Project for the full duration of construction activities.

Given the temporary nature of crew member involvement on the Proposed Project, no crew members or their families are anticipated to relocate to the area. Therefore, any increase in the use of existing neighborhood and regional park facilities—which could result from a temporary population increase during Proposed Project construction—would be less than significant.

River Road Park would be located adjacent to the Mira Loma-Jefferson 66 kV Subtransmission Line. Although Proposed Project construction is expected to result in temporary traffic lane closures, the park would not experience any access restrictions or any temporary closures as a result of Proposed Project construction.

Approximately 0.52 mile of the Proposed Project would cross two other local parks— American Heroes Park and James C. Huber Park. Partial closure of the southwestern corner of American Heroes Park would be required during conductor-stringing activities. Two pull sites would be located in this area. This closure would temporary and short-term, lasting for a total of up to 5 weeks. SCE does not anticipate that other portions of the park would be impacted; however, SCE would coordinate with local parks departments to reduce impacts on park users, as necessary. In addition, during the use of these pull sites, vehicle access to the park along Hellman Avenue may be obstructed as the northbound merge lane from Prairie Smoke Road to the park's entrance would be closed to operate pulling equipment. More information on anticipated street closures is provided in Section 4.16 Transportation and Traffic.

Construction activities would not cause substantial physical deterioration of any park facilities, as all temporary construction areas would be returned to pre-construction conditions. Given the temporary duration of construction, the limited park closures, the limited area of temporary use during conductor-pulling activities, and the coordination with local parks departments, any potential impacts to American Heroes Park would be less than significant.

Operation – No Impact

Operation of the proposed Circle City Substation would be automated and unstaffed. The proposed Circle City Substation would be monitored remotely from the existing Mira Loma Substation, and maintenance crews would visit the substation three to four times per month. Operation of the Mira Loma-Jefferson 66 kV Subtransmission Line would be consistent with the operation of similar lines in the area. No additional SCE staff would be required as a result of operation of the Proposed Project. Therefore, there would be no impact.

4.15.4.2 Does the project include recreational facilities, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? – No Impact

Construction and operation of the Proposed Project do not include any recreational facilities and would not require the construction or expansion of any existing recreational facilities, as the Proposed Project would not induce population growth. As a result, no impact would occur.

4.15.5 Applicant-Proposed Measures

Because no impacts to recreation resources would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.15.6 Alternative Substation Site

Substation Site Alternative B is located adjacent to the proposed Circle City Substation site (i.e., Substation Site Alternative A) on a vacant lot. There are no recreation facilities located within

500 feet of Substation Site Alternative B. As a result, there would be no impacts to recreation associated with this alternative.

4.15.7 Alternative Source Line Routes

Source Line Route Alternatives 2 and 4 would be adjacent to City Park. Impacts to recreation resulting from these alternative source line routes—including temporary lane closures along Quarry Street, which would limit access to the park—would be slightly greater than impacts from the proposed Source Line Route, as City Park would be located adjacent to Source Line Route Alternatives 2 and 4, but not the proposed Source Line Route. However, the park has additional access along East 6th Street to the south, and no closures of park facilities would be required during construction. Accordingly, Source Line Route Alternatives 2 and 4 would result in slightly greater impacts to recreation than the Proposed Project along City Park.

Like the proposed Source Line Route, Source Line Route Alternative 3 would not be located within 0.25 mile of any recreation facilities. As a result, potential impacts to recreation resulting from construction of this alternative would not differ from the Proposed Project.

4.15.8 Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes

Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 3 would cross Sundance Park for approximately 0.08 mile and Ted Brooks Park for approximately 0.04 mile in the City of Norco; these parks would not be spanned by the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route. However, Alternative 3 would avoid crossing approximately 0.42 mile of American Heroes Park in the City of Eastvale, which would be crossed by the proposed subtransmission line. Sundance Park is located in a residential neighborhood along Sundance Lane. The park is relatively small at approximately 1 acre in size, and it features a gazebo, basketball court, and playground. Ted Brooks Park is approximately 1.4 acres in size and contains a small arena and grassy area that is primarily used for barrel-racing practice. Construction of Alternative 3 would require temporary closure of these parks during construction in the area. Thus, impacts to recreation resulting from Alternative 3 would be similar to that of the Proposed Project.

Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 2 would follow essentially the same route as the proposed Mira Loma-Jefferson 66 kV Subtransmission Line. However, Alternative 2 would include an approximately 2,000-foot-long underground section along Hellman Avenue between Schleisman Road and American Heroes Park. Construction of this alternative would require a slightly longer period of time to install the additional underground portion of the subtransmission line, which would also temporarily impact access to American Heroes Park. As a result, potential impacts to recreation that would be associated with constructing Alternative 2 would be slightly greater than the Proposed Project's impacts.

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4.16 Transportation and Traffic

This section describes transportation and traffic in the area of the Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project), as well as the potential impacts and alternatives. Although the Proposed Project would cross several public and private roadways, it would not cause a significant impact to transportation and traffic in the area.

4.16.1 Environmental Setting

This section discusses the current environmental setting of the Proposed Project area with respect to transportation and traffic. Included in the discussion are the roadway network, bicycle facilities, railways, bus service, and airports in or near the Proposed Project location.

4.16.1.1 Existing Roadway Network

The Proposed Project is located in Riverside County and San Bernardino County and would cross a network of state, county, and private roadways. Table 4.16-1: Public Access Roadways and Table 4.16-2: Public Roadways Spanned or Crossed list the major and local roadways that would be used for access during construction and those that would be spanned or crossed by the Proposed Project, respectively, along with their classification, number of lanes, and Level of Service (LOS) information, where available. Most of the local, interstate, and state route facilities operating at less than LOS C in the vicinity of the Proposed Project occur on the freeway system and other major arterials in the western portion of Riverside County. The roadways listed in Table 4.16-2: Public Roadways Spanned or Crossed may also be used to access the Proposed Project site, as needed.

Freeways

Riverside County is linked to Los Angeles and Orange counties primarily by State Route (SR-) 60; Interstate (I-) 10; SR-91; and SR-74. I-15 and other minor conventional highways also provide links to San Diego County. Links to San Bernardino County are provided by I-15 and I-215, as well as by other major and minor local roadways. I-10 also provides connections to destinations in Arizona, and I-15 and I-215 provide access through San Bernardino County to Nevada. In addition, I-15 provides access south to San Diego and to Mexico via I-5 and I-805. Table 4.16-3: Existing Travel Volumes on Interstates and State Routes specifies average daily traffic and peak hour traffic levels for the major freeways and expressways in the Proposed Project area.

Arterials, Collectors, and Local Roadways

The Proposed Project would span or cross approximately 46 roads. Riverside and San Bernardino counties do not maintain traffic volume and LOS data for most of the arterial, collector, and local roads in the Proposed Project area, but available information is provided in Table 4.16-2: Public Roadways Spanned, along with road classification and the presence of bike lanes.

¹ LOS is based on traffic congestion and is measured by dividing traffic volume by roadway capacity. The resulting number, known as the volume-to-capacity (V/C) ratio, usually ranges from 0 to 1.0. The V/C ratings are divided into six LOS categories, A through F, representing conditions ranging from unrestricted traffic flow (A) to extreme traffic congestion (F).

Table 4.16-1: Public Access Roadways

Roadway	Classification	Approximate Number of Lanes	LOS
I-10	Freeway	12	E/F
SR-60	Freeway	12	C/D
SR-71	Expressway	4	C/D
SR-83/Euclid Avenue	Expressway	4	С
Ontario Avenue	Major	6	Information Not Available (INA)
South Promenade Avenue	Secondary	4	INA
Railroad Street	Secondary	4	INA
North Cota Street	Collector	2	INA
Mountain Avenue	Secondary	4	INA
Norco Drive	Secondary	4	INA
Baron Drive	Secondary	2	INA
Chandler Street	Urban Arterial	4	INA
Schleisman Road	Urban Arterial	2	INA
Kimball Avenue	INA	2 to 4	INA
Limonite Avenue	Urban Arterial	4	С
Harrison Avenue	INA	4	INA
Cleveland Avenue	INA	2	INA
Milliken Avenue	Urban Arterial	4	INA
Hamner Avenue	Urban Arterial	4	INA
Cantu-Galleano Ranch Road	Urban Arterial	5	INA
East Riverside Drive	Major	4	INA
South Temescal Street	INA	2	INA
South Grove Avenue	Urban Arterial	7	C/D
South Parco Avenue	INA	4	INA
East Francis Street	INA	5	INA

Sources: Riverside County, 2003; California Department of Transportation (Caltrans), 2002; Riverside County Transportation Commission, 2011; San Bernardino County, 2003

Table 4.16-2: Public Roadways Spanned or Crossed

Roadway	Classification	Contains Bike Lane?	Number of Lanes	LOS
Edison Avenue	INA	Yes	2	INA
Haven Avenue	INA	Yes	2	INA
Prairie Smoke Road	INA		2	INA
Archibald Avenue	Urban Arterial	Yes	2 to 6	INA
Landerwood Drive	INA		2	INA
Pine Avenue	Urban Arterial		2	INA
Hellman Avenue	Secondary	Yes	4	INA
Chino Corona Road	Urban Arterial	Yes	2	INA
Bluff Street	Secondary		2	INA
Sundance Lane	INA		2	INA
Corydon Street/Corydon Avenue	Secondary	Yes	2	INA
Trail Street	INA		2	INA
Kips Korner Road	INA		2	INA
2nd Street	Secondary		2	INA
Foxtail Drive	INA		2	INA
Country Club Lane	INA		3	INA
Auburndale Street	Collector	Yes	4	INA
Lullaby Lane	INA		2	INA
Lincoln Avenue	Secondary	Yes	4	INA
Samar Court	INA		2	INA
Redhead Lane	INA		2	INA
Kalus Avenue	INA		2	INA
Bateman Circle	INA		2	INA
Rincon Street	Collector		4	INA
Malloy Road	INA		2	INA
Windstream Drive	INA		2	INA
River Road	Major	Yes	4	INA
Harrison Street	Secondary	Yes	2	INA
Sheridan Street	Secondary		2	INA
Main Street	Major	Yes	6	INA
East Blaine Street	Secondary		2	INA

Roadway	Classification	Contains Bike Lane?	Number of Lanes	LOS
Howard Street	Collector		2	INA
Joy Street	Secondary		4	INA
SR-91	Freeway		8	E/F
3rd Street	Collector		4	INA
Arroyo Avenue	INA		2	INA
Rimpau Avenue	Collector	Yes	4	INA
Victoria Avenue	Collector		2	INA
6th Street	Major	Yes	4 to 6	INA
I-15	Freeway		8	D/E
Magnolia Avenue	Major	Yes	5	D
Leeson Lane	Major		2	INA
Trademark Circle	INA		2	INA
All American Way	INA		2	INA
El Sobrante Road/Quarry Street	Secondary		2 to 4	INA
Sherborn Street	INA		3	INA

Sources: Riverside County, 2003; Riverside County Transportation Commission, 2011; San Bernardino County, 2011; City of Corona, 2001; Riverside County, 2010; Riverside County Information Technology, 2015

Note: The roadways listed in this table may also be used to access the Proposed Project site, where feasible. The designation "--" indicates that a bike lane does not exist or has not been identified.

Table 4.16-3: Existing Travel Volumes on Interstates and State Routes

Roadway	Average Daily Traffic Volume	Peak Hour Trips
I-10	252,000	17,100
I-15	182,000	12,800
SR-91	255,000	16,400
SR-60	200,000	14,000
SR-71	73,000	6,100
SR-83/Euclid Avenue	25,000	2,550

Source: Caltrans, 2013

Access Roads

The Proposed Project would primarily be accessed through the use of public roadways and existing unpaved and paved access roads. Some new temporary and permanent access roads would be established within Southern California Edison (SCE) rights-of-way (ROWs), public ROWs, and public and private lands to facilitate access from existing roads to the pole sites. Property owner approval would be obtained prior to construction activities for access roads in areas outside of SCE ROWs. Rehabilitation and improvements to existing roads and construction of temporary and permanent roads may be required to facilitate construction access. Two new permanent access roads would be established to access the proposed Circle City Substation site. A total of four new permanent access roads and five permanently widened existing roads would be established to access the Mira Loma-Jefferson 66 kilovolt (kV) Subtransmission Line.

The Proposed Project would utilize seven total potential staging area locations, each of which would be accessible by the roads listed in Table 4.16-1: Public Access Roadways or Table 4.16-2: Public Roadways Spanned or Crossed. Potential staging areas include portions of the existing Mira Loma Substation and proposed Circle City Substation sites and vacant fields located off of Hamner Avenue, Hellman Avenue, and South Temescal Street. One potential staging area is located at the SCE Ontario Service Center, which would be accessed via South Grove Avenue, South Parco Avenue, and East Francis Street. Another potential staging area is located at Jefferson Substation, which would be accessed via Rimpau Avenue, Magnolia Avenue, Ontario Avenue, and Lincoln Avenue. The staging yards are depicted in Figure 3-7: Potential Staging Areas in Chapter 3 – Project Description.

Public and Alternative Transportation

Bicycle Facilities

The Proposed Project would span approximately 14 bike lanes, which are indicated in Table 4.16-2: Public Roadways Spanned.

Railway

Amtrak currently serves Riverside County in two locations—the cities of Palm Springs and Riverside. Amtrak's Southwest Chief Service stops at the Downtown Riverside Metrolink

Station and provides connections to Los Angeles and cities to the east, including Flagstaff, Albuquerque, St. Louis, and Chicago. The Proposed Project would not span any Amtrak routes.

Three Metrolink commuter rail lines serve western Riverside County and provide connections to destinations in Los Angeles, Orange, San Bernardino, and Ventura counties. There are currently five commuter rail stations serving Riverside County—two are in the City of Riverside, one is in the community of Pedley, and two are in the City of Corona. Metrolink is operated by the Southern California Railroad Authority and also provides passenger rail service for San Bernardino County. Metrolink connects San Bernardino Valley communities with the rest of Southern California and to the rest of the United States (U.S.) through Amtrak's services. Metrolink also connects with MetroRail in Los Angeles County.

The North Main Corona Metrolink Station is located immediately adjacent to the Proposed Project at the intersection of North Main Street and East Blaine Street. The Proposed Project would also span the Metrolink path that intersects Joy Street in the City of Corona.

Bus

Public transportation in the Proposed Project area is provided by Riverside Transit Agency (RTA). Currently, RTA operates 40 fixed bus routes within a 2,500-square-mile area of western Riverside County. RTA's main terminal is located in Riverside, and the agency serves approximately 19,000 passengers per day. RTA coordinates with OmniTrans in San Bernardino County to provide bus service between downtown Riverside and downtown San Bernardino, which also connects with OmniTrans bus service to the City of Ontario. In addition, RTA coordinates with Orange County Transit Agency in Orange County and provides connections to select Metrolink stations.

Specialized public transportation services are available in the City of Corona. Greyhound Bus Lines provides private transportation services that link Riverside and San Bernardino counties with other regions, which includes east-west service connecting the cities of Blythe, Indio, Palm Springs, Banning/Beaumont, and Riverside (via San Bernardino). The service continues westward to downtown Los Angeles with intermediate stops. North-south service connects the City of Riverside with the City of Temecula, continuing southward to the City of San Diego. The Corona Cruiser, the City of Corona's fixed-route bus system, travels throughout the city. Corona Cruiser bus routes also connect with RTA regional bus routes and the North Main Street Corona Metrolink station.

The Proposed Project would travel along the following routes:

- follow a Corona Cruiser/RTA bus route on Magnolia Avenue,
- follow an RTA bus route on East 6th Street,
- follow a Corona Cruiser bus route on East Grand Boulevard and East 3rd Street,
- cross a Corona Cruiser/RTA bus route that runs on North Main Street, and
- travel adjacent to a Corona Cruiser bus route on River Road.

Airports

Riverside County contains 12 public-use airports, one military airport (March Air Reserve Base), and six airports owned by cities or private entities. San Bernardino County contains 44 public-and private-use airports, six of which are managed by San Bernardino County. The nearest public airports to the Proposed Project alignment are Chino Airport, located approximately 0.7 mile northwest, and Corona Municipal Airport, located approximately 1.1 miles southwest. In addition, Ontario International Airport is located approximately 0.9 mile northeast of the potential staging yard location at the SCE Ontario Service Center. The nearest private-use airport is Lake Mathews Airport, located approximately 6.3 miles southeast of the Proposed Project. Lake Mathews Airport contains one runway, measuring approximately 3,300 feet in length.

Emergency Evacuation Routes

Section 4.8 Hazards and Hazardous Materials provides a description of the emergency evacuation routes and plans in Riverside County and San Bernardino County. The major freeways and expressways in the Proposed Project area—I-10, I-15, SR-91, SR-60, SR-71, and SR-83—could all be utilized in the event of an emergency evacuation.

4.16.2 Regulatory Setting

Construction projects that cross public transportation corridors may be subject to federal, state, and local encroachment permits. Use or obstruction of navigable airspace also requires permits. The following subsections include a summary of transportation and traffic regulations that are relevant to projects involving the construction of electric facilities.

4.16.2.1 Federal

Code of Federal Regulations Title 14

All airports and navigable airspace not administered by the U.S. Department of Defense are under the jurisdiction of the Federal Aviation Administration (FAA). Title 14, Part 77 of the Code of Federal Regulations (CFR) establishes the standards and required notification for obstructions affecting navigable airspace. In general, construction projects exceeding 200 feet in height—or those extending at a ratio greater than 100 to 1 (horizontal to vertical) from a public or military airport runway more than 3,200 feet long out to a horizontal distance of 20,000 feet—are considered potential obstructions and require FAA notification. In addition, construction projects extending at a ratio greater than 50 to 1 (horizontal to vertical) from a public or military airport runway measuring 3,200 feet or less out to a horizontal distance of 10,000 feet are considered potential obstructions and require FAA notification. Title 14, Part 133 of the CFR also requires an operating plan to be developed in coordination with and approved by the local FAA Flight Standards District Office that has jurisdiction over the area in which the helicopter use would be conducted.

4.16.2.2 State

California Streets and Highways Code Section 670

The use of California state highways for purposes other than normal transportation may require written notification or an encroachment permit from Caltrans. Caltrans has jurisdiction over the

state's highway system and is responsible for protecting the public and infrastructure. Section 670 of the California Streets and Highways Code allows Caltrans to issue encroachment permits authorizing activities related to the placement of encroachments within, under, or over state highway ROWs. Caltrans reviews all requests from utility companies that plan to conduct activities within state highway ROWs. Caltrans' ministerial encroachment permits may include conditions or restrictions on the timeframe for construction activities performed within or above roadways that are under Caltrans jurisdiction.

4.16.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

Riverside County General Plan

The Riverside County General Plan Circulation Element establishes LOS C as a target for all county-maintained roadways and state highways. However, the Circulation Element also makes an exception that LOS D could be allowed in community development areas at intersections of any combination of major highways, arterials, urban arterials, expressways, conventional state highways, or freeway ramp intersections.

Riverside County Congestion Management Plan

Traffic in unincorporated areas of Riverside County is under the jurisdiction of the Riverside County Transportation Commission (RCTC). The Riverside County Congestion Management Plan (CMP) was prepared by the RCTC in consultation with Riverside County and the cities in the county. The plan was prepared with the goal of aligning land use, transportation, and air quality management efforts, and to promote growth management programs that effectively use statewide transportation funds, while still ensuring that new development pays its fair share of needed transportation improvements.

The focus of the CMP is the development of an Enhanced Traffic Monitoring System in which real-time traffic count data can be accessed by the RCTC to evaluate the condition of roads in the Congestion Management System (CMS), as well as to meet other monitoring requirements at federal and state levels. Per the adopted LOS standard of "E," when a CMS segment falls to "F," a deficiency plan is required, and preparation of a deficiency plan is the responsibility of the local agency where the deficiency is located. The local agency would also be required to coordinate with other agencies identified as contributors during the development of the plan.

San Bernardino County General Plan

The Circulation and Infrastructure Element of the San Bernardino County General Plan specifies policies and goals with regards to the transportation system in San Bernardino County. The Circulation and Infrastructure Element describes the roadways, public transportation, airports, bicycle facilities, pedestrian facilities, and open space trails—as well as infrastructure, water sources, water supply, and wastewater facilities within the county. There are no policies relevant to transportation and traffic associated with the Proposed Project contained within the Circulation and Infrastructure Element.

City of Chino General Plan

The Transportation Element of the City of Chino General Plan establishes LOS D as a target at intersections and along roadway segments.

City of Corona General Plan

The City of Corona General Plan Circulation Element establishes LOS D as a target for arterial streets wherever possible. At some key locations, such as at heavily traveled freeway interchanges, LOS E may be adopted as the acceptable standards, on a case-by-case basis. A higher standard, such as LOS C or better, may be adopted for local or collector streets in residential areas.

City of Eastvale General Plan

The City of Eastvale General Plan's Circulation and Infrastructure Element establishes LOS C as a target along city-maintained roads. A peak hour LOS of D may be allowed in commercial and employment areas, and at intersections of any combination of major highways, urban arterials, secondary highways, or freeway ramp intersections.

City of Norco General Plan

The City of Norco General Plan Circulation Element establishes LOS D as a target for roadway segments and intersections at peak hours under build-out conditions.

City of Ontario Policy Plan

The City of Ontario Policy Plan Mobility Element establishes LOS D as a target at all intersections.

Riverside County Airport Land Use Commission Airport Land Use Compatibility Plans

The Riverside County Airport Land Use Commission develops land use compatibility plans for airports within Riverside County. The land use plans are intended to promote the safety and welfare of residents in the airport vicinity and users of the airport. Specifically, the plans address protecting the public from aircraft noise and accidents, and also seek to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace. The boundaries of the airport that influence areas contained in the compatibility plans may be reduced or extended from the conical surfaces specified in Federal Aviation Regulation Part 77 to more accurately reflect the specific flight paths for each airport.

The Proposed Project area is located within the Airport Land Use Compatibility Plan boundaries for the Chino Airport and Corona Municipal Airport, as depicted in Figure 4.8-3: Airport Safety Zones Map of Section 4.8 Hazards and Hazardous Materials. Land use zones crossed by the Proposed Project for both Chino Airport and Corona Municipal Airport are listed in Table 4.8-3: Airport Safety Zones Crossed by the Proposed Project in Section 4.8 Hazards and Hazardous Materials.

Chino Airport Master Plan

The Chino Airport Master Plan identifies compatible uses for the area surrounding the airport as including light and heavy industrial development, some commercial development, and agricultural activities. The Proposed Project would not be located in any of the safety areas, runway protection zones, approach, departure, or obstacle-free zones specified in the Chino Airport Master Plan.

Corona Municipal Airport Comprehensive Land Use Plan

The Comprehensive Land Use Plan for the Corona Municipal Airport contains policies and goals to protect the general public from aircraft noise and accidents, and to ensure that no structures or activities encroach upon the use of navigable airspace associated with the airport. The Proposed Project would not be located in any of the safety zones specified in the Corona Municipal Airport Comprehensive Land Use Plan.

4.16.3 Significance Criteria

The significance criteria for assessing the impacts to transportation and traffic are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Environmental Checklist, a project causes a potentially significant impact if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of
 effectiveness for the performance of the circulation system, taking into account all modes
 of transportation, including mass transit and non-motorized travel and relevant
 components of the circulation system, including but not limited to intersections, streets,
 highways and freeways, pedestrian and bicycle paths, and mass transit
- Conflict with an applicable congestion management program, including LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- Result in inadequate emergency access

• Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

4.16.4 Impact Analysis

Construction and operation of the Proposed Project would result in less-than-significant impacts with regards to transportation and traffic with implementation of the applicant-proposed measure (APM) described in Section 4.16.5 Applicant-Proposed Measures.

4.16.4.1 Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Construction – Less-than-Significant Impact

Proposed Project-related truck traffic would be limited to the transport of supplies to and from construction areas and staging yards along the source line and subtransmission line corridors, and on roads to and from the proposed Circle City Substation site. The Proposed Project would require an estimated average of approximately five trips per day. It is anticipated that the number of truck trips would increase during the 9-week grading period when hauling soil to and from the site would require approximately 50 truck trips per day. Existing roadways in the Proposed Project area would also be used for worker commutes. Personnel would typically drive to the work site at the beginning of the day and leave at the end of the day, with fewer people traveling to and from the work site throughout the day. As described in Chapter 3 – Project Description, SCE anticipates as many as 100 construction personnel working on the Proposed Project on any given day. This would result in an average of approximately 200 personal vehicle trips per day to and from the Proposed Project area during peak construction times. As a result, the total number of vehicle trips required to construct the Proposed Project would be approximately 256 during the peak construction period.

Primary access to Circle City Substation would be established from Leeson Lane along the eastern corridor of the substation property. Secondary access to Circle City Substation would be established from Leeson Lane along the western corridor of the substation property. These primary and secondary access routes would be located within SCE easements measuring approximately 60 feet wide.

I-15, SR-91, and SR-60—the primary freeways that would be used to access the Proposed Project area during construction—would each experience a less-than-1-percent increase in average daily traffic volume during peak and average construction periods. In addition, SCE would encourage carpooling to the materials staging yards to reduce personal vehicle traffic to the greatest extent possible. Work crews would generally leave their personal vehicles at designated locations (e.g., park-and-ride facilities, materials staging yards, or substations) and would proceed to the work site in crew trucks. If SCE construction crews are used, they would typically be based at SCE's existing local facilities, such as Mira Loma Substation. Traffic increases would be spread over the entire approximately 15.6-mile-long Proposed Project

alignment. In addition, because peak construction periods are expected to last approximately 9 weeks (out of the approximately 18-month duration of construction), increases in average daily traffic volumes along the freeways would be short-term and less than significant.

Temporary lane closures would also occur during trenching activities required to install the underground portions of the Proposed Project within roadways (e.g., along Magnolia Avenue, East Grand Boulevard, West Blaine Street, and North Cota Street) and to install the existing Archibald-Chino-Corona 66 kV Subtransmission Line in an underground configuration across Hellman Avenue. In addition, lane closures may be necessary in areas where poles are located adjacent to roadways and during pulling operations. In areas where road shoulders are present, or where bike lanes, parking spaces, or other areas are located adjacent to the roadway (e.g., along portions of River Road, Hellman Avenue, Baron Drive, West Blaine Street, East Blaine Street, El Sobrante Road, and East 3rd Street), construction activities may not require lane closures. Lane closures would be implemented during pole installation, pole removal, and/or conductor-pulling activities. Traffic controls in the form of signs, cones, and flaggers would be in place during all construction activities requiring temporary lane closures.

SCE would obtain ministerial county and city encroachment permits and conduct temporary or partial lane closures in accordance with applicable requirements. SCE would perform work in accordance with these requirements, which include protection of traffic through warning signs, lights, and barricades; minimum interference with traffic; and cleanup of the roadway upon completion of work. In addition, limited segments of the road would be closed at a time. Traffic control plans for each jurisdiction may also be required as part of the encroachment permit process. A typical traffic control plan may include a discussion of work hours, haul routes, work area definitions, traffic control and flagging methods, parking restrictions, and methods for coordinating construction activities with emergency service providers. Because these closures would be temporary, short in duration, and coordinated with local regulatory agencies through the permitting process, the Proposed Project would not cause significant impacts to transportation and traffic in the area. Therefore, conflicts with traffic plans and policies would be less than significant.

Operation – No Impact

Circle City Substation, the proposed Source Line Route, the Mira Loma-Jefferson 66 kV Subtransmission Line, distribution getaways, and telecommunication facilities would be unattended during operation, with only occasional maintenance and monitoring visits approximately once per year or as needed. SCE currently conducts regular inspection and maintenance of existing facilities in the Proposed Project area. As the Proposed Project would be located within existing utility corridors, operation and maintenance of the Proposed Project would not significantly change from current practices. As a result, there would be no impact to transportation and traffic.

4.16.4.2 Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Construction – Less-than-Significant Impact

Existing LOS standards for roads in the Proposed Project area generally range from LOS C to E (which indicate stable-flowing traffic, with areas of operations at road capacity or unstable flow); as a result, the existing roadway network in the Proposed Project area has limited capacity to handle substantial increases in traffic volume. Construction crews, materials, and equipment would primarily access the proposed Circle City Substation site and associated potential staging yard from I-15 or SR-91, either traveling along Magnolia Avenue, South Promenade Avenue, or East 6th Street. I-15 is designated LOS D/E, which indicates decreasing free-flow levels with areas of unstable flow, and SR-91 is designated LOS E/F, which indicates operations at road capacity with areas of breakdown in vehicular flow. Magnolia Avenue is designated LOS D, which indicates decreasing free-flow levels. LOS information is not available for South Promenade Avenue and East 6th Street. In order to reduce impacts to traffic congestion along SR-91, heavy-duty construction vehicles and equipment would not utilize SR-91 during peak traffic hours (between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. on weekdays) to access the Circle City Substation site throughout the approximately 9-week-long duration of peak construction. Alternate travel routes, such as East 6th Street or Magnolia Avenue, would instead be used during this time, as described in APM-TRA-01.

Vehicles would primarily access the remainder of the Proposed Project area (i.e., the proposed Source Line Route, Mira Loma-Jefferson 66 kV Subtransmission Line, and staging yards) from I-15, SR-91, or SR-60, and by traveling along local roads (e.g., Cantu-Galleano Ranch Road, South Archibald Avenue, Norco Drive/6th Street/Corydon Avenue, 2nd Street, North Main Street, South Promenade Avenue, and Magnolia Avenue). In addition to the I-15 and SR-91 designations listed previously, SR-60 is designated LOS C/D. LOS information is not generally available for local roads, with the exception of Magnolia Avenue, South Grove Avenue, and Limonite Avenue, which are designated as LOS D, C/D, and C, respectively, and indicate decreasing free-flow levels.

An increase of approximately 256 vehicle and truck trips during the approximately 9-week peak construction period would result in a less-than-1-percent increase in average daily traffic volume on I-15, SR-91, and SR-60, which would not conflict with the LOS standards set for I-15 and SR-60. SR-91 could experience a temporary decline in LOS due to the addition of construction vehicles during peak construction periods. However, APM-TRA-01 would be implemented, which specifies that heavy-duty construction vehicles and equipment would not utilize SR-91 during the traffic peak hours to access or depart the proposed Circle City Substation site. In addition, Magnolia Avenue, South Grove Avenue, and Limonite Avenue—which are designated as LOS D, C/D, and C, respectively—contain adequate capacity to accommodate minor increases in traffic volume. Traffic volume increases would also be spread out over the entire Proposed Project alignment and over the approximately 18-month-long construction period; therefore, increases would not significantly affect the established LOS standards for roadways used to access the Proposed Project area. As previously discussed, construction workers would

be encouraged to carpool to the job site, to the extent feasible. As a result, while construction of the Proposed Project may slightly increase the daily traffic congestion, this temporary increase is not expected to result in significant changes to the current LOS in the Proposed Project vicinity.

As previously described, traffic flow may also be disrupted due to temporary lane closures that may occur during the installation of crossing structures prior to and during conductor-pulling activities, during the installation of poles located adjacent to roadways, or where the Proposed Project would be undergrounded within roadways. However, construction work would be conducted from road shoulders, bike lanes, parking spaces, and open areas located adjacent to roadways, where possible, and complete lane closures may not be required in these areas. In addition, closures would be dictated by encroachment permits to occur during non-peak traffic hours to the extent practicable. After crossing structures or poles have been installed, lanes would be reopened and would remain open during conductor pulling. As closures would be temporary, limited in duration, and conducted during low-volume traffic times to the extent practicable, significant impacts to the existing LOS standards for these roadways would not occur.

Two new permanent access roads into Circle City Substation would be constructed as part of the Proposed Project; however, these roads would be gated and not accessible for public use. Existing paved and unpaved roads along portions of the route would be used throughout the majority of construction, along with temporary and permanent access roads, which would also not be available for public use. Proposed Project-related traffic may result in a slight increase in the existing daily traffic and/or road congestion due to lane closures, but would not result in permanent changes to the established LOS in and around the Proposed Project area following the 18-month-long duration of construction. In addition, this increase in traffic and/or road congestion would be temporary and spread out over the approximately 15.6-mile-long alignment. Therefore, construction of the Proposed Project would not result in a substantial change to LOS standards in the Proposed Project area, and impacts would be less than significant.

Operation – No Impact

As previously described, Proposed Project facilities would be unattended during operation, with only occasional maintenance and monitoring visits occurring approximately once per year or as needed. As SCE currently conducts regular inspection and maintenance of existing facilities in the Proposed Project area, there would be no perceptible change in the frequency of maintenance and monitoring visits following construction of the Proposed Project. In addition, operation activities may decrease in certain portions of the Proposed Project alignment due to the lower maintenance requirements of the tubular steel poles (TSP) and light-weight steel (LWS) poles that would replace existing wood distribution poles along the proposed Source Line Route and the Mira Loma-Jefferson 66 kV Subtransmission Line. As a result, there would be no impact to the existing LOS due to operation of the Proposed Project.

4.16.4.3 Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Construction – Less-than-Significant Impact

The nearest public airports are Chino Airport, located approximately 0.7 mile northwest of the Proposed Project, and Corona Municipal Airport, located approximately 1.1 miles southwest of the Proposed Project. In addition, the potential staging yard location at the SCE Ontario Service Center is located approximately 0.9 mile southwest of Ontario International Airport; however, as the staging yard would only be used to store equipment and materials, no impacts would occur. The Proposed Project is located within the Riverside County Airport Land Use Commission's Airport Land Use Compatibility Plan boundaries for the Chino Airport and Corona Municipal Airport. However, the Proposed Project is not subject to the use limitations and regulations contained within the plans as local authority is pre-empted by the CPUC. As discussed in Section 4.8 Hazards and Hazardous Materials, the Proposed Project would generally be consistent with the guidelines contained within the plans, with the exception of approximately 0.2 mile of the Mira Loma-Jefferson 66 kV Subtransmission Line, where approximately four LWS poles would be replaced within Airport Land Use Zone C of the Chino Airport. The maximum height of the LWS poles would be 85 feet, which is higher than the suggested limit of 70 feet of Airport Land Use Zone C. The crane used to replace the LWS poles would also exceed the suggested limit of 70 feet. However, construction activities would be temporary and short-term, lasting 4 to 8 days (i.e., 1 to 2 days per pole). In addition, the LWS poles would be installed at approximately the same height as those currently at this location. Therefore, there would be no significant change from existing conditions due to construction of the Proposed Project, and air traffic patterns would not be significantly altered or impacted due to the replacement of the LWS poles.

Title 14, Part 77 of the CFR states that FAA notification is necessary for construction projects greater than 200 feet in height or those located within 20,000 feet of a public use airport that exceeds a 100-to-1 surface ratio from any point on an airport's longest runway measuring more than 3,200 feet. The longest Chino Airport runway measures approximately 7,000 feet. As the nearest Proposed Project poles are located at a distance of approximately 4,600 feet from the Chino Airport and are a maximum of 105 feet tall, the Proposed Project would exceed a 100-to-1 surface ratio for the Chino Airport. The Corona Municipal Airport contains one runway, measuring approximately 3,200 feet in length. As the nearest Proposed Project poles are located a distance of approximately 5,900 feet from the Corona Municipal Airport and are a maximum of 105 feet tall, the Proposed Project would also exceed a 100-to-1 surface ratio for the Corona Municipal Airport. However, SCE would notify the FAA in accordance with Title 14, Part 77 of the CFR for construction work conducted within 20,000 feet of the Chino Airport and Corona Municipal Airport, as required. With respect to Proposed Project structures, the FAA will conduct its own analysis and may recommend no changes to the design of the proposed structures; or it may request redesigning the proposed structures near the airports to reduce the height, marking the structures (including the addition of aviation lighting), or placing marker balls on wire spans. SCE would evaluate the FAA recommendations for reasonableness and feasibility, and in accordance with Title 14, Part 77 of the CFR, SCE may petition the FAA for a discretionary review of its determination to address any issues with the FAA's determination. FAA determinations for permanent structures typically are valid for 18 months.

and therefore, such notifications would be filed upon completion of final engineering and before construction.

No helicopter use is anticipated to be necessary during construction. While construction of the Proposed Project may temporarily obstruct navigable airspace for the Chino Airport due to the replacement of approximately four LWS poles, impacts would be temporary and short-term. Therefore, there would be no significant change to existing air traffic patterns following construction of the Proposed Project. In addition, SCE would coordinate with necessary agencies prior to construction through the FAA notification process. Therefore, impacts to air traffic patterns would be less than significant.

Operation – No Impact

Helicopters are periodically used and would continue to be used during operation and maintenance to perform aerial inspections of TSPs and LWS poles along the proposed Source Line Route and the Mira Loma-Jefferson 66 kV Subtransmission Line approximately once per year or as needed. Helicopter flight paths would generally be limited to existing SCE ROWs. SCE currently implements and would continue to implement an operating plan for helicopter use, in accordance with Title 14, Part 77 of the CFR and in coordination with and to be approved by the local FAA Flight Standards District Office. Therefore, helicopter use would be in accordance with all applicable federal, state, and local aviation rules and regulations and would not create any new hazards. Because the newly installed TSPs and LWS poles would be similar in height to existing structures located along the proposed Source Line Route and Mira Loma-Jefferson 66 kV Subtransmission Line, there would be no significant change from helicopter flight paths during aerial inspections of the Proposed Project, and no significant additional impacts to air traffic patterns would occur.

4.16.4.4 Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction – Less-than-Significant Impact

Construction of the Proposed Project would not necessitate any permanent modifications to existing public roadways. As previously discussed, temporary lane closures may be required to ensure the safety of the public and construction personnel during certain activities where poles are located adjacent to or would be undergrounded within roadways. Lane closures and encroachment into public roadways could increase hazards if appropriate safety measures are not in place, such as proper signage, orange cones, and flaggers. An increase in hazards could also result from an increase in vehicular traffic at the intersections of access roads and public roadways.

Two new permanent access roads would be established to access the Circle City Substation site, but the access roads would be gated and access would be limited to SCE personnel. Four new permanent access roads would be constructed as part of the Mira Loma-Jefferson 66 kV Subtransmission Line. To minimize impacts, SCE would implement traffic control measures in accordance with Proposed Project encroachment permits and traffic control plans required as part

of the encroachment permit process. Access roads would also be designed to allow safe ingress and egress from any public roadways and to accommodate large construction equipment safely.

As discussed in Section 4.2 Agriculture and Forestry Resources, portions of the Proposed Project are located within areas of agricultural land. However, the Proposed Project poles would be located within existing utility ROWs and, as a result, would not substantially increase hazards due to incompatible uses in agricultural areas.

Operation – No Impact

As described previously, Proposed Project facilities would be unattended during operation, with only occasional maintenance and monitoring visits occurring approximately once per year or as needed. As previously discussed, the two new permanent access roads established at the proposed Circle City Substation site, and the three new permanent access roads, two permanently widened existing roads, and one permanent driveway along the Mira Loma-Jefferson 66 kV Subtransmission Line would not be public roads. As a result, there would be no increase in hazards due to design features or incompatible uses due to operation of the Proposed Project.

4.16.4.5 Would the project result in inadequate emergency access?

Construction – Less-than-Significant Impact

Delays could occur along emergency access routes during construction due to increases in vehicle traffic and temporary lane closures, which may occur while stringing or removing the conductors across roadways, during the installation and removal of crossing structures, or during the installation of poles adjacent to roadways. In addition, temporary lane closures would occur in order to construct the underground segments, such as the proposed Source Line Route, the Mira Loma-Jefferson 66 kV Subtransmission Line, and the Archibald-Chino-Corona underground crossover. However, one lane of Magnolia Avenue, East Grand Boulevard, West Blaine Street, North Cota Street, and Hellman Avenue would remain open throughout the duration of each segment of underground construction. Although closures could impact emergency access response times, closures would occur during off-peak hours, where feasible, in accordance with encroachment permits from applicable local jurisdictions and traffic control plans required as part of the encroachment permit process. Thus, impacts would be less than significant.

Operation – No Impact

As described previously, Proposed Project facilities would be unattended during operation, with only occasional maintenance and monitoring visits occurring approximately once per year or as needed. No road or lane closures would occur during operation and maintenance activities. Therefore, emergency access would not be obstructed and no impact would occur.

4.16.4.6 Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Construction – Less-than-Significant Impact

Trenching activities would be conducted in order to construct the underground portion of the Proposed Project, immediately adjacent to the North Main Corona Metrolink Station, within West Blaine Street. In addition, pulling and pole installation activities would be conducted along East Blaine Street, directly adjacent to the parking lot and main entrance of the North Main Corona Metrolink Station. Access to the North Main Corona Metrolink Station could be temporarily delayed due to lane closures that could occur during trenching, pulling, and pole installation activities.

Trenching activities would also be conducted along the area that crosses a Corona Cruiser/RTA bus route that runs along North Main Street. Pulling activities would be conducted along the portion of the Proposed Project that spans the Metrolink Rail path that intersects Joy Street, and along the portion of the Proposed Project that spans an RTA bus route along East 6th Street. Trenching and conductor-pulling activities would be conducted along the portion of the Proposed Project that crosses a Corona Cruiser/RTA bus route on Magnolia Avenue and along a Corona Cruiser bus route along East Grand Boulevard and East 3rd Street. Trenching and conductor pulling activities would also occur in the section of the Proposed Project located adjacent to a Corona Cruiser bus route along River Road. As listed in Table 4.16-2: Public Roadways Spanned, the Proposed Project would also span or cross approximately 15 bike lanes, along which both trenching and conductor-pulling activities would occur.

Construction of the Proposed Project could impact the railway, bus routes, and bike lanes that would be spanned or crossed by the Proposed Project as a result of increased traffic and temporary lane closures due to conductor-pulling activities, trenching activities, and installation of poles and crossing structures. Where road shoulders, bike lanes, parking spaces, or open areas are located adjacent to roadways, partial lane closures would be necessary. Where these elements are not present, complete lane closures would likely be required. Where the line would cross roads, brief closures and flaggers would be required when the line is pulled across these roads or when crossing structures are installed prior to line stringing. In all cases, temporary lane closures would be short-term (lasting a few days in each stretch of the road at a maximum) and would be conducted during off-peak hours when feasible, in accordance with encroachment permits. Construction would generally occur within existing utility corridors and would not involve any activities that would conflict with transportation policies, plans, or programs. As a result, impacts would be less than significant.

Operation – No Impact

The Proposed Project would be unattended during operation, with only periodic maintenance and monitoring visits, and some of these visits would be conducted by helicopter. While lane closures may be necessary in some instances to maintain the poles and conductor, the frequency of these activities would not differ from existing activities on the existing lines. Operation of the Proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Therefore, no impact would occur.

4.16.5 Applicant-Proposed Measures

The following APM would be implemented to reduce impacts to transportation and traffic associated with the Proposed Project:

• **APM-TRA-01: Minimize Use of SR-91.** Heavy-duty construction vehicles and equipment would not utilize SR-91 within the City of Corona (from the Green River Road exit to the Pierce Street exit) to access the proposed Circle City Substation site during peak traffic hours throughout the approximately 9-week-long grading period at the substation site. On weekdays between 7:00 a.m. and 9:00 a.m., heavy-duty construction vehicles and equipment would not utilize SR-91 heading west, and would not utilize SR-91 heading east between 4:00 p.m. and 6:00 p.m. Alternate travel routes, such as East 6th Street or Magnolia Avenue, would be used instead during these times.

4.16.6 Alternative Substation Site

Substation Site Alternative B would be located adjacent to the southeast corner of the proposed Circle City Substation site (i.e., Substation Site Alternative A) and directly north of the eastern terminus of All American Way. The number of construction workers and material deliveries required during construction of Substation Site Alternative B would be similar to those required for construction of the proposed Circle City Substation site. Construction workers and delivery trucks would use the same roadways to access Substation Site Alternative B as the proposed Circle City Substation site. The frequency and number of trips to Substation Site Alternative B during operation would be the same as to the proposed Circle City Substation site. Therefore, construction and operation impacts of Substation Site Alternative B would be similar to those for the proposed Circle City Substation site.

4.16.7 Alternative Source Line Routes

The alternative source line routes would cross and be located adjacent to approximately the same number of roadways, bike lanes, and public transportation routes throughout the Proposed Project area. However, Source Line Route Alternatives 2 and 4 would include approximately 2 miles of additional underground construction along East Grand Boulevard to Quarry Street; East 6th Street from El Sobrante Road to South Promenade Avenue; and along portions of South Promenade Avenue and Leeson Lane. Underground construction associated with Alternatives 2 and 4 would have the potential to impact transportation and traffic conditions in the City of Corona for a longer period of time than the proposed Source Line Route. The proposed Source Line Route would include a shorter length of underground construction along East Grand Boulevard and would not require underground construction along East 6th Avenue. Therefore, construction of the alternative source line routes would result in slightly increased impacts to transportation and traffic than those of the Proposed Project.

4.16.8 Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes

Alternative 3 would differ from the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route in that it would be constructed along Archibald Avenue, rather than along Hellman Avenue. Although residential developments are located along both Archibald and Hellman avenues, Archibald Avenue is a more densely populated area than Hellman Avenue. As a result,

potential impacts to transportation and traffic would be slightly greater for Alternative 3 as compared to the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route.

Alternative 2 would follow the same route as the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route, but it would include an additional section of underground construction for approximately 0.4 mile along Hellman Avenue north of Schleisman Road. Due to the increased construction period required for the installation of underground duct banks, Alternative 2 would result in slightly greater impacts to transportation and traffic than the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route.

The bike lanes and public transportation routes in the vicinity of Alternative 2 and Alternative 3 would be similar to those for the proposed Mira Loma-Jefferson 66 kV Subtransmission Line. Alternative 2 and Alternative 3 are also located within the boundaries of the Riverside County Airport Land Use Commission's Airport Land Use Compatibility Plan boundaries for Chino Airport and Corona Municipal Airport. The distance of each airport land use compatibility zone crossed by the alternative routes would be similar to the distance crossed by the proposed Mira Loma-Jefferson 66 kV Subtransmission Line. Similar impacts, such as a potential temporary impact to air traffic levels during construction, would occur on the roadways along Alternative 2 and Alternative 3. Therefore, impacts associated with the alternative routes would be similar to those of the proposed Mira Loma-Jefferson 66 kV Subtransmission Line with respect to bike lanes, public transportation, and airport land use compatibility.

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4.17 Utilities and Service Systems

This section describes the utilities and service systems in the area of Southern California Edison's (SCE's) Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project), as well as the potential impacts and alternatives. All impacts to utilities and service systems would be less than significant.

4.17.1 Environmental Setting

The following subsections provide an overview of local water resources, wastewater facilities, waste management facilities, and other utilities in the Proposed Project area. The Proposed Project would be located primarily in the City of Corona, with other components also located in the cities of Chino, Eastvale, Norco, and Ontario. The cities of Corona, Eastvale, and Norco are located in Riverside County, and the cities of Chino and Ontario are located in San Bernardino County.

4.17.1.1 Water Resources

The City of Chino's water is drawn from a mix of approximately 28 percent surface water and 72 percent groundwater. Surface water is imported from the Metropolitan Water District of Southern California through the State Water Project (SWP) (i.e., Sacramento-San Joaquin Delta water) and is treated at the Agua de Lejos Water Treatment Plant. The groundwater is obtained from local wells operated by the City of Chino or the Chino Basin Desalter Authority (CDA).

Drinking water for the City of Corona is provided by the city's Department of Water and Power. In 2013, the Department of Water and Power obtained approximately 58 percent of its supply from City of Corona groundwater wells. An additional approximately 33 percent of the city's water was imported from the Colorado River, 7 percent was imported through the SWP, and 2 percent was purchased from the Western Municipal Water District (WMWD). Half of the groundwater in the City of Corona is treated at Temescal Desalter. Water from the Colorado River is treated at the city's two surface water treatment facilities—the Sierra Del Oro and Lester water treatment facilities. There are also five active blending facilities that the Department of Water and Power operates.

The City of Eastvale's water is supplied by the Jurupa Community Services District (JCSD) and the CDA. The JCSD draws most of its water from local groundwater. The JCSD is part of the CDA, a Joint Powers Authority that is also comprised of the Santa Ana River Water Company; the cities of Chino, Chino Hills, Norco, and Ontario; the WMWD; and the Inland Empire Utilities Agency (IEUA). The CDA owns and operates two water treatment plants in the Chino Basin.

The City of Norco purchases approximately 68 percent of its drinking water supply from the Arlington Desalter Facility and the CDA. An additional approximately 32 percent of its water is drawn from groundwater wells. The remaining supply is purchased from the WMWD. The Proposed Project would cross a parcel of unincorporated Riverside County at the Santa Ana River crossing that is located within the City of Norco's Sphere of Influence and receives utility service from the City of Norco, including water.

Drinking water for the City of Ontario is provided by the Municipal Utilities Company; approximately 60 percent is drawn from local wells and an additional approximately 30 percent is brought in through the SWP. The remaining approximately 10 percent is provided by groundwater that is treated by the CDA, then transferred to the JCSD and brought into the city.

Supplemental water for the cities of Chino and Ontario is provided by the IEUA, which operates four regional water recycling plants. The nearest regional treatment plant is Regional Treatment Plant 1 and is located in the City of Ontario.

4.17.1.2 Wastewater

Wastewater in Riverside County—including the cities of Corona, Eastvale, and Norco—is primarily managed by the WMWD, which operates two treatment plants in the cities of Corona and Riverside. The treatment plant in the City of Corona is governed by the Western Riverside County Regional Wastewater Authority (WRCRWA). The WRCRWA plant collects wastewater from the WMWD, the City of Norco, the JCSD, and the Home Gardens Sanitary District. The City of Corona also operates a reclamation facility—Water Reclamation Facility #1—to treat sewer effluent. The City of Corona's reclaimed water system produced 1.83 billion gallons of reclaimed water in 2013. Wastewater that cannot be managed by the City of Corona's system is treated by the IEUA.

The Water and Sanitation Division of the San Bernardino County Special District manages wastewater throughout much of San Bernardino County. Wastewater from the cities of Chino and Ontario is treated by the IEUA.

4.17.1.3 Waste Management

Residential waste collection in the cities of Chino, Corona, and Norco is provided by Waste Management, Inc. In accordance with City of Chino Solid Waste Ordinance No. 2012-19, 65 percent of construction and demolition materials are required to be diverted from landfills using a combination of source reduction, reuse, and recycling efforts. Within the City of Corona, 58 percent of the annual waste stream is diverted to green waste and other recycling programs. The City of Ontario provides a refuse and recycling service within the city, and waste is sent to the West Valley Material Recovery Facility in the City of Fontana. A construction and demolition recycling plan is required for demolition and renovation projects within the City of Ontario when total costs exceed \$100,000 to divert at least 50 percent of the total construction and demolition debris generated by a project for reuse or recycling. Solid waste collection in the City of Eastvale is provided by Waste Management, Inc. and Burrtec Waste Industries, Inc. (Burrtec). Burrtec operates a transfer station in the City of Fontana near the Proposed Project, and a landfill in Salton City. San Bernardino County is responsible for solid waste management in unincorporated areas of the county, and contracts with Burrtec. The locations of local landfills—along with the types of waste they accept, their capacity, and their distance from the Proposed Project—are provided in Table 4.17-1: Landfills and Recycling Centers near the Proposed Project.

Table 4.17-1: Landfills and Recycling Centers near the Proposed Project

		Approxima (cubic	Approximate Distance from	
Facility and Location	Waste Accepted	Total	Remaining	the Proposed Substation ¹ (miles)
El Sobrante Landfill 10910 Dawson Canyon Road, Corona	Solid waste, household refuse, yard trimmings, furniture, appliances, electronic waste	184,930,000	145,530,000	6.4
Frank R. Bowerman Sanitary Landfill 11002 Bee Canyon Access Road, Irvine	Mixed municipal, industrial, construction/demolition	266,000,000	205,000,000	14.4
West Valley Material Recovery Facility/Transfer Station (Transfer/Processing Facility; Composting Facility; Construction and Demolition debris and Inert Debris Processing) 13373 Napa Street, Fontana	Construction/demolition, green materials, industrial, mixed municipal, wood waste			15.0
Olinda Alpha Sanitary Landfill 1932 North Valencia Avenue, Brea	Agricultural, industrial, construction/demolition, mixed municipal, tires, wood waste	74,900,000	38,578,383	18.4
San Bernardino County: Mid-Valley Landfill 2390 Alder Avenue, Rialto	Treated wood, solid waste, household refuse, yard trimmings, furniture, appliances, electronic waste, construction waste	101,300,000	67,520,000	19.8
Badlands Sanitary Landfill 31125 Ironwood Avenue, Moreno Valley	Solid waste, household refuse, electronic waste, tires	33,560,993	14,730,025	23.4

Source: California Department of Resources Recycling and Recovery (CalRecycle), 2015

Notes: "--" = Information not available

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¹ Due to the distance of the landfills and recycling centers from the Proposed Project in general, the proposed Circle City Substation was selected as a reference point and is representative of the Proposed Project as a whole in this particular instance.

4.17.1.4 Electricity and Natural Gas

SCE provides electric utility service to the cities of Chino, Eastvale, Norco, and Ontario, as well as the area of unincorporated Riverside County crossed by the Proposed Project. As of April 2001, the City of Corona has owned and operated a municipal electric utility, which provides service to approximately 3.4 percent of the City of Corona. SCE provides the remaining connections within city limits. Southern California Gas Company provides natural gas to all of the cities in the Proposed Project area.

4.17.1.5 Other

AT&T provides telephone and Internet service to the cities of Corona, Chino, Eastvale, Norco, and Ontario, as well as the area of unincorporated Riverside County crossed by the Proposed Project. Verizon Communications also provides telephone service to the City of Ontario.

4.17.2 Regulatory Setting

4.17.2.1 Federal

Safe Drinking Water Act

Originally passed by Congress in 1974 and amended in 1986 and 1996, the Safe Drinking Water Act (SDWA) allows the United States (U.S.) Environmental Protection Agency (EPA) to establish drinking water standards and oversee water supplies to ensure that they are in compliance with those standards. The standards apply to public and private water suppliers serving 25 or more individuals. The SDWA is intended to protect drinking water supplies from both naturally occurring and artificially introduced contaminants.

Clean Water Act

The Clean Water Act (CWA) was originally enacted in 1948 and has been amended numerous times, with significant expansions in 1972 and 1977. The CWA's main objectives are to maintain and restore the chemical, physical, and biological integrity of waters through the authorization of water quality programs, regulation of discharges of pollutants, and establishment of water quality standards. Authority for the implementation and enforcement of the CWA lies primarily with the U.S. EPA and its delegated state and local agencies, namely the State Water Resources Control Board (SWRCB), and in the Proposed Project area, the Santa Ana Regional Water Quality Control Board (RWQCB).

4.17.2.2 State

Urban Water Management Planning Act

All urban water suppliers within the State of California are required to prepare Urban Water Management Plans. Sections 10610 through 10657 of the California Water Code detail the information that must be included in these plans, as well as who must file them.

Integrated Waste Management Act of 1989

The Integrated Waste Management Act of 1989, otherwise known as Assembly Bill (AB) 939, mandates that California's jurisdictions divert 50 percent of their solid waste from landfills.

CalRecycle is under the umbrella of the California EPA and is responsible for the implementation of AB 939.

4.17.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Proposed Project. Pursuant to CPUC General Order No. 131-D, Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties and cities' regulations are not applicable as the counties and cities do not have jurisdiction over the Proposed Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only. Relevant local policies for the jurisdictions that would be crossed by the Proposed Project were reviewed. There were no policies provided by the cities of Chino, Norco, or Ontario that would be relevant to the Proposed Project. The following subsections provide relevant local policies that were provided by Riverside County, San Bernardino County, the City of Corona, and the City of Eastvale.

Riverside County General Plan

The following policies from the Circulation Element of the Riverside County General Plan are relevant to the Proposed Project:

- Policy C 1.4: Utilize existing infrastructure and utilities to the maximum extent practicable and provide for the logical, timely, and economically efficient extension of infrastructure and services.
- Policy C 25.2: Locate new and relocated utilities underground when possible. All
 remaining utilities shall be located or screened in a manner that minimizes their visibility
 by the public.

Riverside Countywide Integrated Waste Management Plan

The Riverside Countywide Integrated Waste Management Plan (CIWMP) outlines the goals, policies, and programs that the county and its cities will implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. The Riverside County Waste Management Department is specifically charged with the following responsibilities:

 Implementing programs that adhere to the goals, policies, and objectives outlined in the Source Reduction and Recycling Element of the county's General Plan that enable the unincorporated portion of Riverside County to achieve 50-percent diversion of solid waste from landfill disposal.

- Implementing programs that adhere to the goals, policies, and objectives outlined in the county's Household Hazardous Waste Element to reduce the amount of household hazardous waste that is disposed of within landfills.
- Meeting the solid waste disposal needs of all Riverside County residents.
- Maintaining and updating the CIWMP and reporting to the California Integrated Waste Management Board on the county's progress in complying with AB 939.

San Bernardino County General Plan

The following policy from the Circulation and Infrastructure Element of the San Bernardino County General Plan is relevant to the Proposed Project:

- Policy CI 14: The County will ensure a safe, efficient, economical and integrated solid waste management system that considers all wastes generated within the County, including agricultural, residential, commercial, and industrial wastes, while recognizing the relationship between disposal issues and the conservation of natural resources.
- Policy CI 18.1: Coordinate with Southern California Edison and other utility suppliers to make certain that adequate capacity and supply exists for current and planned development in the County.

City of Chino

The City of Chino adopted Ordinance No. 2012-19, which requires that construction and demolition materials being diverted to recycle or salvage in the City of Chino must increase from 50 percent to 65 percent in accordance with the Integrated Waste Management Act of 1989.

City of Corona General Plan

The following policies from the Infrastructure and Utilities Element of the City of Corona's General Plan are relevant to the Proposed Project:

- Policy 7.7.1: Ensure that new development does not degrade surface waters or the groundwater system.
- Policy 7.12.3: Continue to provide for the undergrounding of new and existing electrical distribution lines unless it is determined not to be economically or practically feasible as a result of significant environmental or other constraints.
- Policy 7.13.2: Provide for the continued development and expansion of telecommunications systems including cable and, as feasible, fiber optics, for access of data and information, and communication purposes.
- Policy 7.13.4: Promote the extension of the regional fiber optic network into the City.
- Policy 7.8.1: Provide an adequate and orderly system for collection and disposal of solid waste for new and existing development in the City and Sphere of Influence.

City of Eastvale General Plan

The following action and policies from the Land Use, Circulation and Infrastructure, and Design elements of the City of Eastvale General Plan are relevant to the Proposed Project:

- Action LU-31.1: Monitor the capacities of infrastructure systems and public services in coordination with service providers, utilities, and outside agencies.
- Policy C-29: Locate new and relocated utilities underground when possible. All remaining utilities shall be located or screened in a manner that minimizes their visibility by the public.
- Policy DE-16: The City will seek to reduce the unsightly appearance of overhead and aboveground utilities by placing them underground as new development occurs.
- Policy AQ-32: Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

4.17.3 Significance Criteria

The significance criteria for assessing the impacts to public services are derived from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project would cause a potentially significant impact if it:

- Exceeds wastewater treatment requirements of the applicable RWQCB
- Requires or results in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects
- Requires or results in the construction of new storm water drainage facilities or expansion
 of existing facilities, the construction of which could cause significant environmental
 effects
- Does not have sufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed
- Results in the determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the projected demand in addition to the provider's existing commitments
- Is served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs
- Does not comply with federal, state, and local statutes and regulations related to solid waste

4.17.4 Impact Analysis

4.17.4.1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Construction – No Impact

During the approximately 18-month duration of Proposed Project construction, portable toilets would be provided for the approximately 100 construction workers on site at any given time. The portable toilets would be maintained by a licensed sanitation contractor and provided in accordance with applicable sanitation regulations established by the Occupational Safety and Health Administration, which generally require one portable toilet for every 10 workers. The licensed sanitation contractor would dispose of the waste at an off-site location in compliance with established RWQCB standards. No other wastewater is anticipated to be generated by Proposed Project construction. Therefore, no RWQCB standards would be exceeded, and there would be no impact.

Operation – Less-than-Significant Impact

Proposed Project construction would not directly or indirectly result in new or expanded development. As a result, the Proposed Project would not result in the need for any new water or wastewater treatment facilities and would not require the expansion of any existing facilities. SCE would apply to the City of Corona for sewer and water service for a stand-alone, permanent restroom at the proposed Circle City Substation. The substation would be automated and monitored from the existing Mira Loma Substation; no SCE employees would be stationed at the site. SCE personnel would visit several times each month for maintenance. Therefore, use of the restroom would be limited, and the Proposed Project would not generate large volumes of wastewater to be sent to a treatment facility or that would exceed treatment requirements set forth by the Santa Ana RWQCB.

Water would be used during operational activities to wash the insulators and conductors. Approximately 100 gallons per year of deionized water from the existing Mira Loma Substation would be needed to wash the new insulators and conductor; therefore, no additional wastewater would be generated beyond what is currently required for SCE's power lines in the area. The small amount of additional wastewater generated would not require or result in the construction of new water or wastewater treatment facilities. As a result, impacts would be less than significant.

4.17.4.2 Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction – No Impact

As previously described, portable toilets would be provided for crew members during construction of the Proposed Project. The waste would be disposed of off site in compliance with RWQCB standards and would not require new facilities or the expansion of existing facilities. Water would be drawn from municipal sources for dust control, cleanup, crew member consumption, and hand washing. Construction of the Proposed Project would not discharge large

volumes of wastewater, nor would it require a significant quantity of water for construction; therefore, there would be no need for the expansion of new water or wastewater treatment facilities. As a result, there would be no impact.

Operation – No Impact

As previously described, the Proposed Project would include a stand-alone, permanent restroom located within the proposed Circle City Substation. Circle City Substation would be monitored remotely and would only require periodic visits for maintenance. Maintenance crews would visit the proposed substation three to four times a month, resulting in no more than eight uses per month. A standard low-flow toilet would draw 1.6 gallons of water and discharge it as wastewater for each use, resulting in approximately 150 gallons of wastewater per year. Approximately 1 gallon of water would be required for each use of the restroom sink, resulting in a total of 2.6 gallons of water drawn for each use, or approximately 300 gallons per year. As previously described, approximately 100 gallons per year of deionized water from the existing Mira Loma Substation would be needed to wash new insulators and conductor. SCE would apply for service for the restroom from the City of Corona's Department of Water and Power. Because the Proposed Project would not draw large volumes of water or discharge large volumes of wastewater, there would be no need for the expansion of new water or wastewater treatment facilities. Therefore, there would be no impact.

4.17.4.3 Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? – No Impact

As discussed in Section 4.9 Hydrology and Water Quality, the Proposed Project would not result in a significant increase in impermeable surfaces that would increase storm water discharge from the Proposed Project. Section 4.9 Hydrology and Water Quality also provides discussion of drainage patterns and flooding. If required by the City of Corona, an approximately 700-foot extension of the existing storm drain system may be constructed to accept site flow onto Leeson Lane. In addition, a standard catch basin would be installed in the Leeson Lane right-of-way. An alternative to the surface swales would include the installation of an approximately 1,300-footlong buried drain pipe through the eastern access corridor. However, this extension is a minor change that would improve the drainage from the site. As a result, there would be no impact.

SCE would also obtain coverage under the SWRCB General Permit for Storm Water Discharges Associated with Construction Activity Order No. 2009-0009-DWQ. In order to obtain coverage under the permit, SCE would develop and provide a Storm Water Pollution Prevention Plan (SWPPP) to the SWRCB prior to initiating construction activities, which is described further in Section 4.9 Hydrology and Water Quality. In conjunction with the SWPPP, appropriate best management practices (BMPs) (e.g., the installation of silt fencing and covering of spoil piles) would be developed to minimize impacts associated with storm water runoff. These BMPs would then be implemented and monitored throughout the Proposed Project by a Qualified SWPPP Practitioner. As a result, there would be no impact.

4.17.4.4 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Construction – Less-than-Significant Impact

As previously discussed, the Proposed Project would draw approximately 58 acre-feet of water from local sources for dust control, cleanup, crew member consumption, and hand washing. Restroom facilities would be portable and would not draw from local supplies. Therefore, the Proposed Project would not draw a significant volume of water, and available water supplies would be more than sufficient to serve the Proposed Project's limited demand. Therefore, impacts would be less than significant. Additional discussion of water resources in the Proposed Project area is included in Section 4.9 Hydrology and Water Quality.

Operation – Less-than-Significant Impact

As previously discussed, SCE would apply for water service from the City of Corona's Department of Water and Power. It is expected that no more than 400 gallons of water would be required annually for the restroom, and approximately 100 gallons of deionized water from the existing Mira Loma Substation would be required for cleaning of equipment. Therefore, there would not be a need for any new or expanded entitlements, resources, or facilities to accommodate this demand. As a result, impacts would be less than significant.

4.17.4.5 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? – Less-than-Significant Impact

As discussed previously, waste during construction would be contained in portable toilets and disposed of off site. During operation of the Proposed Project, the Circle City Substation restroom is not expected to generate more than 150 gallons of wastewater per year. Because very little wastewater would be generated by the Proposed Project, there would be capacity to serve the projected increase in demand, and as it would be a minor increase, it would not likely challenge any existing commitments. Therefore, the impact would be less than significant.

4.17.4.6 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? – Less-than-Significant Impact

The Proposed Project would generate limited quantities of construction waste, much of which can be recycled or salvaged. Waste materials collected by crews, such as treated wood poles, would be separated and taken to the materials staging area and categorized for final disposal. Excavated materials would be reused as fill for the Proposed Project and/or disposed of at an off-site disposal facility in accordance with applicable laws, if necessary. All non-hazardous waste that could not be recycled or salvaged would be taken to local landfills.

Grading on the Proposed Project would primarily be limited to the removal of approximately 22,400 cubic yards of potentially contaminated soil from a berm at the proposed Circle City Substation site. Any hazardous waste would be disposed of in a Class I hazardous waste landfill

or similar facility, as appropriate. In total, the landfills near the Proposed Project have the capacity to accept approximately 471 million cubic yards of additional waste. The operation and maintenance of the Proposed Project would not significantly differ from existing conditions, and would generate a relatively small amount of waste. Because local landfills have sufficient capacity and the Proposed Project would not generate a high volume of waste, impacts would be less than significant.

4.17.4.7 Would the project comply with federal, state, and local statutes and regulations related to solid waste? – No Impact

SCE currently adheres to and would continue to adhere to all national, state, and local standards for the disposal of solid waste during operation and maintenance the Proposed Project. During Proposed Project construction and operation, SCE would dispose of all waste in accordance with published national, state, or local standards relating to solid and hazardous waste disposal through recycling or transport to an authorized landfill. Thus, the Proposed Project would not violate any solid waste statutes or regulations, and there would be no impact.

4.17.5 Applicant-Proposed Measures

Because no potentially significant impacts to utilities and service systems would occur as a result of the Proposed Project, no avoidance or minimization measures are proposed.

4.17.6 Alternative Substation Site

Substation Site Alternative B has a similar setting to that of the proposed Circle City Substation site (i.e., Substation Site Alternative A). As discussed in Section 4.9 Hydrology and Water Quality, Substation Site Alternative B would not impact the existing drainage pattern of the site, and construction and operation of the alternative site would result in less-than-significant impacts. This alternative would not require the construction of any new storm water facilities. Therefore, impacts would be similar to the Proposed Project.

4.17.7 Alternative Source Line Routes

The alternative source line routes would require a similar amount of water for construction and would result in a similar amount of waste as the proposed Source Line Route. As a result, impacts would be similar to that of the Proposed Project.

4.17.8 Alternative Mira Loma-Jefferson 66 Kilovolt Subtransmission Line Routes

Both Mira Loma-Jefferson 66 Kilovolt (kV) Subtransmission Line Route Alternatives 2 and 3 would require a similar amount of water for construction and would result in a similar amount of waste as the Mira Loma-Jefferson 66 kV Subtransmission Line. As a result, impacts would be similar to that of the Proposed Project.

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CHAPTER 5 – COMPARISON OF ALTERNATIVES

This chapter provides a comparison of the alternatives to Southern California Edison's (SCE's) Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project) described in Chapter 2 – Project Alternatives and analyzed in Chapter 4 – Environmental Impact Assessment. The comparative analysis presented in this chapter focuses on the differences in impacts among the alternatives. The California Environmental Quality Act (CEQA) and Section 15126.6(d) of the CEQA Guidelines require that an environmental impact report include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. All of the alternatives must be capable of satisfying the Proposed Project objectives.

The following objectives were identified to meet the Proposed Project's purpose and need, as described in Section 1.6 Project Objectives in Chapter 1 – Purpose and Need:

- Serve long-term peak electrical demand requirements in the Electrical Needs Area as soon as possible after receipt of applicable permits
- Enhance electrical system reliability by adding transformation and circuitry to serve increased electrical demand and increasing operational flexibility
- Construct the new electrical facilities in close proximity to the electrical demand to effectively and efficiently serve the Electrical Needs Area (as defined in Section 1.2 Electrical Needs Area)
- Meet the Proposed Project need while minimizing environmental impacts
- Meet the Proposed Project need in a cost-effective manner
- Design and construct the Proposed Project in conformance with SCE's current engineering, design, and construction standards for substation, transmission, subtransmission, and distribution system projects

These objectives provided guidance in the development of a range of reasonable alternatives to the Proposed Project or its location, which would feasibly attain most of the basic objectives. An alternative Circle City Substation site, alternative source line routes, and alternative Mira Loma-Jefferson 66 kilovolt (kV) Subtransmission Line routes are compared with the Proposed Project in this chapter. The following subsections provide information regarding the methodology used to evaluate the various alternatives, a summary comparing the alternatives to the Proposed Project, a more detailed description of the alternatives comparison, and a description of the resource areas that would be significantly impacted by the Proposed Project. The alternative Circle City Substation site and alternative source line routes are depicted in Figure 2-1: Alternative Substation Sites and Source Line Routes Map in Chapter 2 – Project Alternatives, while Figure 2-2: Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes Map provides the alternative routes for the Mira Loma-Jefferson 66 kV Subtransmission Line.

5.1 Evaluation Methodology

The following subsections describe the methodology used to identify the potential sites for the proposed Circle City Substation, the proposed Source Line Route, and the Mira Loma-Jefferson 66 kV Subtransmission Line Route.

5.1.1 Circle City Substation Site

In order to meet the Proposed Project objectives, a Substation Study Area was determined by analyzing a set of boundaries within which the placement of a new substation would effectively and efficiently serve the Electrical Needs Area. Figure 1-1: Electrical Needs Area in Chapter 1 – Purpose and Need depicts the Substation Study Area, which is located within the northeast portion of the Electrical Needs Area. The placement of a substation within this Substation Study Area would allow SCE to increase transformer capacity in the Electrical Needs Area, and transfer electrical demand between distribution circuits and the existing substations located near the Electrical Needs Area. A new substation operating within the Substation Study Area would maximize electrical benefits and satisfy the purpose and need for the Proposed Project.

After determination of the Substation Study Area, potential substation locations were developed using the following considerations:

- The substation should be located in an area where existing and future electrical demand would be efficiently and effectively served.
- The substation should be located in an area where it would maximize system reliability and operational flexibility with adjacent substations and circuits.
- When possible, the substation should be located at a site that maximizes the use of
 existing 66 kV subtransmission lines and minimizes the need to construct new 66 kV
 subtransmission facilities.

A review of the potential sites identified within the Substation Study Area allowed SCE to select two potential substation site alternatives. These alternatives are depicted in Figure 2-1: Alternative Substation Sites and Source Line Routes Map in Chapter 2 – Project Alternatives, which also provides further information regarding the basis for the development, evaluation, and selection of the Proposed Project alternatives.

5.1.2 Source Line Routes

Following identification of the potential sites for the new substation, power flow analysis studies were performed in order to determine the number of source lines that would be required to serve the electrical demand and satisfy the design criteria. SCE's power flow analysis studies revealed that the construction of a minimum of four source lines would be needed, which could be accomplished by installing two double-circuit source lines. The two source lines located in the closest proximity to the proposed and alternative substation sites include the Mira Loma-Corona-Pedley and Chase-Corona-Databank 66 kV subtransmission lines. Both of these lines would be utilized to energize the new substation.

A total of four source line routes were identified for the Mira Loma-Corona-Pedley and the Chase-Corona-Databank 66 kV subtransmission lines that would accommodate the connection of either the proposed Circle City Substation (i.e., Substation Site Alternative A) or Substation Site Alternative B. Two potential source line routes that include segments of the Mira Loma-Corona-Pedley and the Chase-Corona-Databank 66 kV subtransmission lines were identified—the proposed Source Line Route (i.e., Source Line Route Alternative 1) and Source Line Route Alternative 2, which are depicted in Figure 2-1: Alternative Substation Sites and Source Line Routes Map. Further information regarding the basis for the development, evaluation, and selection of the Proposed Project source line route alternatives is provided in Section 2.5 Source Line Route Alternatives Considered in Chapter 2 – Project Alternatives.

5.1.3 Mira Loma-Jefferson Subtransmission Line Route

In order to meet the Proposed Project objectives, the Mira Loma-Jefferson 66 kV Subtransmission Line Route Study Area was determined by analyzing a set of boundaries within which the placement of a new subtransmission line (from the existing Mira Loma Substation to the existing Mira Loma-Corona-Jefferson 66 kV Subtransmission Line) would effectively serve the electrical demand. The placement of the Mira Loma-Jefferson 66 kV Subtransmission Line within this area would allow SCE to address the capacity shortfalls of the Mira Loma-Corona and Mira Loma-Corona-Jefferson 66 kV subtransmission lines in an efficient manner.

Following the determination of the Mira Loma-Jefferson 66 kV Subtransmission Line Route Study Area, potential routes were developed based on the criteria that the Mira Loma-Jefferson 66 kV Subtransmission Line Route should maximize the use of existing 66 kV subtransmission lines and existing easements. Based on these criteria, SCE selected three potential routes to connect the existing Mira Loma Substation to the existing Mira Loma-Corona-Jefferson 66 kV Subtransmission Line within the Mira Loma-Jefferson 66 kV Subtransmission Line Route Study Area. These alternatives are depicted in Figure 2-2: Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes Map. Further information regarding the basis for the development, evaluation, and selection of the Proposed Project alternatives is provided in Chapter 2 – Project Alternatives.

5.2 Alternatives to the Proposed Project

California Public Utilities Commission General Order 131-D requires that an Application for a Permit to Construct include the reasons for adoption of the power line route or substation location selected, including a comparison with alternative routes or locations, and the advantages and disadvantages of each. The following subsections compare the substation site alternatives and alternative source line routes, as well as the route alternatives for the Mira Loma-Jefferson 66 kV Subtransmission Line.

5.2.1 Alternative Substation Site

In most cases, construction and operation impacts of Substation Site Alternative B would be identical or very similar to those identified for the proposed Circle City Substation in Chapter 4 – Environmental Impact Assessment. A tabular comparison of the impacts resulting from selection of the proposed and alternative substation sites is provided in Table 5-1: Comparison of

5 - COMPARISON OF ALTERNATIVES

Proposed and Alternative Substation Sites. As described in Section 2.4.2 Substation Site Alternative B in Chapter 2 – Project Alternatives, Substation Site Alternative B would be located on an approximately 12.5-acre, privately owned parcel, adjacent and southeast of the proposed Circle City Substation site. The parcel is currently vacant and is bordered by All American Way on the west, mixed vacant land and an asphalt production facility to the south, and vacant land to the east. To the north is a Waste Management, Inc. facility, the terminus of Temescal Street, and a mobile home park.

As discussed in Section 2.4.3 Substation Site Alternative Recommendation in Chapter 2 – Project Alternatives, the substation would be approximately the same size and similar in design at either substation site. Substation Site Alternative A was selected as the preferred alternative because it is located outside of the City of Corona's redevelopment area, known as "the Gateway"; it has easy access for distribution and subtransmission circuits; and it is currently owned by SCE. Substation Site Alternative B would have limited access for new distribution circuits, requires a new access road, and is located within close proximity to a mobile home park.

5.2.2 Alternative Source Line Routes

SCE determined that all of the potential source line routes would have the ability to serve the proposed or alternative Circle City Substation sites. However, Source Line Route Alternative 1 was selected as the proposed Source Line Route because it would result in fewer potential impacts to resources, including biological resources, recreation, and transportation and traffic. A tabular comparison of the impacts resulting from selection of the proposed and alternative source line routes is provided in Table 5-2: Comparison of the Proposed and Alternative Source Line Routes.

5.2.2.1 Source Line Route Alternative 1

Source Line Route Alternative 1 would be approximately 4.7 miles in length (3.8 miles aboveground and 0.9 mile underground) to the proposed Circle City Substation site, and approximately 5.0 miles in length (4.1 miles aboveground and 0.9 mile underground) to Substation Site Alternative B. The proposed Source Line Route would avoid areas that would be crossed by Source Line Route Alternative 2 and Source Line Route Alternative 3, where special-status plant species and least Bell's vireo (*Virio bellii pusillus*)—a federally and state-listed endangered bird species—are known to occur.

5.2.2.2 Source Line Route Alternative 2

Source Line Route Alternative 2 would be approximately 5.1 miles in length (3.2 miles aboveground and 1.9 miles underground) to the proposed Circle City Substation site, and approximately 5.2 miles in length (3.2 miles aboveground and 2.0 miles underground) to Substation Site Alternative B. A greater percentage of this alternative would be configured underground, including in the area along East Grand Boulevard between East 3rd Street and Quarry Street, and within East 6th Street under Interstate (I-) 15, along Magnolia Avenue, and along Leeson Lane to the proposed Circle City Substation site (or farther south through private property to enter Substation Site Alternative B). Source Line Route Alternative 2 would also be longer in length than the proposed Source Line Route or Source Line Route Alternative 4.

Table 5-1: Comparison of Proposed and Alternative Substation Sites

	Impact Level			
Resource Area	Proposed Circle City Substation	Substation Site Alternative B		
Aesthetics	Less-than-significant impact	Similar to the Proposed Project		
Agriculture and Forestry Resources	Less-than-significant impact	Similar to the Proposed Project		
Air Quality	Significant and Unavoidable impact	Similar to the Proposed Project		
Biological Resources	Less-than-significant impact	Similar to the Proposed Project		
Cultural Resources	Less-than-significant impact	Similar to the Proposed Project		
Geology and Soils	Less-than-significant impact	Similar to the Proposed Project		
Greenhouse Gas Emissions	Less-than-significant impact	Similar to the Proposed Project		
Hazards and Hazardous Materials	Less-than-significant impact	Similar to the Proposed Project		
Hydrology and Water Quality	Less-than-significant impact	Similar to the Proposed Project		
Land Use and Planning	No impact	Greater than the Proposed Project; however, remains less than significant.		
Mineral Resources	No impact	Similar to the Proposed Project		
Noise	Less-than-significant impact	Similar to the Proposed Project		
Population and Housing	No impact	Similar to the Proposed Project		
Public Services	Less-than-significant impact	Similar to the Proposed Project		
Recreation	Less-than-significant impact	Similar to the Proposed Project		
Transportation and Traffic	Less-than-significant impact	Similar to the Proposed Project		
Utilities and Service Systems	Less-than-significant impact	Similar to the Proposed Project		

Table 5-2: Comparison of the Proposed and Alternative Source Line Routes

	Impact Level				
Resource Area	Proposed Source Line Route	Source Line Route Alternative 2	Source Line Route Alternative 3	Source Line Route Alterative 4	
Aesthetics	Less-than- significant impact	Similar to the Proposed Project, as more of Source Line Segment 2 would be installed underground, but all of Source Line Segment 4 would be overhead; however, remains less than significant	Slightly greater visual impacts than the Proposed Project due to the increased length.	Similar to the Proposed Project	
Agriculture and Forestry Resources	Less-than- significant impact	Similar to the Proposed Project	Similar to the Proposed Project	Similar to the Proposed Project	
Air Quality	Significant and unavoidable impact	Greater than the Proposed Project, as a greater portion of the line would be installed underground, requiring increased ground disturbance and construction equipment use; however, remains significant and unavoidable	Similar to the Proposed Project	Greater than the Proposed Project, as a greater portion of the line would be installed underground, requiring increased ground disturbance and construction equipment use; however, remains significant and unavoidable	

	Impact Level				
Resource Area	Proposed Source Line Route	Source Line Route Alternative 2	Source Line Route Alternative 3	Source Line Route Alterative 4	
Biological Resources	Less-than- significant impact	Greater potential impacts, as Source Line Segment 4 would contain additional riparian/riverine resources and a less-disturbed vegetation type; least Bell's vireo has been observed in this area; and Riversidean sage scrub is present along this route; however, remains less than significant with applicant-proposed measures (APMs)	Greater potential impacts, as Source Line Segment 4 would contain additional riparian/riverine resources and a less-disturbed vegetation type; least Bell's vireo has been observed in this area; and Riversidean sage scrub is present along this route; however, remains less than significant with APMs	Similar to the Proposed Project	
Cultural Resources	Less-than- significant impact	Similar to the Proposed Project	Similar to the Proposed Project	Similar to the Proposed Project	
Geology and Soils	Less-than-	Similar to the	Similar to the	Similar to the	
	significant impact	Proposed Project	Proposed Project	Proposed Project	
Greenhouse Gas	Less-than-	Similar to the	Similar to the	Similar to the	
Emissions	significant impact	Proposed Project	Proposed Project	Proposed Project	
Hazards and	Less-than-	Similar to the	Similar to the	Similar to the	
Hazardous Materials	significant impact	Proposed Project	Proposed Project	Proposed Project	
Hydrology and Water	Less-than-	Similar to the	Similar to the	Similar to the	
Quality	significant impact	Proposed Project	Proposed Project	Proposed Project	
Land Use and	No impact	Similar to the	Similar to the	Similar to the	
Planning		Proposed Project	Proposed Project	Proposed Project	
Mineral Resources	No impact	Similar to the Proposed Project	Similar to the Proposed Project	Similar to the Proposed Project	
Noise	Less-than- significant impact	Slightly reduced operation impacts due to the elimination of corona noise in those areas; however, remains less than significant	Similar to the Proposed Project	Slightly reduced operation impacts due to the elimination of corona noise in those areas; however, remains less than significant	
Population and	No impact	Similar to the	Similar to the	Similar to the	
Housing		Proposed Project	Proposed Project	Proposed Project	

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	Impact Level				
Resource Area	Proposed Source Line Route	Source Line Route Alternative 2	Source Line Route Alternative 3	Source Line Route Alterative 4	
Public Services	Less-than- significant impact	Similar to the Proposed Project	Similar to the Proposed Project	Similar to the Proposed Project	
Recreation	Less-than- significant impact	Slightly greater impacts as this alternative would be located adjacent to City Park; however, remains less than significant	Similar to the Proposed Project	Slightly greater impacts as this alternative would be located adjacent to City Park; however, remains less than significant	
Transportation and Traffic	Less-than- significant impact	Greater impacts than the Proposed Project, as a longer portion of this alternative would be installed underground, requiring an extended construction period and lane and/or road closures; however, remains less than significant	Greater impacts than the Proposed Project, as a longer portion of the alternative source line route would be installed underground, requiring an extended construction period and lane and/or road closures; however, remains less than significant	Greater impacts than the Proposed Project, as a longer portion of this alternative would be installed underground, requiring an extended construction period and lane and/or road closures; however, remains less than significant	
Utilities and Service Systems	Less-than- significant impact	Similar to the Proposed Project	Similar to the Proposed Project	Similar to the Proposed Project	

As previously discussed, Source Line Route Alternative 2 would also require a greater amount of underground construction work, which would extend the construction period and increase the potential impacts to noise and to transportation and traffic due to lane and/or road closures. However, the overall impact levels to these resources would not change as compared to the Proposed Project. Installation of a greater portion of Source Line Route Alternative 2 underground would also minimize corona noise for a greater number of residents during operation of the Proposed Project. Source Line Route Alternative 2 would have greater potential biological impacts, as it would contain additional riparian/riverine resources and a lessdisturbed vegetation type. Least Bell's vireo has been observed in this area, and Riversidean sage scrub is also present along this route; however, impacts would remain less than significant with APMs.

In addition, Source Line Route Alternative 2 would cross City Park along Quarry Avenue. Although closure of the park would not be required, the proximity of Proposed Project activities to the park would inhibit access to the park from Quarry Street during construction, which would cause slightly greater impacts to recreation as a result.

5.2.2.3 Source Line Route Alternative 3

Source Line Route Alternative 3 would be approximately 5.1 miles in length (4.7 miles aboveground and 0.4 mile underground) to the proposed Circle City Substation site, and approximately 5.2 miles in length (4.8 miles aboveground and 0.4 mile underground) to Substation Site Alternative B. Like Source Line Route Alternative 2, Source Line Route Alternative 3 would also be longer in length than the proposed Source Line Route or Source Line Route Alternative 4. Source Line Route Alternative 3 would have greater impacts to biological resources and transportation and traffic than the proposed Source Line Route. Source Line Route Alternative 3 would have greater potential biological impacts, as it would contain additional riparian/riverine resources and a less-disturbed vegetation type. Least Bell's vireo has been observed in this area, and Riversidean sage scrub is also present along this route; however, impacts remain less than significant with APMs. Source Line Route Alternative 3 would also have greater impacts to transportation and traffic than the proposed Source Line Route, as a longer portion of Source Line Route Alternative 3 would be installed underground, requiring an extended construction period and lane and/or road closures; however, impacts remain less than significant. All other impacts would be similar to the proposed Source Line Route.

5.2.2.4 Source Line Route Alternative 4

Source Line Route Alternative 4 would be approximately 4.7 miles in length (2.4 miles aboveground and 2.3 miles underground) to the proposed Circle City Substation site, and approximately 5.1 miles in length (2.6 miles aboveground and 2.5 miles underground) to Substation Site Alternative B. As with Source Line Route Alternative 2, Source Line Route Alternative 4 would require more underground construction work, including in the area along East Grand Boulevard between East 3rd Street and Quarry Street, and within East 6th Street under I-15, along Magnolia Avenue, and along Leeson Lane to the proposed Circle City Substation site (or farther south through private property to enter Substation Site Alternative B).

Similarly to Source Line Route Alternative 2, Source Line Route Alternative 4 would also require a greater amount of underground construction work, which would extend the construction period and increase the potential impacts to noise and to transportation and traffic due to lane and/or road

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closures. However, the overall impact levels to these resources would not change as compared to the Proposed Project. Installation of a greater portion of Source Line Route Alternative 4 underground would also minimize corona noise during operation of the Proposed Project. This alternative would also avoid areas that would be crossed by Source Line Route Alternative 2 and Source Line Route Alternative 3, where special-status plant species and least Bell's vireo are known to occur.

In addition, Source Line Route Alternative 4 would cross City Park along Quarry Avenue. Although closure of the park would not be required, the proximity of Proposed Project activities to the park would inhibit access to the park from Quarry Street during construction, which would cause slightly greater impacts to recreation as a result.

5.2.3 Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes

SCE identified three potential subtransmission line route alternatives that would originate at the existing Mira Loma Substation and would connect to the existing Mira Loma-Corona-Jefferson 66 kV Subtransmission Line near Corona Substation. Alternative 1 was selected as the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route because it would require the least amount of underground construction. The proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route and Alternative 2 would follow the same route, with Alternative 2 differing only in that it would be installed underground for approximately 2,000 feet along Hellman Avenue, north of Schleisman Road, and to the existing right-of-way (ROW)—which is approximately 500 feet wide—in the City of Eastvale. Alternative 3 would differ from the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route and Alternative 2 in that it would exit Mira Loma Substation and travel along the existing subtransmission line in a southwesterly direction and turn south along Archibald Avenue. Alternative 3 would travel southbound along Archibald Avenue to a location south of Grapewin Street, where it would continue along the SCE ROW to cross the Santa Ana River, and then follow the same route as the proposed Mira Loma-Jefferson 66 kV Subtransmission Line from a point on River Road just north of Corydon Avenue in the City of Norco. A tabular comparison of the proposed and alternative Mira Loma-Jefferson 66 kV Subtransmission Line routes is provided in Table 5-3: Comparison of Proposed and Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes.

Along the portion of Alternative 3 that diverges from the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route, the alignment would cross through additional land use designations, including more Medium Density Residential, Commercial Retail, Community Center, and Medium High Density Residential. Alternative 3 would require the installation of new subtransmission poles along Archibald Avenue, where none currently exist, and additional structures to be located within the existing SCE ROW that crosses the Santa Ana River approximately 0.5 mile northeast of River Road. Because Alternative 2 would be located along the same route as the proposed Mira Loma-Jefferson 66 kV Subtransmission Line, there would be no difference regarding the land use designations crossed between the two lines.

Table 5-3: Comparison of Proposed and Alternative Mira Loma-Jefferson 66 kV Subtransmission Line Routes

		Impact Level	
Resource Area	Mira Loma-Jefferson 66 kV Subtransmission Line	Alternative 2	Alternative 3
Aesthetics	Less-than-significant impact	Slightly less visual impacts than the Proposed Project, as an additional portion of the line north of Schleisman Road would be installed underground; however, remains less than significant	Greater than the Mira Loma-Jefferson 66 kV Subtransmission Line Route, as Alternative 2 would pass two public parks, would include an overhead river crossing that follows an existing distribution line, and would be in a more densely populated area; however, remains less than significant
Agriculture and Forestry Resources	Less-than-significant impact	Similar to the Proposed Project	Similar to the Proposed Project
Air Quality	Significant and unavoidable impact	Greater than the Proposed Project, as a greater portion of the line would be installed underground, requiring increased ground disturbance and construction equipment use; however, remains significant and unavoidable	Similar to the Proposed Project
Biological Resources	Less-than-significant impact	Similar to the Proposed Project	Similar to the Proposed Project
Cultural Resources	Less-than-significant impact	Similar to the Proposed Project	Similar to the Proposed Project
Geology and Soils	Less-than-significant impact	Similar to the Proposed Project	Similar to the Proposed Project
Greenhouse Gas Emissions	Less-than-significant impact	Greater than the Proposed Project, as a greater portion of the line would be installed underground, requiring increased ground disturbance and construction equipment use; however, remains less than significant	Similar to the Proposed Project

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		Impact Level	
Resource Area	Mira Loma-Jefferson 66 kV Subtransmission Line	Alternative 2	Alternative 3
Hazards and Hazardous Materials	Less-than-significant impact	Similar to the Proposed Project	Slightly greater than the Proposed Project, as new structures would be installed along approximately 4 miles of Archibald Avenue; however, remains less than significant
Hydrology and Water Quality	Less-than-significant impact	Similar to the Proposed Project	Slightly increased potential to impact water quality due to its location in a less disturbed area within the Santa Ana River corridor; however, remains less than significant
Land Use and Planning	No impact	Same as the Proposed Project	Similar to the Proposed Project
Mineral Resources	No impact	Similar to the Proposed Project	Similar to the Proposed Project
Noise	Less-than-significant impact	Slightly increased construction-related impacts to sensitive receptors, as a portion of Alternative 3 would be located adjacent to a greater number of homes; slightly reduced impacts due to the elimination of corona noise to sensitive receptors in that area; however, remains less than significant	Slightly greater construction-related impacts, as more sensitive receptors would be located in closer proximity to Alternative 2; however, remains less than significant
Population and Housing	No impact	Similar to the Proposed Project	Similar to the Proposed Project
Public Services	Less-than-significant impact	Similar to the Proposed Project	Similar to the Proposed Project

		Impact Level	
Resource Area	Mira Loma-Jefferson 66 kV Subtransmission Line	Alternative 2	Alternative 3
Recreation	Less-than-significant impact	Slightly increased potential impacts, as a result of a slightly longer construction period to install the line underground near American Heroes Park; however, remains less than significant	Similar to the Proposed Project
Transportation and Traffic	Less-than-significant impact	Slightly greater than the Proposed Project, as an additional section north of Schleisman Road would be installed underground; however, remains less than significant	Slightly greater than the Proposed Project, as Alternative 2 would be constructed along a busier and more populated street than the Proposed Project; however, remains less than significant
Utilities and Service Systems	Less-than-significant impact	Similar to the Proposed Project	Similar to the Proposed Project

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Alternative 3 would require the installation of new structures through more highly populated residential and commercial areas than the proposed Mira Loma-Jefferson 66 kV Subtransmission Line. Both the proposed Mira Loma-Jefferson 66 kV Subtransmission Line and Alternative 2 would replace or relocate existing Mira Loma-Corona-Jefferson 66 kV Subtransmission Line structures along the same route. Thus, Alternative 3 would result in increased impacts to aesthetics. In addition, the proposed route would potentially result in greater aesthetic impacts compared to Alternative 2, as an approximately 2,000-foot-long section of Alternative 2 would be installed underground north of Schleisman Road.

Like the proposed Mira Loma-Jefferson 66 kV Subtransmission Line, Alternative 3 would cross the Santa Ana River through willow riparian forest habitat along the existing SCE ROW located approximately 0.5 mile northeast of River Road. The proposed and alternative routes would all cross Santa Ana sucker (*Catostomus santaanae*) and least Bell's vireo critical habitat within the river corridor. Both the proposed Mira Loma-Jefferson 66 kV Subtransmission Line and Alternative 2 would replace two existing H-frame structures near the Santa Ana River, whereas Alternative 3 would require the installation of new structures in a less-disturbed area along the Santa Ana River. Thus, increased impacts to biological resources would result if Alternative 3 was selected.

As previously described, Alternative 3 would travel along Archibald Avenue, which contains more residential properties than Hellman Avenue. Therefore, more sensitive receptors would be situated in closer proximity to construction activities. As a result, the impacts from construction-related noise would increase if Alternative 3 was chosen, as compared to the proposed Mira Loma-Jefferson 66 kV Subtransmission Line. Construction-related noise for Alternative 2 would be slightly greater for the portion of Alternative 2 that would be installed underground; however, corona noise during operation would be minimized.

Construction of Alternative 3 would also result in slightly greater impacts to transportation and traffic compared to construction of the proposed Mira Loma-Jefferson 66 kV Subtransmission Line because it would travel through a more densely populated area. Further, construction of Alternative 2 would result in increased impacts to transportation and traffic because Alternative 2 would include an additional underground section. As previously described, underground construction would require more time to complete compared to the installation of overhead lines. Therefore, both Alternative 2 and Alternative 3 would result in slightly greater transportation and traffic impacts compared to the proposed Mira Loma-Jefferson 66 kV Subtransmission Line.

5.3 Environmental Impacts

As described in Chapter 4 – Environmental Impact Assessment, the Proposed Project would have significant impacts to air quality. Construction of Substation Site Alternative B, the alternative source line routes, or the alternative Mira Loma-Jefferson 66 kV Subtransmission Line routes would not avoid the environmental impacts related to air quality that are associated with the Proposed Project.

Air quality impacts would be similar to the Proposed Project because Substation Site Alternative B, the alternative source line routes, and the alternative Mira Loma-Jefferson 66 kV Subtransmission Line routes are located within an area under the jurisdiction of the South Coast

Air Quality Management District. Air quality impacts resulting from Substation Site Alternative B would differ in that the site would be located farther away from nearby sensitive receptors, but would also be significant and unavoidable because its construction and operation would be similar in scope to that of the Proposed Project. Air quality impacts resulting from the alternative source line routes and Mira Loma-Jefferson 66 kV Subtransmission Line Route Alternative 3 would differ in that a greater portion of the line would be installed underground, requiring increased ground disturbance and construction equipment use, but impacts would also be significant and unavoidable because the criteria air pollutant emissions would be greater than the Proposed Project.

CHAPTER 6 – OTHER CEQA CONSIDERATIONS

This chapter analyzes the potential cumulative and growth-inducing impacts related to the Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project), discusses the overall significance of the environmental effects of the Proposed Project, and summarizes the Mandatory Findings of Significance.

6.1 Cumulative Impacts

The California Environmental Quality Act (CEQA) requires lead agencies to consider the cumulative impacts of proposals under their review. Section 15355 of the CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." According to Section 15130(a)(1), a cumulative impact "is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions." According to Section 15130(b)(3), the cumulative impacts analysis "would examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects."

Section 15130(a)(3) also states that an environmental document may determine that a project's contribution to a significant cumulative impact would be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of mitigation measures designed to alleviate the cumulative impact.

In conducting a cumulative impacts analysis, the proper frame of reference is the temporal span and spatial areas in which the Proposed Project would cause impacts. In addition, a discussion of cumulative impacts must include either:

- a list of past, present, and reasonably future projects, including, if necessary, those outside the lead agency's control; or
- a summary of projections contained in an adopted general plan or related planning document, or in a previously certified Environmental Impact Report, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provided that such documents are referenced and made available for public inspection at a specified location (Section 15130(b)(1)).

According to Section 15130(b)(1)(B)(2), the term "probable future project" includes the following:

- approved projects that have not yet been constructed;
- projects that are currently under construction;
- projects requiring an agency approval for an application that has been received at the time a Notice of Preparation is released; and

• projects that have been budgeted, planned, or included as a later phase of a previously approved project.

A listing of projects that meet this criteria and are within 1 mile of the Proposed Project are listed in Table 6-1: Cumulative Projects within 1 Mile, along with the project identification number, a brief description, the jurisdiction in which each project is located, the distance from the Proposed Project, status, and anticipated construction schedule. These projects are also depicted in Figure 6-1: Planned and Proposed Projects Map (Source Line Route) and Figure 6-2: Planned and Proposed Projects Map (Subtransmission Line).

The following subsections discuss whether—when combined with past, present, planned, and probable future projects in the area—the Proposed Project could result in significant short-term or long-term environmental impacts. Short-term impacts are generally associated with construction of the Proposed Project, while long-term impacts are those that result from permanent Proposed Project features or operation and maintenance of the projects.

6.1.1 Aesthetics

Construction and operation of the Proposed Project would result in an incremental change to the area's visual character. The proposed Circle City Substation would be located within an industrial area in the City of Corona and on an approximately 19.5-acre site that was formerly occupied by a warehouse. The substation would not substantially degrade the existing character of this industrial landscape setting. The City of Corona is developed with an urban landscape containing industrial and commercial uses, as well as residential uses in the vicinity of the proposed Circle City Substation. No planned projects are located within 0.5 mile of the proposed Circle City Substation; therefore, the planned projects are not likely to be seen in the same viewshed as the Proposed Project. As a result, the development of Circle City Substation would not result in a significant cumulative impact to aesthetics when considered with existing and proposed development in the area.

North of the Santa Ana River, the Proposed Project area is more agricultural and rural residential. However, when considered in conjunction with other past, present, and future projects, including those in Table 6-1: Cumulative Projects within 1 Mile, it is evident that the visual character of the Proposed Project area north of the Santa Ana River is transforming to large-scale residential communities. This already represents a change in the visual character of the area, to which the Proposed Project would contribute. However, based on the scope and size of the Proposed Project in comparison to the projects in Table 6-1: Cumulative Projects within 1 Mile, as well as the existing urban-industrial character in the vicinity of the proposed Circle City Substation, the contribution would be minor and less than significant.

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¹ The status of each project has been divided into three categories: Applied, meaning an application has been submitted to the jurisdictional agency; Approved, indicating that the project has been approved, but is not yet under construction; and Under Construction.

Table 6-1: Cumulative Projects within 1 Mile

Map ID	Project Identification	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	oated iction ule ²
	Tagrina			(miles)		Begin	End
1	PP13-003	Two-story office building on approximately 17,400 square feet	Southeast corner of Main Street and 8th Street, Corona	Crossed	Approved	ł	ŀ
2	DPR13-011 TTM36-642	45 townhomes on approximately 3.8 acres	Northwest of Main Street and Parkridge Avenue, Corona	Crossed	Approved	-	1
ю	CUP12-006	Phase 1 (2016): Approximately 72,000-square-foot addition; approximately 120,000-square-foot medical office building (possible, not positive); 870-space parking structure Phase 2 (2030): Approximately 140,000-square-foot addition Phase 3 (2035): Repurpose existing hospital to sub-acute care uses; no more floor area	South Main Street, north of 9th Street, Corona	Crossed	Approved	2016	2035
4	DPR15-002	Four industrial buildings on approximately 95,500 square feet	Malloy Court and West Rincon Street, Corona	Crossed	Applied		ŀ
5	DRP14-021	Two industrial buildings on approximately 216,072 square feet	Northwest corner of East 6th Street and Radio Road, Corona	Crossed	Applied	-	1
9	Not Applicable (NA)	Interstate (I-) 15 Corridor Improvement Project involving the construction of two toll express lanes and one general-purpose lane in each direction from State Route (SR-) 74 to SR-60 and ancillary improvements	SR-74 to SR-60, Corona	Spanned	Applied	2016	2020

² Projects with construction start and/or end dates denoted with "--" are either unknown or not available from the local jurisdiction.

Map ID	Project Identification Number	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	ated iction ule ²
				(miles)		Begin	End
7	DPR11-003 ARC11-001	Two medical office buildings	Northeast corner of East Grand Boulevard and 3rd Street, Corona	0.01	Approved	-	1
8	TTM36-427 PP06-009	194 multi-family units on approximately 7.3 acres	Southeast corner of Harrington Street and Lincoln Avenue, Corona	0.28	Approved	1	1
6	DPR12-007 TTM36-451 PP12-005 SPA12-007 GPA13-001	464 multi-family apartment units and approximately 77,256 square feet of commercial mixed use on approximately 14.5 acres	West side of North Main Street, south of Rincon Street, Corona	0.28	Under Construction	2015	1
10	DPR08-020	Affordable housing project with 180 units	Southeast corner of Harrington Street and Lincoln Avenue, Corona	0.32	Approved	1	1
11	DPR08-010	Four-story hotel, measuring approximately 47,500 square feet	West side of Corona Life Drive, north of Sampson Avenue, east of McKinley Street, Corona	0.42	Approved	I	1
12	PP08-004	Two-story medical building, measuring approximately 5,311 square feet	Southwest corner of Washburn and 7th streets, Corona	0.43	Approved	1	1
13	TTM36-533	Rough grading of 103 single-family lots on approximately 61 acres	Lauren Canyon, northeast of Old Temescal, Corona	0.57	Applied	2015	1

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Map ID	Project Identification	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	ated iction ule ²
	rannoer			(miles)		Begin	End
20	TM 16420-1	799 apartment units	West of Hellman Avenue and Prairie Smoke Road, Chino	0.2	Under Construction	ŀ	I
21		Mill Creek Single Family Residential Units	South of Chino Corona Road, Chino	0.23	Applied	1	1
22	-	Rancho Miramonte Project: 415 singlefamily residential units; 659 townhome units; a museum measuring approximately 65,000 square feet; a church measuring approximately 152,000 square feet; and a park measuring approximately 150,000 square feet	Southeast corner of Cucamonga Avenue and West Country Road, northeast corner of McCarthy Road and Cucamonga Avenue, southeast corner of Chino Corona Road and East County Road, Chino	0.38	Applied	I	I
23	-	Lewis Residential: 800 apartment units	Southwest corner of East Preserve Loop and Pine Avenue, Chino	0.48	Approved	1	I
24	-	Fallencrest at the Preserve: 204 single-family residential units, 786 townhome units, 412 apartment units, a shopping center measuring approximately 775,970 square feet, and a general office measuring approximately 775,970 square feet	North of East Preserve Loop and Pine Avenue, Chino	0.48	Approved	1	I
25	PM19368	Chino East Industrial	South of Merrill Avenue, east of Grove Avenue, west of Carpenter Avenue, north of Remington Avenue, Chino	0.64	Applied	ŀ	1

Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project Proponent's Environmental Assessment

Project Identification	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	ated iction ule ²
 Number			(miles)		Begin	End
 15-0783	The Ranch at Eastvale: Approximately 120-acre mixed-use master plan development with approximately 267,200 square feet of industrial/commercial; approximately 801,500 square feet of light industrial; approximately 1,121,100 square feet of business development; and access roads	West of Cucamonga Creek, east of Hellman Avenue, south of the City of Ontario, and north of American Heroes Park, Eastvale	Crossed	Approved	I	ı
12-0297	Lennar-Mill Creek Crossing, Planned Residential Development Subdivision: 122 single-family dwelling units for Tract 29997	Southeast corner of Chandler Street and Hellman Avenue, Eastvale	Crossed	Under	1	ł
 14-2832	ATT- River Road, New Disguised Wireless Facility: Approximately 70-foot tall disguised wireless facility and an approximately 138-square-foot equipment shelter	Southeast corner at Hall and River roads, west of Baron Drive, Eastvale	Crossed	Applied	-	I
 14-1398	Sendero, Planned Residential Development: 321 residential units	Northwest corner of Limonite Avenue and Harrison Avenue, Eastvale	Crossed	Applied	1	l
 NA	Chandler Area Vision Plan	North of Chandler Street, east of Hellman Avenue, west of Archibald Avenue, west of Selby Avenue, Eastvale	Crossed	Applied	1	1
 ı	SC Limonite, LLC: 330 single-family residential units	South of Remington Avenue. west of Harrison Avenue, north of Limonite Avenue, Eastvale	Crossed	Approved	ı	1

Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project Proponent's Environmental Assessment

Map ID	Project Identification	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	ated ction ule ²
	lyumber			(miles)		Begin	End
32	I	Eastvale Shopping Center: Approximately 192,000-square-foot discount superstore, specialty retail, fast-food with drive through, fast food without drive through, and gas station with convenience store and car wash	Southeast corner of Limonite Avenue and Archibald Avenue, Eastvale	Crossed	Approved	1	l
33	11-0160	Providence Business Park: 14 industrial buildings ranging from 12,850 square feet to 129,000 square feet and associated improvements on approximately 53 acres of vacant land (Note: Providence Business Park was formerly known as Bircher's site)	West of Archibald Avenue and approximately 750 feet south of Limonite Avenue, Eastvale	0.01	Approved	ŀ	1
34	TR 29997	122 single-family residential units	Southeast corner of Chandler Street and Hellman Avenue, Eastvale	0.01	Under Construction	1	I
35	11-0558	The Trails, Planned Residential Development Residential Subdivision: 256 dwelling units and an approximately 5-acre park on two parcels	Northwest corner of Archibald Avenue and 65th Street, Eastvale	0.07	Under Construction	1	1
36	PP23219 (PM 35865)	14 industrial buildings on approximately 53.37 acres	South of western extension of Limonite Avenue, east on Cucamonga Creek Storm Drain, west of Archibald Avenue, north of 65th Street, Eastvale	0.12	Approved	ŀ	I
37	12-0051	Walmart-Eastvale Crossings: Development of an approximately 177,000-square-foot retail store and several outparcels on approximately 23.37 acres	Southeast corner of Limonite Avenue and Archibald Avenue, Eastvale	0.16	Applied	1	ŀ

Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project Proponent's Environmental Assessment

Map ID	Project Identification	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	ated iction ule ²
	rumber			(miles)		Begin	End
	13-0395	Copper Sky Residential Development: 250 single-family residential units	Northwest corner of 65th Street and Archibald Avenue, Eastvale	0.20	Under	1	ł
39	11-0354	Arco Gas Station	Southeast corner of Hamner Avenue and Riverside Drive, Eastvale	0.32	Approved	1	ł
40	VΝ	The Enclave Specific Plan: Approximately 112-acre single-family residential unit community, including approximately 15 acres of commercial development and 7.1 acres of parks	Southwest corner of Schleisman Road and Archibald Avenue, Eastvale	0.40	Under	2009	1
	11-0629	LBA Realty Industrial Building: Approximately 446,173-square-foot industrial building on approximately 24 acres with overflow parking on an adjacent parcel	Northeast corner of Cantu-Galleano Ranch Road and Hamner Avenue, Eastvale	0.46	Applied	1	1
42	11-0271 15-0551	Goodman Commerce Center (formally Lewis Eastvale Commerce Center): Commercialretail (hotels, restaurants, entertainment, services for the local community and travelers), industrial (large-format light manufacturing, light assembly, and warehousing and distribution uses), and business park development (offices, incubator suites, and small industrial spaces) on approximately 190 acres	North of Bellegrave Avenue, south of Cantu Galleano Ranch Road, east of Miliken Avenue, west of I-15, Eastvale	0.47	Approved	ŀ	I .
43	15-0958	Eastvale Marketplace: Neighborhood retail center with multi-tenant and single-tenant buildings and parking facilities	Northeast corner of Limonite Avenue and Sumner Avenue, Eastvale	0.54	Applied	1	I

Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project Proponent's Environmental Assessment

Map ID	Project Identification Numbor	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	oated oction ule ²
	Dampa			(miles)		Begin	End
44	14-1077	Grainger Site	North of I-15, east of Hamner Avenue, west of Wineville Avenue, Eastvale	0.60	Approved	1	ŀ
45	TR 35751	243 townhome units	Southwest corner of Schleisman Road and Enclave Drive, Eastvale	0.61	Under Construction	-	1
46	11-0359	Richland Communities Residential Community: 173 residential units on approximately 50 acres	Northeast corner of Archibald Avenue and Schleisman Road, Eastvale	0.62	Approved	1	1
47	14-2322 15-1174	Vantage Point Church: A sanctuary, church, community buildings, and associated site improvements	8500 Archibald Avenue, Eastvale	0.66	Applied	1	ŀ
48	14-2039	Bank of America: Bank of America building with three-lane drive-through operation	Pad A of the Enclaves Shopping Center (southwest corner of Schleisman Road and Archibald Avenue), Eastvale	0.67	Approved	I	2015
49	15-0175	Chandler Catholic Church: Pre-application review for four individual parcels to be located within the C-1/C-P and A-1 zoning districts	14395 Chandler Street, Eastvale	0.72	Applied	1	1
50	TR 32821	350 townhome units	South of 58th Street, west of Scholar Way, Eastvale	0.76	Approved	1	ŀ
51	11-0211	Osterkamp/T-Mobile Cell Tower: Approximately 50-foot monopine cell tower on an approximately 3-acre vacant lot	14371 Chandler Street, Eastvale	0.79	Applied	I	ŀ

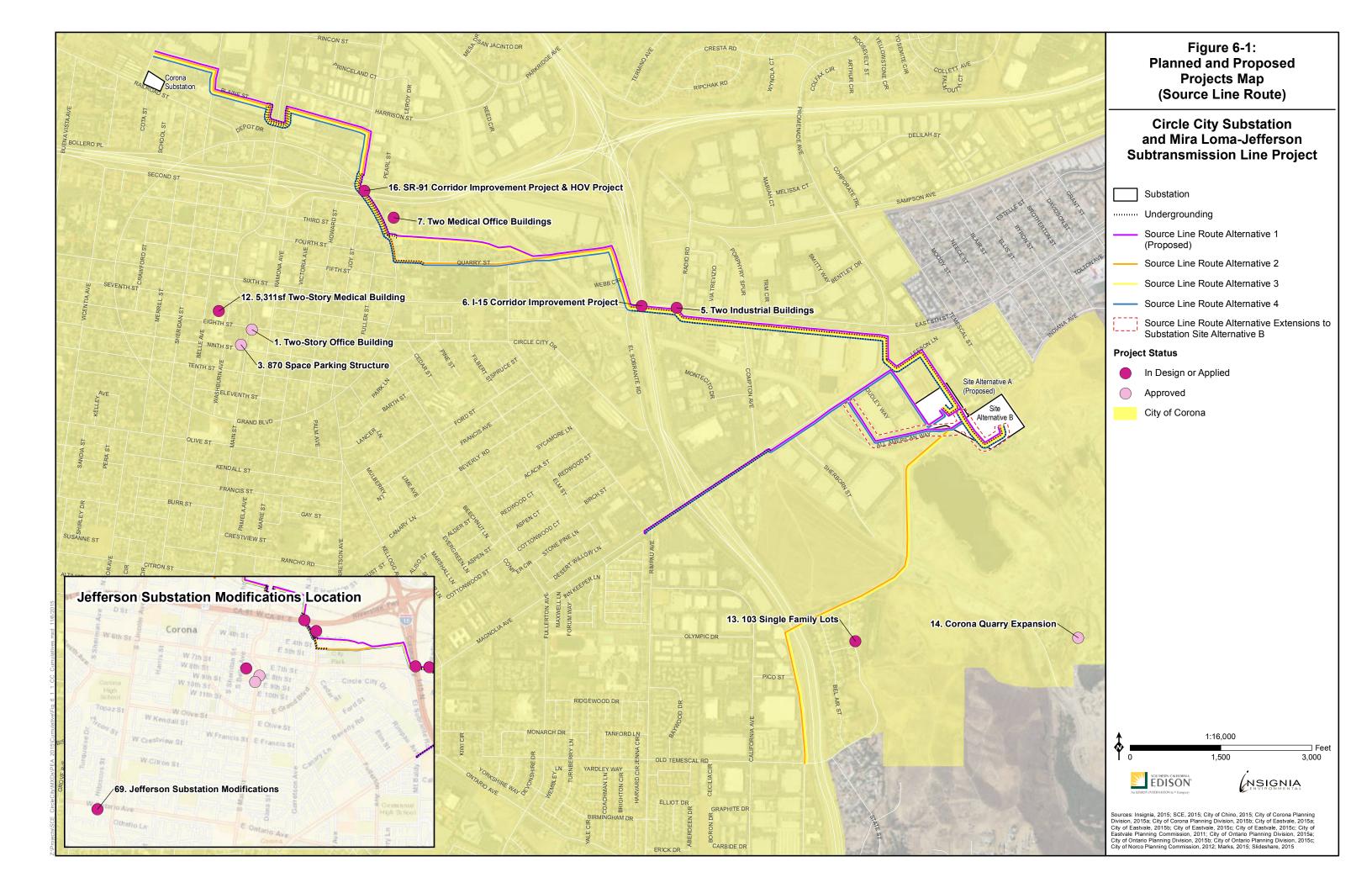
Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project Proponent's Environmental Assessment

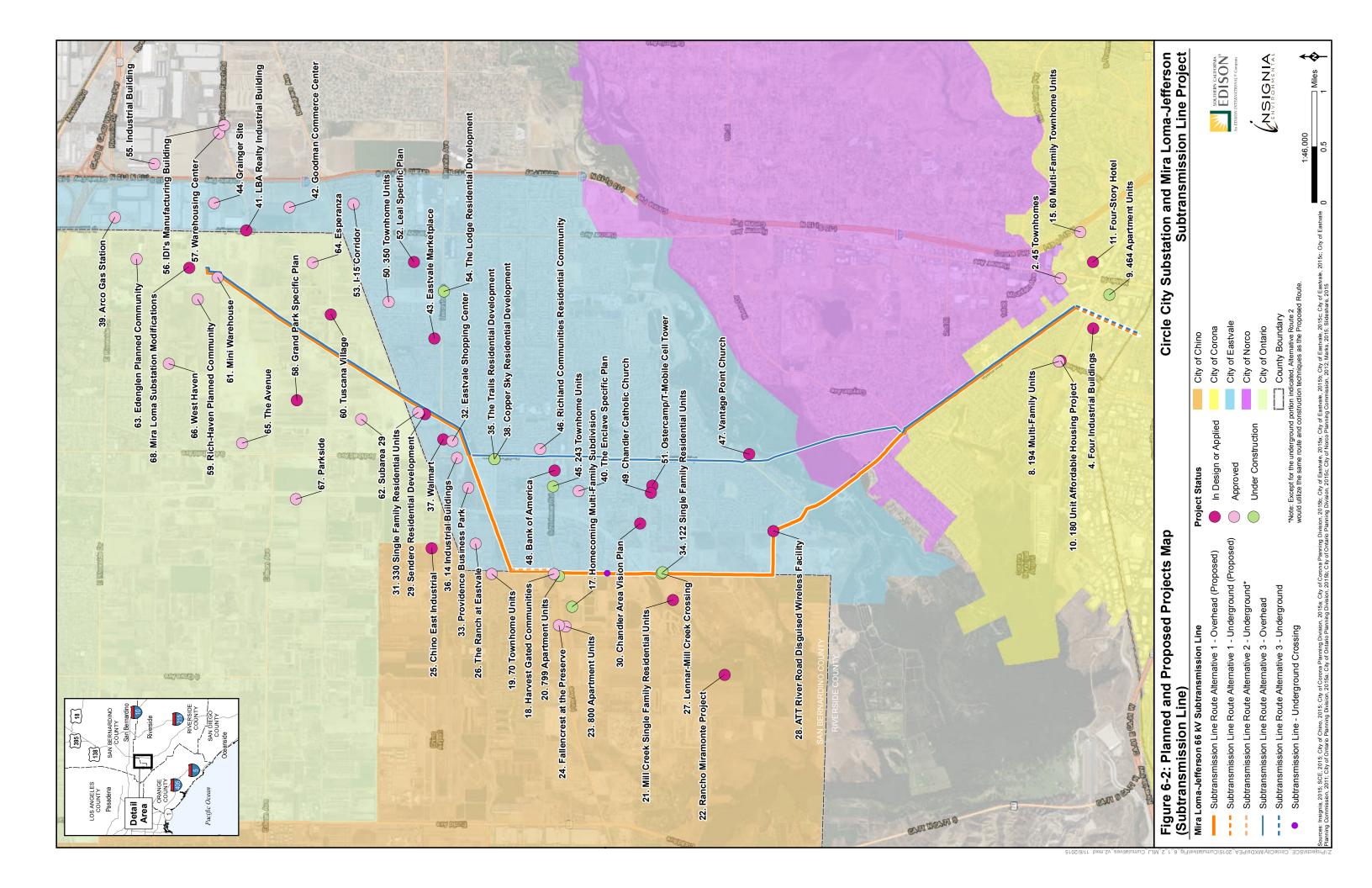
Map ID	Project Identification Number	Project Description	Location	Approximate Distance to the Proposed Project (miles)	Status	Anticipated Construction Schedule ² Begin End	nated iction ule ² End
57	PP24596	Warehousing center measuring 122,590 square feet	North of Cantu-Galleano Ranch Road, east of I-15, west of Wineville Avenue, Jurupa Valley	0.87	Approved	-	1
58	NA	Grand Park Specific Plan: 1,327 residential units, elementary school on approximately 11.16 acres, high school on approximately 56.21 acres, and an approximately 146.66-acre park	North of Eucalyptus Avenue, south of Edison Avenue, east of Archibald Avenue, west of Haven Avenue,	Crossed	Approved	-	ŀ
59	NA	Rich-Haven Planned Community: 4,256 residential units with approximately 886,200 square feet of commercial space	North of Edison Avenue, south of Riverside Drive, east of Haven Avenue, west of Mill Creek Avenue, Ontario	Crossed	Approved	-	ŀ
09	I	Tuscana Village: 176 single-family residential units and a shopping center measuring approximately 260,000 square feet	Southwest corner of Edison Avenue and Cleveland Avenue, east of Sumner Avenue, north of Bellegrave Avenue, Ontario	Crossed	Applied	-	1
61	PDEV10-008	Mini warehouse, measuring approximately 17,000 square feet	West of Hamner Avenue, 0.5 mile north of Edison Avenue, Ontario	Crossed	Approved	1	I

Map ID	Project Identification Number	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	ated iction ule ²
						Degili	EIIG
62	NA	Subarea 29: 2,293 residential units with a recreation center, commercial space, neighborhood parks, and schools	North of Bellegrave Avenue, south of Eucalyptus Avenue, west of Haven Street, Ontario	Crossed	Under	ŀ	I
63	NA	Edenglen Planned Community: 584 residential units with a sports park and approximately 767,520 square feet of commercial space	North of Chino Avenue, south of Riverside Drive, east of Mill Creek Avenue, west of Miliken Avenue, Ontario	>0.01	Under Construction	2007	I
64	NA	Esperanza: 1,410 residential units	North of Bellegrave Avenue, south of Edison Avenue, east of Mill Creek Avenue, west of Milliken Avenue, Ontario	0.17	Approved	I	I
65	NA	The Avenue: 2,326 residential units with approximately 174,000 square feet of commercial space	North of Edison Avenue, south of Schaefer Avenue, Ontario	0.22	Approved	2015	1
99	NA	West Haven: 753 residential units	North of Schaefer Avenue, south of Riverside Drive, west of Haven Avenue, Ontario	0.50	Approved	2015	ŀ

Map ID	Project Identification Numbor	Project Description	Location	Approximate Distance to the Proposed Project	Status	Anticipated Construction Schedule ²	ated iction ule ²
	Tagrina			(miles)		Begin	End
67	NA	Parkside: 1,947 residential units with approximately 115,000 square feet of commercial space	North of Eucalyptus Street, south of Edison Avenue, east of Carpenter Avenue, west of Archibald Avenue, Ontario	0.86	Approved	I	I
	PIN 6197	Replace bushing on AA-bank	Within Mira Loma Substation	0	In Design	2017	2017
	PIN 4329	Replace three circuit breakers	Within Mira Loma Substation	0	In Design	2017	2017
89	PIN 4756	Replace station batteries	Within Mira Loma Substation	0	In Design	2017	2017
	PIN 6446	Install phase measurement devices	Within Mira Loma Substation	0	In Design	2019	2019
	PIN 5210	Replace one AA-bank	Within Mira Loma Substation	0	In Design	2019	2019
69	PIN 4329	Replace five circuit breakers	Within Jefferson Substation	0	In Design	2018	2018

Sources: City of Chino, 2015; City of Corona Planning Division, 2015a; City of Corona Planning Division, 2015b; City of Eastvale, 2015a; City of Eastvale, 2015c; City of Eastvale, 2015c; City of Eastvale, 2015c; City of Eastvale, 2015c; City of Eastvale Planning Commission, 2011; City of Ontario Planning Division, 2015c; City of Norco Planning Commission, 2012; Marks, 2015; Slideshare, 2015





6.1.2 Agriculture and Forestry Resources

The Proposed Project would cross approximately 3.4 miles of land designated as Prime Farmland, Unique Farmland, or Farmland of Local Importance in the cities of Chino, Eastvale, and Ontario. There is no forest land, timberland, or timberland zoned Timberland Production located within or near the Proposed Project area. The installation of new poles and the construction of new access roads associated with the proposed Mira Loma-Jefferson 66 Kilovolt (kV) Subtransmission Line Route would permanently disturb approximately 0.4 acre of Prime Farmland, 0.01 acre of Unique Farmland, and 0.8 acre of Farmland of Local Importance.

However, the portion of the Proposed Project that would convert Prime Farmland and Unique Farmland would be constructed within an existing utility corridor and would replace existing structures; the majority of these areas have already been designated for residential, commercial, and industrial development. The farmland that would be converted in the cities of Chino, Eastvale, and Ontario is already planned for future development as described in Table 6-1: Cumulative Projects within 1 Mile. These developments include Rich-Haven Planned Community and Subarea 29. Other proposed developments will also convert Prime Farmland and Farmland of Local Importance. Furthermore, as described in Section 4.2 Agriculture and Forestry Resources, the placement of subtransmission poles and the construction of new access roads on land currently under agricultural production would not affect the status of the agricultural land zoning. Public utility uses are considered compatible with zoning for—and currently occur within—these agricultural lands, according to the jurisdictions that would be crossed by the Proposed Project. As a result, there would be no impact from the Proposed Project on existing agricultural zoning and no Williamson Act contracts would need to be canceled. When compared to the amount of converted agricultural land resulting from the projects listed in Table 6-1: Cumulative Projects within 1 Mile, the Proposed Project's contribution to potential cumulative impacts to agricultural resources would be less than significant.

6.1.3 Air Quality

The Proposed Project would have a potentially significant impact on air quality, with significant net increases in emissions of nitrogen oxides (NO_x) and inhalable particulate matter (PM) that is less than 10 microns in diameter (PM₁₀) during construction. Therefore, construction of the Proposed Project, in conjunction with other projects that could potentially occur at the same time, may result in considerable net increases in NO_x and PM₁₀ emissions. Projects expected to be constructed at the same time as the Proposed Project in the City of Corona include an 870-space parking structure and expanded medical facilities, the I-15 Corridor Improvement Project, a 464 multi-family apartment project, grading for 103 single-family lots, and the Corona Quarry Expansion project. Projects expected to be constructed at the same time as the Proposed Project in the City of Ontario include the Edenglen Planned Community, The Avenue, and West Haven. The Enclave Specific Plan in the City of Eastvale is expected to be constructed at the same time as the Proposed Project. In addition, several other projects with unknown construction timelines could overlap with construction of the Proposed Project.

Furthermore, all of the projects listed in Table 6-1: Cumulative Projects within 1 Mile would be subject to CEQA review and would be required to implement measures to reduce significant air

quality impacts from emissions and dust during construction. Although the Proposed Project and other projects in the vicinity that may be constructed concurrently would be required to implement the South Coast Air Quality Management District's (SCAQMD's) Rule 403 and comply with the California Air Resources Board's (CARB's) Off-Road Idling Policy to reduce emissions, cumulative impacts from these emissions during construction are expected to remain significant. Emissions during operation of the Proposed Project would be limited to those produced from vehicles during site visits, routine maintenance, or emergency repairs. Southern California Edison (SCE) currently operates existing facilities adjacent to the Proposed Project; these activities would not change following construction. As a result, operation of the Proposed Project would not contribute significantly to cumulative air quality impacts.

6.1.4 Biological Resources

As discussed in Section 4.4 Biological Resources, the Proposed Project has the potential to impact biological resources, including special-status plant and wildlife species, critical habitat, and wetlands and jurisdictional waters. Specifically, the Proposed Project crosses designated critical habitat for the Santa Ana sucker (Catostomus santaanae), least Bell's vireo (Verio bellii pusillus), and southwestern willow flycatcher (Empidonax traillii extimus). In addition, the Proposed Project is located within criteria cells and an "Additional Survey Needs" area for Narrow Endemic plant species and burrowing owl (Athene cunicularia) in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Three federally listed species vernal pool fairy shrimp (Branchinecta lynchi), Riverside fairy shrimp (Streptocephalus woottoni), and Delhi Sands flower-loving fly (Rhaphiomidas terminates abdominalis)—have a moderate potential to occur near the Proposed Project and could therefore be impacted by Proposed Project activities. However, focused species surveys are currently in progress in the Proposed Project vicinity, and these species have not been documented. Construction activities associated with the Proposed Project also have the potential to impact nesting birds, and several other fish, amphibians, reptiles, and mammals designated as species of special concern. As discussed in Section 4.4 Biological Resources, impacts to special-status plant and wildlife species, critical habitat, and wetlands and jurisdictional waters resulting from Proposed Project activities would be less than significant with the implementation of applicant-proposed measures (APMs) during construction.

Six of the projects listed in Table 6-1: Cumulative Projects within 1 Mile are located within the Prado Flood Control Basin/Santa Ana River corridor; therefore, cumulative impacts to Santa Ana sucker, least Bell's vireo, southwestern willow flycatcher, or special-status fish species could result. Other projects slated for construction in the vicinity of the Proposed Project could result in impacts to Narrow Endemic plant species, burrowing owl, fairy shrimp, Delhi Sands flower-loving fly, and several other fish, amphibians, reptiles, and mammals designated as species of special concern. Projects within western Riverside County and within the City of Eastvale, which has also adopted the Western Riverside County MSHCP, would mitigate for impacts to special-status biological resources in accordance with the MSHCP. In addition, all projects in the area would mitigate for any significant impacts to biological resources according to the requirements listed under Section 7 and Section 10 of the federal Endangered Species Act and requirements listed under CEQA. Evaluations of cumulative impacts are conducted under the Section 7 or

Section 10 processes for all projects. As a result, cumulative impacts to special-status biological resources would be less than significant.

6.1.5 Cultural Resources

The majority of the Proposed Project is located within existing, disturbed areas and is not expected to impact cultural resources. The proposed Circle City Substation site was occupied by a circa 1960 building that had not been formally evaluated for California Register of Historic Resources (CRHR) eligibility, and was therefore considered a historical resource for the purposes of CEQA based on its age; however, the entire building was demolished prior to the sale of the parcels to SCE. In addition, the Proposed Project would be installed in an underground configuration through the Grand Boulevard Historic District, which is listed on the National Register of Historic Places; however, no direct impacts to the contributing features of the district would occur. Two potentially CRHR-eligible archaeological resources would also be located within the Proposed Project area, but direct impacts to these resources are not anticipated. Implementation of a Worker Environmental Awareness Plan and best management practices would reduce potential impacts to cultural resources to a less-than-significant level. Other projects in the vicinity of the Proposed Project would also be required to comply with regulations protecting cultural resources. The Proposed Project is not expected to impact cultural resources; therefore, it would not contribute to a significant cumulative effect on cultural resources.

Portions of the Proposed Project are underlain by geologic formations with moderate to very high paleontological sensitivity. Fifty-eight out of 67 projects in the vicinity of the Proposed Project are also underlain by similar formations. However, protective measures similar to those discussed for the Proposed Project would reduce impacts to less-than-significant levels for these projects. Because the Proposed Project would involve minimal ground disturbance for the installation of pole foundations, coupled with the implementation of APMs and similar mitigation measures for nearby planned projects, the anticipated cumulative impact is not expected to be significant.

6.1.6 Geology and Soils

Potential temporary cumulative impacts from construction of the Proposed Project, in conjunction with other planned and proposed projects, include soil disturbance from grading and excavation activities that could cause erosion and sedimentation. All of the projects included in Table 6-1: Cumulative Projects within 1 Mile involve soil disturbance. However, the potential for soil erosion and sedimentation would be minimized through the implementation of Storm Water Pollution Prevention Plans (SWPPs), which are required for all projects that disturb 1 acre or more of soil. As a result, temporary cumulative impacts are expected to be less than significant. In addition, the Proposed Project would be engineered to withstand any potential geologic hazard. Other projects planned or proposed within the vicinity would be constructed in accordance with all applicable building codes. As a result, a significant unavoidable impact to geology and soils is not anticipated.

6.1.7 Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions would result from the construction and operation of the Proposed Project; however, these emissions would not result in significant impacts. As discussed in Section 4.7 Greenhouse Gas Emissions, the total of amortized construction emissions and annual operational GHG emissions associated with the Proposed Project would be approximately 137.63 metric tons of carbon dioxide equivalent, primarily from sulfur hexafluoride. This estimate is much lower than the 10,000-metric-ton SCAQMD threshold or the 7,000-metric-ton draft CARB threshold. Although operation of other foreseeable projects included in the cumulative impact analysis may result in an increase in GHG emissions, the Proposed Project's GHG emissions would be much less than the SCAQMD's significance threshold. As a result, the Proposed Project's contribution to significant cumulative GHG impacts is expected to be less than significant.

6.1.8 Hazards and Hazardous Materials

Cumulative hazards and/or hazardous materials impacts could result from the construction of concurrent projects, which would have an increased effect on public or worker safety; such hazards include exposure to hazardous materials, increased fire potential, and physical hazards. Because these projects require construction equipment, they could have a temporary impact from accidental releases of diesel and gasoline fuel, hydraulic fluids, and other hazardous liquids. However, with the proper adherence to federal and state regulations, large releases of hazardous materials are highly unlikely, and small releases would be contained, cleaned up, and disposed of properly. During operation, SCE would implement a Spill Prevention, Control, and Countermeasure Plan to prevent and address any accidental releases of hazardous materials. In addition, the Proposed Project may pose a fire hazard if vegetation or other obstructions come into contact with energized electrical equipment; however, the Proposed Project would be predominantly located within existing utility corridors and along roadways, and not within the California Department of Forestry and Fire Protection's classes of moderate or high fire threat to people. As a result, the Proposed Project's contribution to a cumulative effect on hazards and hazardous materials would be minor and would not result in a significant impact.

6.1.9 Hydrology and Water Quality

The Proposed Project would require water for dust control during construction. The projects listed in Table 6-1: Cumulative Projects within 1 Mile would also require the use of water to meet construction needs. If these projects are constructed within the same timeframe, they could produce a temporary cumulative impact to the water supply. The Proposed Project would draw approximately 58 acre-feet of water from local sources, and available water supplies would be more than sufficient to serve the Proposed Project's limited demand. Therefore, the Proposed Project's contribution to water demand would be less than significant.

Potential temporary cumulative impacts to water quality could occur as a result of construction of the Proposed Project in conjunction with other planned and proposed projects as all of the projects involve soil disturbance from grading, clearing, and excavation activities. These activities could cause erosion and sedimentation, and thus degrade water quality. However, the

potential for soil erosion and sedimentation would be minimized through the implementation of SWPPs, which are required for all projects that disturb 1 acre or more of soil. With the implementation of SWPPs, the cumulative impact to water quality is expected to be less than significant.

6.1.10 Land Use and Planning

Construction and operation of the Proposed Project would not result in any impacts to land use and planning. Therefore, the Proposed Project would not contribute to a cumulative impact to land use and planning.

6.1.11 Mineral Resources

Construction and operation of the Proposed Project would not result in any impacts to mineral resources. Therefore, the Proposed Project would not contribute to a cumulative impact to mineral resources.

6.1.12 Noise

The nearest planned or proposed project within the vicinity of the Circle City Substation site—grading for 103 single-family lots—would be approximately 0.6 mile from the substation site; as a result, no temporary cumulative impact to noise in this area would occur from construction of the Proposed Project. Along the linear portions of the Proposed Project, short-term construction noise impacts could overlap with other projects that are constructed simultaneously. Pole installation would take 1 to 2 days at each location, so any overlap with other construction projects in the vicinity would be temporary and short in duration. In addition, similar to the Proposed Project, other construction projects are expected to conform to the construction times allowed by the local jurisdictions' regulations, or to obtain a variance as needed. Therefore, the cumulative noise impacts associated with the Proposed Project and other planned and proposed projects would be less than significant.

6.1.13 Population and Housing

Construction and operation of the Proposed Project would not result in impacts to population and housing. Therefore, the Proposed Project would not contribute to a cumulative effect on population and housing.

6.1.14 Public Services

An emergency could arise as a result of construction of the Proposed Project and would require fire or police protection, or emergency services. If multiple emergencies were to occur at several construction sites, there could be a cumulative impact on local public services. However, the probability of a single emergency incident would be low, and the probability of simultaneous emergencies at multiple construction sites would be even lower. In addition, the Proposed Project spans several jurisdictions and there are many emergency service providers in the cumulative impact analysis area. It is not expected that there would be a significant cumulative impact that would tax the existing emergency services beyond their current capabilities. As a

result, the Proposed Project's contribution to potential cumulative impacts to public services would be less than significant.

6.1.15 Recreation

Construction and operation of the Proposed Project would not result in significant impacts to recreation. The Proposed Project would not cause population growth that would result in the increased use of existing parks or require the construction of new recreation facilities. Although construction of the Proposed Project would require a short-term closure of a baseball field at John C. Huber Park and a short-term closure of a portion of American Heroes Park, these closures would be temporary and coordinated with local parks departments. No other projects are expected to occur within the same parks during the Proposed Project's construction period. Therefore, the Proposed Project would not have a cumulatively considerable effect on recreation.

6.1.16 Transportation and Traffic

Construction and operation of the Proposed Project would not result in significant impacts to transportation. During construction, traffic impacts could occur from all planned and proposed projects with overlapping construction timeframes. As discussed previously in Section 6.1.3 Air Quality, some of the projects in Table 6-1: Cumulative Projects within 1 Mile are anticipated to be constructed at the same time as the Proposed Project. In addition, the traffic generated by the Proposed Project would be spread out over the Proposed Project area. Furthermore, each project would be required to coordinate with the local jurisdictions and address lane closures through the encroachment permit process, and the jurisdictional agencies would evaluate and address the potential for cumulative traffic impacts through the permit process, thereby reducing impacts to a less-than-significant level. Operation of other planned or proposed projects in the Proposed Project vicinity may result in traffic impacts following construction. However, during operation of the Proposed Project, the proposed Circle City Substation would be unattended and remotely operated, requiring only occasional visits for maintenance and repairs. The frequency of inspections for the source line and subtransmission line would be even less. Given these facts as well as the scope and size of the Proposed Project compared to the projects listed in Table 6-1: Cumulative Projects within 1 Mile—the Proposed Project's contribution to potential transportation and traffic impacts would be less than significant.

6.1.17 Utilities and Service Systems

Cumulative impacts to utilities and service systems have the potential to occur if multiple projects have a combined impact on local utility services or infrastructure. During construction, all projects would be required to manage storm water on site to comply with regional water quality requirements. The Mira Loma-Jefferson 66 kV Subtransmission Line would result in minimal new impervious surfaces for pole foundations, which would be 5 to 8 feet in diameter. Following construction, the proposed Circle City Substation would result in approximately 2.7 acres of new impervious surfaces; however, all storm water would either infiltrate within the Proposed Project area or would be released to the municipal storm water system, and would not contribute a considerable amount of additional storm water to drainage pipes or treatment

facilities. Therefore, the contribution of the Proposed Project to potential cumulative storm water drainage impacts would be small and less than significant.

Local area landfills could be impacted due to the increased cumulative need for disposal of construction debris. The Proposed Project would generate limited quantities of construction waste, much of which can be recycled or salvaged. The amount of daily construction waste for the projects listed in Table 6-1: Cumulative Projects within 1 Mile is unknown; however, in total, the landfills near the Proposed Project have the capacity to accept approximately 471 million cubic yards of additional waste. The operation and maintenance of the Proposed Project would not significantly differ from existing conditions, and would generate a very small amount of waste. Because local landfills have sufficient capacity, the Proposed Project's contribution to potential cumulative impacts to landfill access and capacity would be small and less than significant.

Increased electrical demand would occur as a result of the projects listed in Table 6-1: Cumulative Projects within 1 Mile. However, the Proposed Project would have a positive impact to the existing electrical system by providing more reliable power to area residents and businesses.

6.2 Growth-Inducing Impacts

Section 15126.2(d) of the CEQA Guidelines states that environmental documents should "discuss the ways in which the proposed project could foster economic or populations growth, or the construction of additional housing, either directly or indirectly in the surrounding environment." A project would be considered to have growth-inducing effects if it:

- Either directly or indirectly fosters economic or population growth or the construction of additional housing in the surrounding area.
- Removes obstacles to population growth.
- Requires the construction of new community facilities that could cause significant environmental effects.
- Encourages and facilitates other activities that could significantly affect the environment, either individually or cumulatively.

6.2.1 Would the project either directly or indirectly, foster economic or population growth or the construction of additional housing in the surrounding area?

The Proposed Project could be considered growth-inducing if growth resulted from direct and indirect employment needed to construct, operate, and maintain the Proposed Project, and/or if growth resulted from the additional electrical power that would be transmitted by the Proposed Project. As discussed in Chapter 3 – Project Description, construction and operation of the Proposed Project would not substantially affect employment in the area. Construction would be performed by either SCE construction crews or contractors, and would be temporary and short-term. Once constructed, the Proposed Project would be maintained and operated by existing SCE personnel.

The Proposed Project is needed to serve current and projected demand for electricity, and to maintain electric system reliability in the portions of northwestern Riverside County, including the cities of Corona, Norco, and the surrounding communities of unincorporated Riverside County. The Proposed Project is not designed to facilitate growth in the community, either directly or indirectly. It would accommodate growth in the area that is planned or approved by local land use authorities, but would not induce growth itself.

6.2.2 Would the project remove obstacles to population growth?

Obstacles to growth in the region served by the Proposed Project are primarily due to feasibility of the development, economic constraints, permitting, and other development restrictions and regulations administered by local agencies. The Proposed Project would not affect the development feasibility, remove an obstacle to growth, or affect development restrictions administered by local agencies.

6.2.3 Would the project require the construction of new community facilities that could cause significant environmental effects?

The Proposed Project would not require the creation of any new community facilities. However, the Proposed Project would require construction of temporary and permanent access roads for access to poles during construction and maintenance, as well as two new permanent access roads for the construction and maintenance of the proposed Circle City Substation. These access roads would not extend public services to an area that is not presently served by electricity. The Proposed Project is designed to respond to existing growth and demand trends.

6.2.4 Would the project encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively?

The demand for electricity is a result of, not a precursor to, development in the region. Although the Proposed Project would increase the reliability of electric service in the area, the objective of the Proposed Project is not to provide a new source of electricity.

6.3 Significant Environmental Effects of the Proposed Project

Section 15126.2 of the CEQA Guidelines requires a discussion of the overall significance of the environmental effects of a project. This discussion is to distinguish between the direct and indirect effects of a project, and the short-term/long-term effects of a project. These potential significant environmental effects are summarized in Table 6-2: Potential Significant Environmental Effects. With the implementation of APMs, all the potential significant environmental effects associated with the Proposed Project—with the exception of air quality impacts associated with construction—would be reduced to less-than-significant levels.

6.4 Mandatory Findings of Significance

The Mandatory Findings of Significance are described in the following subsections.

Table 6-2: Potential Significant Environmental Effects

Resource	Description	Direct/Indirect	Short-term/Long-term
Air Quality			
Regional Air Quality	During construction, NO _x and PM ₁₀ emissions would exceed corresponding SCAQMD daily significance thresholds.	Direct	Short-term: SCE would comply with the SCAQMD's Rule 403 and CARB's Off-Road Idling Policy 2423 during construction to help reduce emissions.
South Coast Air Basin (nonattainment for ozone precursors, PM _{2.5} , and PM ₁₀)	Construction activities would result in a cumulatively considerable net increase in NO _x and PM ₁₀ emissions.	Direct	Short-term: SCE would comply with the SCAQMD's Rule 403 and CARB's Off-Road Idling Policy 2423 during construction to help reduce emissions.

6.4.1 Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

As presented in Chapter 4 – Environmental Impact Assessment, construction and operation of the Proposed Project have the potential to degrade the quality of the environment. As discussed in Section 4.4 Biological Resources, construction and operation of the Proposed Project could indirectly impact suitable habitat for a number of fish and wildlife species. However, with the implementation of APMs, potential impacts would be less than significant. As determined in the analysis provided in Section 4.4 Biological Resources, construction and operation of the Proposed Project would not cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

The effects to cultural resources resulting from construction and operation of the Proposed Project are discussed in Section 4.5 Cultural Resources. Potential cultural resources occur within the Proposed Project area, and geologic formations with a moderate to high potential for paleontological resources are located under the Proposed Project area. However, with implementation of APMs, construction and operation of the Proposed Project would not have significant, unavoidable impacts to cultural resources and would not eliminate important examples of any major periods of California history or prehistory.

6.4.2 Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection

with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

As discussed in Section 6.1 Cumulative Impacts, the Proposed Project would result in cumulatively considerable impacts to air quality. Operation of the Proposed Project would have a less-than-significant impact to air quality. During operation of the Proposed Project, emissions would be limited to those produced by employee vehicles during routine maintenance inspections. These intermittent visits would not contribute significantly to cumulative air quality impacts during operation of the Proposed Project. Construction of the Proposed Project by itself may cause significant net increases in NO_x and PM₁₀ emissions. Therefore, construction of the Proposed Project—along with other projects included in the cumulative impact analysis (as provided in Table 6-1: Cumulative Projects within 1 Mile) that would be under construction or in operation at the same time that the Proposed Project is under construction—may result in cumulatively considerable net increases in NO_x and PM₁₀ emissions. Compliance with the SCAQMD's Rule 403 and CARB's Off-Road Idling Policy would reduce impacts, but the cumulative impact from these emissions is expected to remain significant.

6.4.3 Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Construction and operation of the Proposed Project would not cause substantial adverse effects on human beings. On the contrary, access to a reliable source of electricity would directly enhance the lives of human beings by supporting a wide range of individual lifestyles that depend on the predictability of electrical service. The Proposed Project would indirectly enhance the lives of human beings by providing the region with reliable and sufficient electrical service to allow decision-makers flexibility as to what types of development could occur in the region.

6.5 Significant Irreversible Environmental Change

Pursuant to Section 15126.2(c) of the CEQA Guidelines, if an Environmental Impact Report is prepared, it must address significant irreversible and irretrievable environmental changes that would be caused by the Proposed Project. These changes include uses of non-renewable resources during construction and operation, long-term or permanent access to previously inaccessible areas, and irreversible damages that may result from Proposed Project-related accidents.

Resources that are irreversibly or irretrievably committed to a project are those that are used on a long-term or permanent basis, such as the use of non-renewable resources (e.g., metal and fuel) and other natural or cultural resources. These resources are irretrievable in that they would be used for the Proposed Project when they could be used for other purposes. Human labor is also considered an irretrievable resource. The unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment is another factor that should be considered when evaluating a project's irreversible and irretrievable commitment of resources.

For the construction and operation and maintenance of the Proposed Project, most impacts are short-term and temporary in nature. Building materials, fuel for construction vehicles and

equipment, and other resources would not be reversible or retrievable. Construction of the Proposed Project would result in the permanent removal of habitat; however, the majority of the Proposed Project area is already highly disturbed and degraded. Implementation of the Proposed Project would not result in the destruction of environmental resources, such that the range of potential uses of the environment would be limited. While implementation of the Proposed Project would have short-term effects on natural resources, it would not adversely affect the biodiversity in the area. In addition, although implementation of the Proposed Project would require the use of minimal amounts of non-renewable and depletable resources, SCE would attempt to minimize the irreversible or irretrievable commitment of resources through implementation of energy efficiency programs, as described in the paragraph that follows.

In accordance with the California Public Utilities Commission's Energy Action Plan (as updated in 2008), SCE has implemented several programs designed to encourage energy conservation, promote the use of distributed generation, and reduce peak demand through demand response technologies. In addition, SCE's energy efficiency programs significantly contributed to California's goal of reducing GHG emissions. The results of these programs are described in SCE's Annual Energy Efficiency Reports. In 2014, these results included over 1.2 billion kilowatt-hours of annualized energy saving, over 200 megawatts of peak demand reduction, and over \$64 million of resource benefits (SCE 2015).

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APPENDIX A: ENVIRONMENTAL CHECKLIST FORM

APPENDIX A: ENVIRONMENTAL CHECKLIST FORM

1. Project Title

Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project)

2. Lead Agency Name and Address

California Public Utilities Commission (CPUC) 505 Van Ness Avenue San Francisco, CA 94102-3298

3. Contact Persons and Phone Numbers

Alisa Krizek Environmental Coordinator, Corporate Environmental Services (626) 462-8641

4. Project Location

The Proposed Project is located in the cities of Corona, Eastvale, and Norco in the western portion of Riverside County, and within the cities of Chino and Ontario in southwestern San Bernardino County.

5. Project Sponsor's Name and Address

Southern California Edison Company (SCE) 2244 Walnut Grove Avenue Rosemead, California 91770

6. General Plan Designation

The CPUC has primary jurisdiction over the Proposed Project because it authorizes the construction, operation, and maintenance of public utility facilities. CPUC General Order 131-D Section IX.B states that "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the Commission's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." SCE has considered local land use plans as part of the environmental review process.

The proposed Circle City Substation would be located on a former industrial site that was privately owner but is now owned by SCE. The City of Corona land use designation for the proposed substation site is General Industrial. The General Industrial land use designation encompasses a wide range of manufacturing, construction, transportation,

wholesale trade, warehousing, vehicle storage, and related service activities, as well as mineral resource mining activities.

The proposed Source Line Route and the Mira Loma-Jefferson 66 kilovolt (kV) Subtransmission Line Route would primarily be located in within existing SCE fee-owned rights-of-way (ROWs), easements, or public ROWs where SCE holds franchise. Upon final engineering and Proposed Project approval, acquisition of new land rights may be required. The Proposed Project would cross a variety of land uses through the cities of Chino, Corona, Eastvale, Norco, and Ontario, as well as a small portion of unincorporated Riverside County, along the approximately 15.6 miles of alignment. General plan designations in the City of Corona are typically industrial and commercial in nature, as compared to those crossed in the cities of Chino, Eastvale, and Ontario, which are largely agriculturally based. Residential designations are located throughout the Proposed Project area, particularly in the cities of Corona and Eastvale.

7. Zoning

As previously described in the response to Item 6, the CPUC has primary jurisdiction over the Proposed Project. SCE has considered other state and local land use plans as part of the environmental review process, but such projects are exempt from local land use jurisdiction, zoning regulations, and permitting.

The proposed Circle City Substation site is located in the City of Corona and is zoned as Heavy Manufacturing. The Heavy Manufacturing zone allows for manufacturing uses that may produce noise, dust, and heat, and for uses that require the utilization or mixing of toxic chemicals. It is primarily situated at locations removed from commercial and residential areas. As with the general plan designations, the proposed Source Line Route and the Mira Loma-Jefferson 66 kV Subtransmission Line would cross through a variety of zones within each of the separate jurisdictions. Similarly, zoning designations in the City of Corona typically consist of more manufacturing, commercial, and residential zones, as compared to the cities of Chino, Eastvale, and Ontario, which contain more agricultural zones, as well as some residential areas.

8. Description of Project

The Proposed Project would include the following:

- Construction of a new 66/12 kV substation (Circle City Substation). The proposed Circle City Substation would be an unstaffed, automated, low-profile, 56 megavolt-ampere (MVA) substation with a potential capacity of 112 MVA at final build-out.
- Construction of four new 66 kV subtransmission source lines, including:
 - Two source lines in a double-circuit configuration, which would be a combination of overhead and underground construction. Each source line would be approximately 1.2 miles in length and would be created by

connecting to the existing Chase-Corona-Databank 66 kV Subtransmission Line to form the new Circle City-Corona No. 2 66 kV Subtransmission Line and the new Chase-Circle City-Databank 66 kV Subtransmission Line.

- Two source lines in a double-circuit configuration, which would be constructed overhead. Each source line would be approximately 3.5 miles in length and would be created by connecting to the existing Mira Loma-Corona-Pedley 66 kV Subtransmission Line to form the Mira Loma-Circle City-Pedley and the Circle City-Corona No. 1 66 kV subtransmission lines.
- Construction of a new 66 kV subtransmission line, which would be a combination
 of both overhead and underground construction. The proposed Mira LomaJefferson 66 kV Subtransmission Line would be approximately 10.9 miles in
 length and would be constructed from SCE's existing Mira Loma Substation to a
 location adjacent to SCE's existing Corona Substation.
- Upgrade Mira Loma Substation to accommodate the new Mira Loma-Jefferson 66 kV Subtransmission Line
- Construction of approximately six new underground 12 kV distribution getaways exiting the proposed Circle City Substation.
- Relocation of approximately 1.9 miles of an existing overhead 33 kV distribution line to an underground position.
- Installation of telecommunication facilities to connect the Proposed Project to SCE's existing telecommunication system.

9. Surrounding Land Uses and Setting

The Proposed Project crosses portions of northwestern Riverside and southwestern San Bernardino counties. In Riverside County, the Proposed Project is located within the cities of Corona, Eastvale, and Norco, as well as a small portion of unincorporated Riverside County near the Santa Ana River, which is within the Temescal Canyon Area Plan boundaries. The Proposed Project is located within the cities of Chino and Ontario in San Bernardino County. The land use pattern in the area includes a mix of agricultural, low- to high-density residential, industrial, commercial, and open space uses. The area immediately surrounding the proposed Circle City Substation site is used primarily for industrial activities and manufacturing. The nearest residences are located approximately 720 feet from the substation property line. SCE purchased the formerly privately owned parcel for the proposed Circle City Substation site. As previously discussed in the responses to Items 6 and 7, the proposed Source Line Route and Mira Loma-Jefferson 66 kV Subtransmission Line would cross a variety of different land uses throughout the approximately 15.6-mile alignment.

10. Other Public Agencies Whose Approval Is Required

In addition to approval by the CPUC, Proposed Project approval would also be required by the United States (U.S.) Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and U.S. Fish and Wildlife Service for impacts to biological and hydrological resources that would result from construction of the Proposed Project.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the Proposed Project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages. The remaining impacts would either be less than significant or less than significant with the implementation of SCE's applicant-proposed measures (APMs), as described in Chapter 4 – Environmental Impact Assessment. Impacts related to air quality would remain significant even after minimization measures are applied.

Aesthetics	Agriculture and	\boxtimes	Air Quality
Biological Resources	Forestry Resources Cultural Resources		Geology and Soils
Greenhouse Gas Emissions	Hazards and Hazardous Materials		Hydrology and Water Quality
Land Use and Planning	Mineral Resources		Noise
Population and Housing	Public Services		Recreation
Transportation and Traffic	Utilities and Service Systems		Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation: I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. Signature Date

Signature

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiring, program EIR, or other CEQA process, an effect has been adequately analyzed I an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a

- previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

CEQA ENVIRONMENTAL CHECKLIST

Please note: Explanatory text that accompanies these checklist findings is provided at the end of this table.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
4.1 Aesthetics				
a) Have a substantial adverse effect on a scenic vista?				✓
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			✓	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?			√	
4.2 Agriculture and Forestry Resou	irces			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			✓	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				✓
4.3 Air Quality				
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	✓			
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	✓			
d) Expose sensitive receptors to substantial pollutant concentrations?	✓			
e) Create objectionable odors affecting a substantial number of people?			✓	
4.4 Biological Resources				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			√	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			✓	

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			✓	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			✓	
4.5 Cultural Resources				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				√
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			✓	
d) Disturb any human remains, including those interred outside of formal cemeteries?				✓
e) Cause a substantial adverse change in the significance of a tribal cultural resource pursuant to PRC Section 21084.2				✓

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
4.6 Geology and Soils				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			✓	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			✓	
ii) Strong seismic ground shaking?			\checkmark	
iii) Seismic-related ground failure, including liquefaction?			✓	
iv) Landslides?			\checkmark	
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			√	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
4.7 Greenhouse Gas Emissions				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓
4.8 Hazards and Hazardous Mater	ials			
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
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 result in a safety hazard for people residing or working in the project area?				√
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			✓	
4.9 Hydrology and Water Quality				
a) Violate any water quality standards or waste discharge requirements?			\checkmark	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			√	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			✓	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
f) Otherwise substantially degrade water quality?				✓
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			✓	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			✓	
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?				✓
4.10 Land Use and Planning				
a) Physically divide an established community?				✓
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓
4.11 Mineral Resources				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				√
4.12 Noise				
a) The 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?			✓	

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
b) The 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?				√
4.13 Population and Housing				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			√	

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
4.14 Public Services				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			\checkmark	
Police protection?			✓	
Hospitals?				✓
Schools?			✓	
Parks?				✓
Other public facilities?				✓
4.15 Recreation		ı		
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			√	
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
4.16 Transportation and Traffic				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			✓	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			✓	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			✓	
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?			✓	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
4.17 Utilities and Service Systems				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			✓	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g) Comply with federal, state, and local statutes and regulations related to solid waste?				✓

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
6.4 Mandatory Findings of Significance				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			✓	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	✓			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				✓

1.1 Sources and Explanations of Answers

This section contains a brief explanation for answers provided in the California Environmental Quality Act (CEQA) Environmental Checklist.

1.1.1 Aesthetics

No specific scenic vistas have been identified within the Proposed Project area, and no designated State Scenic Highways would be visible from the Proposed Project area. Accordingly, there would be no impact to these resources. As described in Section 4.1.4 Impact Analysis in Section 4.1 Aesthetics, the Proposed Project represents an incremental change in the visual character or quality of the site, but generally impacts associated with the Proposed Project would be less than significant. Impacts associated with light or glare from the Proposed Project would generally occur during daytime hours and would be less than significant. However, if nighttime lighting is necessary, it would be temporary in nature and brief in duration. In addition, SCE proposes to implement APM-AES-01 to mitigate this potential impact to a less-than-significant level. APM-AES-01: Construction Lighting provides that if temporary construction lighting is required, SCE would use shielded construction light fixtures and lighting would be directed away from nearby residences to the extent feasible.

1.1.2 Agriculture and Forestry Resources

The proposed Circle City Substation site is located within an industrial area that is zoned as Heavy Manufacturing by the City of Corona and allows for public utility uses. The proposed Source Line Route would also be located entirely within the City of Corona and would not cross any land zoned for agriculture or forestry uses. Thus, there would be no impact resulting from a conflict with an existing agricultural zoning designation, zoning for forest land or timberland, or a Williamson Act contract for the proposed substation or Source Line Route. In addition, no forest land or timberland would be crossed by the Proposed Project; therefore, there would be no impact to forest land or timberland. Likewise, the Proposed Project would not involve other changes in the environment that would result in the conversion of farmland to non-agricultural use.

The proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route would cross a total of approximately 3.3 miles of land designated as Important Farmland by the California Department of Conservation, including Prime Farmland, Unique Farmland, and Farmland of Local Importance. The Proposed Project would also cross approximately 2.2 miles of land zoned for agricultural use, including five parcels that are currently under Williamson Act contracts. The Proposed Project would permanently convert approximately 1.6 acres of these types of farmland to non-agricultural use for the construction of the proposed Mira Loma-Jefferson 66 kV Subtransmission Line poles and associated access roads. The Proposed Project would convert only approximately 1.2 acres of state-designated farmland to non-agricultural use, and all other impacts would be temporary in nature. In addition, the Proposed Project would not conflict with zoning as construction would occur within in an existing SCE easement. Therefore, impacts would be less than significant.

1.1.3 Air Quality

Growth projections from local general plans adopted by cities in the district, and vehicle milestraveled projections developed by the Southern California Association of Governments, are some of the data used to develop the Air Quality Management Plan (AQMP). Because construction and operation of the Proposed Project would not result in a population increase, the Proposed Project would not conflict with the growth projections used to develop the 2012 AQMP, and there would be no impact. In addition, the Proposed Project would likely require the use of some odor-producing materials near sensitive receptors. However, there would be few sources of odor, and construction would be short-term near these sensitive receptors. Therefore, impacts associated with objectionable odors resulting from the Proposed Project would be less than significant. Operation of the Proposed Project would not exceed any of the applicable South Coast Air Quality Management District (SCAQMD) thresholds, result in a cumulatively considerable increase of non-attainment criteria pollutants, or contribute to a localized exceedance of an air quality standard. Therefore, impacts related to violations of air quality standards, increased criteria pollutants (for which the Proposed Project region is non-attainment), and exposure of sensitive receptors to substantial pollutant concentrations would be less than significant for operation of the Proposed Project.

The estimated peak daily emissions of nitrogen oxides (NO_x) and suspended particulate matter (PM) measuring less than 10 microns in diameter (PM₁₀) during construction activities are projected to exceed corresponding SCAQMD mass daily significance thresholds. Emissions of these pollutants during construction may contribute to regional air quality violations. To reduce temporary fugitive dust emissions, SCE would implement APM-AIR-01, which would require that all unpaved construction areas, including unpaved access roads, be stabilized using water or an approved tackifier. In addition, vehicle speeds on unpaved access roads would be limited to 15 miles per hour. SCE would also comply with the California Air Resources Board's (CARB's) Off-Road Idling Policy and the SCAQMD's Rule 403, which is designed to reduce the amount of PM emitted to the atmosphere as a result of man-made fugitive dust sources through required actions. SCE would also implement APM-AIR-02, which would require the use of off-road equipment that complies with U.S. Environmental Protection Agency Tier 3 non-road engine standards to the extent feasible. Although these measures would reduce impacts, impacts to air quality during construction of the Proposed Project are expected to remain significant.

Construction of the Proposed Project could also result in a cumulatively considerable net increase in ozone precursors— NO_x and VOCs. Peak daily $PM_{2.5}$ and PM_{10} emissions would exceed the significance thresholds from the SCAQMD; therefore, a cumulatively considerable net increase in $PM_{2.5}$ and PM_{10} could also occur. As a result, impacts from these emissions would be potentially significant, as described in Section 4.3 Air Quality.

The potential for the Proposed Project to expose sensitive receptors to substantial pollutant concentrations was evaluated by comparing maximum daily on-site carbon monoxide (CO), NO_x, PM₁₀, and PM_{2.5} emissions at individual locations with maximum allowable emissions in the look-up tables provided in the SCAQMD methodology. Maximum daily on-site construction emissions would not exceed the maximum allowable emissions for CO and NO_x, and construction of the Proposed Project would not expose sensitive receptors to substantial concentrations of these pollutants. However, the localized emissions of PM_{2.5} and PM₁₀ would

exceed the applicable thresholds during construction of the proposed Circle City Substation, modifications to the existing Mira Loma Substation, and construction of the proposed Source Line Route. As a result, sensitive receptors in these locations may be exposed to potentially significant concentrations of PM.

1.1.4 Biological Resources

There is potential for special-status species—including plants, invertebrates, fish, amphibians, reptiles, birds, or mammals—to be present within Proposed Project construction areas, and construction activities may result in significant impacts to those species. No special-status plant species, invertebrates, or amphibians have been observed during the surveys of the Proposed Project area to date. To reduce any potential impacts to special-status species, SCE would implement APM-BIO-01, which would require biological monitoring in construction areas where sensitive biological resources or suitable habitat for special-status species are located. SCE would also implement APMs BIO-02, BIO-03, BIO-04, BIO-05, BIO-06, BIO-07, and BIO-08, which would require avoidance, minimization, or mitigation for any impacts to specific species or habitat types, as specified in Section 4.4.6 Applicant-Proposed Measures of Section 4.4 Biological Resources. As a result, impacts to special-status species would be less than significant. In addition, SCE would implement APM-BIO-09, which would provide for various methods of avoiding impacts to nesting birds.

Because two existing H-frame structures would be removed and replaced with two new hybrid H-frame structures within the Santa Ana River—an area designated as suitable habitat for arroyo chub (Gila orcuttii) and Santa Ana sucker (Catostomus santaanae)—there is potential for these species to be impacted. In addition to APMs BIO-01 and BIO-05, SCE would also implement APM-BIO-10, which would provide mitigation for any impacts to riparian/riverine habitat suitable for special-status fish species, as appropriate. These measures would also ensure that impacts to the movement or nursery sites of special-status fish species would remain at a lessthan-significant level. APM-BIO-10 would also be implemented to provide mitigation for any impacts to riparian/riverine habitat suitable for the federally and state-listed least Bell's vireo (Vireo bellii pusillus), federally and state-listed southwestern willow flycatcher (Empidonax traillii extimus), yellow warbler (Dendroica petechial brewsteri), yellow-breasted chat (Icteria virens) as well as for various bat species, reptile species, amphibian species, and special-status vegetation. Through implementation of these APMs and/or by participating in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), and should SCE choose to obtain authorization for covered species, impacts to special-status species would be less than significant. Proposed Project construction would be consistent with the MSHCP, and impacts would be less than significant. Impacts resulting from construction of the Proposed Project would also be less than significant with respect to riparian habitat or other sensitive natural communities with the implementation of the afore-mentioned APMs.

Construction activities associated with the Proposed Project would impact jurisdictional hydrologic features, resulting in a total of approximately 4.90 acres of temporary impacts and 0.47 acres of permanent impacts to USACE-jurisdictional waters, approximately 7.09 acres of temporary impacts and 0.52 acre of permanent impacts to RWQCB-jurisdictional waters, and approximately 5.64 acres of temporary impacts and 0.48 acre of permanent impacts to CDFW-jurisdictional waters, as described in Section 4.4 Biological Resources. SCE would implement

biological monitoring through APM-BIO-01 and would mitigate impacts to jurisdictional waters as required by APM-BIO-11; therefore, impacts to jurisdictional waters would be less than significant. In addition, SCE would ensure that the Proposed Project would not conflict with any local policies or ordinances protecting biological resources by implementation of APM-BIO-12. APM-BIO-12 provides for the avoidance, minimization, and mitigation of impacts to protected trees. Therefore, impacts would be less than significant.

1.1.5 Cultural Resources

Cultural resources surveys and records searches of the Proposed Project area provide that the southern portion of a circa 1960 building was located at the proposed Circle City Substation site, but has already been demolished. In addition, one historic resource and one extant archaeological resource are located along the proposed Source Line Route, and one historic resources is located along the proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route. The historic resource along the proposed Source Line Route is listed on the National Register of Historical Places and is considered automatically eligible for listing on the California Register of Historical Resources (CRHR). None of the other resources have yet been formally evaluated for CRHR eligibility, though they are presumed to be eligible for the purposes of CEQA until otherwise identified. SCE would implement a Worker Environmental Awareness Plan (WEAP), as described in Section 3.10 Worker Environmental Awareness Training in Chapter 3 –Project Description. In addition, as provided in Section 3.9 Environmental Surveys, SCE's unanticipated discovery plan would be implemented in the event of a cultural resources discovery to ensure that impacts remain at a less-than-significant level.

Construction of the Proposed Project has the potential to significantly impact paleontological resources in areas having a moderate to high sensitivity for the presence of fossil localities. SCE would implement APM-PAL-01, which would require the preparation and implementation a Paleontological Resources Management Plan and the presence of a Paleontological Monitor during ground-disturbing activities in paleontologically sensitive formations, to ensure that any impacts to paleontological resources or sites, or unique geological features would be less than significant.

1.1.6 Geology and Soils

The Proposed Project is not located within an Alquist-Priolo Earthquake Fault Zone, and there are no Alquist-Priolo faults that would be crossed by or located immediately adjacent to any Proposed Project facility. SCE would take into the account the site-specific soil conditions (e.g., water table depth, evidence of faulting, liquefaction potential, physical properties of subsurface soils, soil resistivity, and slope stability) in the final Proposed Project design, as described in Section 3.8 Geotechnical Studies in Chapter 3 – Project Description. Similarly, at the proposed Circle City Substation site, highly unstable soils, if present, would be removed and replaced with engineered fill in accordance with the recommendations of the Geotechnical Investigation Report that was prepared for the proposed substation site. Thus, construction- and operation-related Proposed Project impacts associated with seismic activity, unstable soils types, and expansive soils would be kept to a less-than-significant level. In addition, soil erosion and topsoil loss would be minimized and remain at a less-than-significant level through implementation of the Proposed Project's Storm Water Pollution Prevention Plan (SWPPP), and the grading plans

submitted to the local jurisdictions would include surface improvements that would minimize soil erosion and the loss of topsoil at the proposed substation site. The Proposed Project would not involve the installation of a septic tank or an alternative wastewater disposal system. Therefore, no impacts would result to sewer or wastewater disposal systems.

1.1.7 Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from the Proposed Project would be well below the SCAQMD threshold and draft CARB recommendation. The total of amortized GHG emissions and annual operational GHG emissions would be approximately 96.99 metric tons of carbon dioxide equivalent per year, primarily from sulfur hexafluoride. This estimate is much lower than the 10,000-metric-ton SCAQMD threshold or the 7,000-metric-ton draft CARB threshold. Therefore, construction and operation impacts associated with the Proposed Project would have a less-than-significant impact with respect to the generation of GHG emissions. In addition, because SCE complies with all Climate Action Team guidance, the Proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, there would be no impact.

1.1.8 Hazards and Hazardous Materials

The Proposed Project is not located on a known hazardous waste site, and ground-disturbing activities would not impact the five hazardous sites located within 0.25 mile of the Proposed Project. In addition, there would be no safety hazard for personnel during construction or operation of the Proposed Project within airport safety zones, and no impact to people residing or working in the Proposed Project area from a public airport, public use airport, or private airstrip. Thus, no impact would result from Proposed Project activities.

All transport of hazardous materials would be in compliance with applicable laws, rules, and regulations, including the acquisition of required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations. In addition, a Proposed Project-specific Hazardous Materials Management Plan, as specified in APM-HAZ-01, would be prepared and implemented throughout construction of the Proposed Project. The plan would include safety information regarding the transport, use, and disposal of hazardous materials. Further, SCE would implement the measures provided in the Proposed Project-specific Spill Prevention, Control, and Countermeasure (SPCC) Plan during operation of the proposed Circle City Substation, in accordance with in accordance with Title 40, Sections 112.1 through 112.7 of the Code of Federal Regulations. As a result, impacts would be less than significant.

Construction of the Proposed Project would require the limited use of hazardous materials, such as fuels, lubricants, and cleaning solvents. There is a possibility of a spill or release of hazardous materials during construction and operation, but the controls put in place by the SWPPP, WEAP, and SPCC Plan would minimize the potential impacts to less-than-significant levels. As discussed in Section 4.8.4.3 in Section 4.8 Hazards and Hazardous Materials, four schools are located within 0.25 mile of the Proposed Project, along River Road between North Lincoln Avenue and 2nd Street. Construction and operation of the Proposed Project may require the limited use of hazardous materials, primarily for the use of vehicles and equipment, in this area. However, if hazardous materials are released or encountered during construction, they would be

contained and managed through implementation of the best management practices (BMPs) provided in the SWPPP. Operation of the existing subtransmission line in the vicinity is similar to what would be required for the proposed subtransmission line and impacts would be less than significant. Proposed Project construction could potentially interfere with the emergency routes of fire protection, police, or other emergency service providers in the immediate area due to temporary lane closures that might be required. In the event of an evacuation, Proposed Project construction would cease and the roads would be opened to allow passage. Furthermore, freeways would remain open at all times throughout construction. Therefore, the impact would be less than significant.

The majority of the Proposed Project—approximately 15.7 miles—is located within areas having a moderate to extreme fire threat to people. SCE has standard protocols that are implemented when the National Weather Service issues a Red Flag Warning. In addition, SCE participates with the California Department of Forestry and Fire Protection (CAL FIRE), California Governor's Office of Emergency Services, U.S. Forest Service and various city and county fire agencies in the Red Flag Fire Prevention Program and complies with Sections 4292 and 4293 of the California Public Resources Code that are related to vegetation management in transmission line corridors. SCE would also develop a fire management plan, as provided by APM-HAZ-02, outlining fire-prevention practices during vegetation clearing, grading, and construction activities. As a result, construction of the Proposed Project would have a less-than-significant impact to risk of loss, injury, or death involving wildland fires.

1.1.9 Hydrology and Water Quality

The Proposed Project would not place housing in a 100-year floodplain and would not otherwise substantially degrade water quality. In addition, the Proposed Project area is too far from the ocean to be subjected to tsunamis; it would not span any bounded waterbodies; and the terrain and soil conditions render the potential for landslides or mudflows very low. As a result, there would be no impact from these potential events.

A SWPPP would be prepared based on final engineering design and would include all Proposed Project components. Implementation of the SWPPP, WEAP, and associated BMPs would minimize impacts on water quality from erosion, accidental spills, and other potential water quality impacts during construction. During construction, SCE would obtain a National Pollutant Discharge Elimination System General Permit for construction storm water discharges, which would include measures to protect water quality during rain events. Any construction and operation impacts to water quality that could potentially result from the Proposed Project would be reduced to less-than-significant levels with the implementation of these measures. Implementation of the BMPs described in the SWPPP would also ensure that impacts associated with the introduction of pollutants to storm water runoff would be less than significant.

Groundwater is not expected to be encountered during Proposed Project construction. However, if groundwater is encountered during excavation within the Prado Flood Control Basin/Santa Ana River corridor (where the groundwater depth is known to be shallow), it would not be expected to affect groundwater levels, as any impact would be short-term and negligible. The placement of semi-permeable and impervious material that would be associated with development of the proposed substation site, access roads, and subtransmission structure

installation could potentially create some reduction in the groundwater recharge immediately below the impervious surface, but would have a negligible effect on the overall infiltration volume of the area. In addition, the restroom that would be installed at the proposed Circle City Substation would be used infrequently and would not substantially deplete groundwater supplies. Therefore, construction and operation impacts to groundwater supplies would be less than significant.

The proposed Circle City Substation site is relatively flat and the graded substation pad would maintain a minimum of 1-percent slope to drain toward drainage swales that would be located around the substation perimeter. The final grading and drainage plans that would be submitted to the City of Corona may include a detention or retention basin just north and/or south of the substation block wall, if determined necessary. In addition, an approximately 700-foot extension of the existing storm drain system may be constructed to accept site flow onto Leeson Lane. Further, the installation of the Source Line Route would be within city street ROWs and would not alter drainage patterns. Installation of the Mira Loma-Jefferson 66 kV Subtransmission Line poles may require minor grading to provide a safe, level work area. However, the amount of grading required to install individual poles would not substantially alter existing drainage patterns. With the exception of the replacement of existing H-frames within the Santa Ana River, work would not occur in streams or rivers, and surface runoff would not be expected to change as compared to pre-construction conditions. As a result, Proposed Project activities would not substantially alter the existing drainage patterns, and would not result in substantial erosion, siltation, or flooding effects either on or off site. Therefore, impacts would be less than significant.

A portion of the proposed Mira Loma-Jefferson 66 kV Subtransmission Line would be located within a 100-year flood hazard area. However, the H-frame structures that would be placed within this area along the Santa Ana River corridor would replace existing H-frame structures and would not alter drainage patterns or significantly impede flood flows due to their relatively small footprint. Likewise, the Proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, as the Proposed Project would be designed to withstand the effects of a 100-year flood. These impacts would therefore be less than significant.

1.1.10 Land Use and Planning

Construction and operation of the Proposed Project would not divide an established community; therefore, there would be no impact. The Proposed Project is compatible with land use plans and policies adopted by local agencies responsible for land use planning throughout the Proposed Project area. Therefore, construction and operation of the Proposed Project would not conflict with an applicable environmental plan, policy, or regulation of an agency with jurisdiction over the Proposed Project, and there would be no impact.

Portions of the Proposed Project would be located within the established Western Riverside County MSHCP boundary. From a land use and planning perspective, construction and operation of the Proposed Project would not conflict with or impact a habitat conservation plan or natural community conservation plan. Thus, there would be no impact.

1.1.11 Mineral Resources

Neither construction nor operation of the Proposed Project would result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state, or of a locally important mineral recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, there would be no impact to mineral resources.

1.1.12 Noise

Riverside County, San Bernardino County, and the cities of Norco and Ontario provide exemptions for noise related to construction activities under certain conditions that are typically related to the time of day that the noise is being generated. Construction of the Proposed Project would be limited to the allowable times within these jurisdictions. Proposed Project construction may temporarily exceed the City of Corona's noise standards for residences located within 32 feet of the proposed Source Line Route and may temporarily exceed the City of Chino's standards for residences located within 32 feet of Mira Loma-Jefferson 66 kV Subtransmission Line construction. SCE would obtain variances as necessary from the appropriate jurisdictions in the event that construction activities are necessary on days or hours outside of those specified by ordinance and for the locations where local noise standards would be exceeded during construction of the Proposed Project. Therefore, impacts would be less than significant. Operational noise levels of the proposed Circle City Substation, Source Line Route, and Mira Loma-Jefferson 66 kV Subtransmission Line would not exceed applicable standards and would also be less than significant. In addition, while vibration due to construction and operation of the facilities may be slightly perceptible at some locations, the Proposed Project would not generate distinctly perceptible vibrations, and no structures would be damaged. Thus, the Proposed Project would result in less-than-significant impacts from groundborne vibrations or groundborne noise levels.

Construction of the Proposed Project would not result in a permanent increase in ambient noise levels. As described in Section 4.12 Noise, temporary or periodic ambient noise during construction of the proposed Circle City Substation would measure approximately 65 A-weighted decibels (dBA) at the nearest residences. This level would not be significant when compared to the current minimum ambient noise level of 55.1 dBA for these residences. Construction of the proposed Source Line Route and Mira Loma-Jefferson 66 kV Subtransmission Line would result in short-term exceedances of noise standards for some residents for periods of approximately 1 week over the approximately 18-month construction period, and construction would occur in accordance with restrictions on construction from local jurisdictions. The operation of Proposed Project facilities would also not result in a substantial permanent increase over the nighttime lowest existing ambient noise level of 55.1 dBA that was monitored in the Proposed Project area, and no substantial increase in noise would occur. As a result, impacts associated with increases in ambient noise levels would be less than significant.

The Proposed Project alignment is approximately 0.7 mile southeast of the Chino Airport and approximately 1.1 miles northeast of the Corona Municipal Airport. However, the Proposed Project is not located within the airport noise compatibility contours for either airport. SCE's Ontario Service Center, which may potentially be used as a staging area during construction of the Proposed Project, is located approximately 0.9 mile from Ontario International Airport and is

within the 60 to 65 decibels Community Noise Equivalent Level noise impact zone for Ontario International Airport. However, the Ontario Service Center is considered a compatible land use within this impact zone. No private airstrips are located within the vicinity of the Proposed Project. Therefore, neither construction nor operation of the Proposed Project would expose residents or workers to excessive noise levels, and there would be no impact.

1.1.13 Population and Housing

The Proposed Project would not induce population growth or displace substantial numbers of people or housing. The Proposed Project would not include any new homes, so there would be no direct impact on population growth in the area. The Proposed Project would include new access roads and potentially new or expanded ROWs for portions of the proposed Source Line Route and Mira Loma-Jefferson 66 kV Subtransmission Line. However, these new access roads and ROWs would not provide new opportunities for local industry or commerce in the area and would not directly or indirectly induce population growth. As a result, there would be no impact to population and housing resulting from construction and operation of the Proposed Project.

1.1.14 Public Services

Construction and operation of the Proposed Project would not require expansion of fire and police protection, schools, or other public facilities. The closure of lanes of local roads during construction activities may cause traffic delays and slow the response time of emergency response vehicles. The proposed Mira Loma-Jefferson 66 kV Subtransmission Line Route would be constructed along the roadway in front of the parking lot entrances for Auburndale Intermediate School, which would impact traffic flows and access to schools. However, emergency response vehicles would be allowed to pass lane closures when possible. In addition, to reduce impacts to traffic flow, SCE would coordinate the road closures with local jurisdictions through the encroachment process prior to Proposed Project construction. As a result, impacts to fire and police protection and to schools would be less than significant during construction of the Proposed Project. No impacts would result to hospitals, parks, or other public facilities, or from operation of Proposed Project facilities.

1.1.15 Recreation

The Proposed Project would not increase the use of existing parks or require the construction of new recreation facilities. Partial closure of American Heroes Park would be required during conductor-stringing of the proposed Mira Loma-Jefferson 66 kV Subtransmission Line. This closure would be temporary and short-term, lasting for a total of up to 5 weeks. In addition, SCE would coordinate with local parks departments to reduce impacts on park users, as necessary. As a result, impacts related to the increased use of existing parks or recreational facilities would be less than significant. The Proposed Project does not include recreational facilities and there would be no construction or expansion of recreational facilities that would physically affect the environment in an adverse way. Likewise, there would be no impact to recreation resulting from operation of the Proposed Project.

1.1.16 Transportation and Traffic

Construction of the Proposed Project would require approximately 38 truck trips per day during the 9-week substation grading period and approximately 200 personal vehicle trips per day to and from the Proposed Project area during peak construction. Temporary lane closures may be necessary where trenching activities are required for the proposed Source Line Route and/or the Mira Loma-Jefferson 66 kV Subtransmission Line or where poles are located adjacent to roadways and during pulling operations. However, SCE would obtain ministerial encroachment permits and these closures would be temporary. In addition, in order to reduce impacts to traffic congestion along State Route (SR-) 91, heavy-duty construction vehicles and equipment would not utilize SR-91 during peak traffic hours (between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. on weekdays) during the approximately 9-week peak construction period for Circle City Substation, as described in APM-TRA-01. Thus, construction of the Proposed Project would not conflict with applicable plans or policies for effectiveness of the circulation system or with applicable congestion management programs, and impacts would be less than significant.

The Proposed Project is located within the Riverside County Airport Land Use Commission's Airport Land Use Compatibility Plan boundaries for the Chino Airport and Corona Municipal Airport. However, the Proposed Project is not subject to the use limitation and regulations contained within the plans as local authority is preempted by the CPUC. The nearest poles to the Chino Airport and Corona Municipal Airport would be up to 105 feet tall and would exceed a 100-to-1 surface ratio. In accordance with Federal Aviation Administration (FAA) requirements, SCE would provide notification to the FAA regarding Proposed Project construction activities that would be conducted within 20,000 feet of the airports, as described in Section 4.16 Transportation and Traffic. Therefore, impacts to air traffic patterns would be less than significant for construction of the Proposed Project.

The Proposed Project would not substantially increase hazards due to design features or incompatible uses because SCE would ensure that appropriate safety measures—such as proper signage, orange cones, and flaggers—would be provided in areas where temporary lane closures would be required. The railway, bus routes, and bike lanes that would be spanned or crossed by the Proposed Project could also be impacted due to increased traffic and temporary lane closures. However, flaggers would be present to help direct traffic where closures are necessary and the closures would be conducted during off-peak hours, as previously described. Therefore, impacts associated with these aspects of the Proposed Project would be less than significant. There would be no impacts to transportation or traffic resulting from operation of the Proposed Project.

1.1.17 Utilities and Service Systems

Operation of the Proposed Project would not exceed the RWQCB's wastewater treatment requirements, as there would be only a small volume of wastewater for the restroom facility at Circle City Substation. Approximately 100 gallons per year of deionized water would be used to wash the new insulators and conductor at Mira Loma Substation. Likewise, sufficient water supplies are available to serve construction and operation of the Proposed Project, and no new or expanded entitlements would be needed. As very little wastewater would be generated by the Proposed Project, there would be capacity to serve the minor increase in demand and would not likely challenge any existing commitments. Further, the landfills near the Proposed Project have

sufficient capacity to accept waste from the Proposed Project, which would not generate a high volume of waste. As a result, these Proposed Project effects would result in less-than-significant impacts. No other impacts would result to utilities and service systems.

1.1.18 Mandatory Findings of Significance

The Proposed Project would not result in potentially significant impacts to the items that are discussed in Section 6.4 Mandatory Findings of Significance in Chapter 6 – Other CEQA Considerations. However, construction of the Proposed Project would result in potentially significant impacts to air quality, as described in the section that follows.

1.1.18.1 Does the project have impacts that are individually limited, but cumulatively considerable?

Construction of the Proposed Project, along with other projects included in the cumulative impact analysis shown in Table 6-1: Cumulative Projects within 1 Mile, may contribute to adverse air quality impacts. Construction of the Proposed Project, by itself, may cause significant net increases in NO_x and PM₁₀, emissions. Therefore, construction of the Proposed Project—if constructed at the same time as other projects included in the cumulative impact analysis—may result in cumulatively considerable net increases in NO_x and PM₁₀ emissions. Compliance with SCAQMD's Rule 403 and CARB's Off-Road Idling Policy would reduce impacts, but the cumulative impact from these emissions is expected to remain significant.

APPENDIX B: LIST OF PREPARERS

APPENDIX B: LIST OF PREPARERS

Southern California Edison

Aaron Shearin, Telecommunications Engineer 3, President of Region 10 Utilities Telecommunication Council; Bachelor of Science (B.S.) Electrical Engineering; Master of Science (M.S.) Computer Information Systems

Adam Nava, Transmission Planner

Adriana Mendoza, Local Public Affairs Region Manager; Juris Doctor (J.D.) University of California, Berkeley School of Law; Bachelor of Arts (B.A.) Psychology & Social Behavior, University of California, Irvine; B.A. Criminology, Law & Society, University of California, Irvine; Licensed Attorney, State Bar of California

Alex Gutierrez, Project Manager; B.S. Urban and Regional Planning, California State Polytechnic, Pomona; Certificate Project Management, University of California, Irvine

Alisa Krizek, Environmental Project Manager; B.A. Political Science, California State University, San Bernardino; Project Management Certificate, California Institute of Technology (Prepared Executive Summary, Chapter 1 – Purpose and Need, Chapter 2 – Project Alternatives, and Chapter 3 – Project Description)

Amanda Cannon, Archaeologist; Master of Arts (M.A.) Social Science, Humboldt State University; B.S. Anthropology, University of California, Davis; B.S. Environmental Resources Sciences, University of California, Davis; Register of Professional Archaeologists

Anjeanette Barrett, Project Manager, Major Projects & Acquisitions, Associate of Arts (A.A.) Long Beach City College; 10 years of experience in real estate and property management of SCE fee owned property, ROW and easements.

Bernardo Ochoa, Planner 3 for Transmission Design Management; B.S. Civil Engineering, California State University, Los Angeles

Bethmarie Quiambao, Air Quality Specialist; B.S. Urban and Regional Planning, California Polytechnic State University, Pomona

DeShawn Spencer, Project Sponsor; B.S. Electrical Engineering, California State Polytechnic University, Pomona

Esam Abraham, P.E., Senior Engineer (Prepared Geotechnical Investigation Report and Limited Environmental Soil Characterization Report)

Frank Zepeda, Execution Project Manager, Project Management Certification, University of California, Irvine; Mechanical & Architectural Design Degree, Stilwell Technical Institute

Gennady Tsarev, Professional Engineer (P.E.), Civil Engineer (Prepared Geotechnical Investigation Report)

Jason Lambert, Wetlands Regulatory Specialist; M.S. Environmental Science, Loyola Marymount University; B.S. Natural Sciences, Loyola Marymount University

Joe Urena, Substation Construction & Maintenance

John Kao, P.E., Senior Civil Engineer; B.S. Civil Engineering, California State Polytechnic University, Pomona (Contributed to Chapter 4.9 Hydrology and Water Quality)

Joshua Torres, Public Involvement; B.S. Political Science, Florida State University; M.B.A., Claremont Graduate University

Julie Granbery, Senior Project Manager Compliance Assurance; Master of Environmental Science & Management (MESM), University of California, Santa Barbara; B.S. Environmental Science, University of California, Riverside; Certified Professional in Storm Water Quality (CPSWQ); Qualified SWPPP Developer/Practitioner (QSD/P)

Justine Yan, Engineer 3 (Prepared Limited Environmental Soil Characterization Report)

Kashif Siddiqi, Project Engineer

Lydia Roman, Region Manager; B.S. Legal Studies, University of La Verne

Pascual Garcia, Transmission Licensing & Execution Project Manager; Project Management Certificate, University of California, Irvine; 10 years of experience in land surveying and AutoCAD; A.A, East Los Angeles Community College

Paul McCabe, Project Sponsor; B.S. Electrical Engineering, San Diego State University; M.S. Electrical Engineering, University of Southern California; Licensed Professional Engineer, Stat of California

Ryan A. Castillo, Hazardous Waste Specialist; B.S. Environmental Health, California State University, Fresno; M.S. Environmental Health, California State University, Northridge

Scott Richtmyer, (C.E.G.) Certified Engineering Geologist; B.S. Geological Sciences, University of California, Santa Barbara

Tammy Yamasaki, Air Quality Specialist; B.S. Environmental Science, University of California, Riverside

Teresa M.G. Escobar, P.E. Civil Engineer; B.S. Civil and Environmental Engineering, University of California, Los Angeles

Tommy Savage, Edison Carrier Solutions Planner

Vichaya Lipipun, Substation Engineer; B.S. Electrical Engineering, California State Polytechnic University, Pomona; Licensed Professional Engineer, State of California

Vincent Allen, Planner and Technical Specialist

Violet Flores, Environmental Engineer; B.S. Civil Engineering, California State Polytechnic University, Pomona (Prepared Phase I Environmental Site Assessment [ESA])

Zsolt Kahancza, Biologist; B.A. Biological Science, California State University, San Bernardino

Insignia Environmental

Anne Marie McGraw, President; M.S. Engineering, California Polytechnic State University, San Luis Obispo; Master of City and Regional Planning (MCRP), California Polytechnic State University, San Luis Obispo; B.S. Environmental Policy Analysis and Planning, University of California, Davis (Provided Proponent's Environmental Assessment [PEA] project management and quality assurance/quality control [QA/QC])

Robert Curley, Director; Master of Business Administration, Santa Clara University; B.S. Mechanical Engineering, University of California, Santa Barbara (Prepared emissions calculations)

Erika Carrillo, Senior Planner; M.S. Environmental Management, University of San Francisco; B.A. International Relations, Boston University; B.S. Journalism, Boston University (Provided PEA project management, provided QA/QC, and prepared Section 4.5 Cultural Resources)

Yasmine Akky, Biologist; M.S. Biological Sciences, California Polytechnic State University, San Luis Obispo; B.S. Biological Sciences, University of California, Davis (Prepared Habitat Assessment, Section 4.4 Biological Resources, and Section 4.9 Hydrology and Water Quality)

Kyle Rommel, Associate Planner; B.S. Marine Biology, University of North Carolina-Wilmington (Prepared Section 4.6 Geology and Soils, Section 4.8 Hazards and Hazardous Materials, Section 4.11 Mineral Resources, and Section 4.16 Transportation and Traffic)

Danielle Althaus, Associate Planner; MCRP, California Polytechnic State University, San Luis Obispo; B.A. Environmental Studies, State University of New York at Potsdam; B.A. Communication, State University of New York at Potsdam (Prepared Section 4.10 Land Use and Planning, Section 4.14 Public Services, 4.17 Utilities and Service Systems, and Chapter 5 – Comparison of Alternatives)

Sophia Lai, Associate Planner; MCRP, California Polytechnic State University, San Luis Obispo; B.S. Public Health Sciences, University of California, Irvine (Prepared Chapter 4 – Environmental Impact Assessment Summary, Section 4.2 Agriculture and Forestry Resources, Section 4.3 Air Quality, Section 4.7 Greenhouse Gas Emissions, Section 4.12 Noise, Section 4.13 Population and Housing, Section 4.15 Recreation, and Chapter 6 – Other CEQA Considerations)

Bradley Jacobsen, Lead Geographic Information Systems (GIS) Specialist; B.A. Geography, Sonoma State University (Provided GIS analysis and prepared graphics)

Kristen Marschall, Technical Editor; B.S. Journalism, California Polytechnic State University, San Luis Obispo (Provided QA/QC)

Acentech, Inc.

Aaron Bétit, Senior Consultant; B.S. Engineering, University of Hartford (Prepared construction noise analysis)

ASM Affiliates, Inc.

Brian Williams, Senior Archaeologist; M.A. Maritime Archaeology, Flinders University, Australia; B.A. Anthropology, University of San Diego (Prepared updated cultural resources records search)

Environmental Vision

Marsha Gale, Managing Principal; MCRP, University of California, Berkeley; M.A. Landscape Architecture, University of California, Berkeley; B.A. Landscape Architecture, University of Illinois, Champaign/Urbana (Prepared Section 4.1 Aesthetics)

Bonterra Consulting

Stacie Tennant, Senior Project Manager; B.S. California State University Northridge (Prepared Biological Technical Report)

Allison Rudalevige, Regulatory Technician; M.S. University of California, Riverside (Prepared Jurisdictional Delineation Report)

Chambers Group

Darin Busby, Biologist; B.S. Ecology and Evolution, University of California, Santa Barbara (Prepared Focused, Protocol-Level 2012/2013 Wet Season Fairy Shrimp Survey Report)

Melissa Busby, Biologist; B.A. Biological Anthropology, University of California, San Diego (Prepared Focused, Protocol-Level 2012/2013 Wet Season Fairy Shrimp Survey Report)

John Dicus, Biologist; B.A. English, Northern Arizona University; Associate of Arts Social and Behavioral Sciences, Mount San Jacinto College (Prepared Dehli Sands Flower-Loving Fly Focused Survey and Technical Report)

Melanie Dicus, Biologist; B.S. Biology, Northern Arizona University (Prepared Dehli Sands Flower-Loving Fly Focused Survey and Technical Report)

Linette Lina, Project Manager; B.S. Wildlife, Fisheries, Conservation Biology, University of California, Davis (Prepare Focused Plant Surveys Report)

ICF International

Karolina Chmiel, Senior Archaeologist/GIS Analyst; Master of Arts (M.A.) Anthropology, Northern Arizona University; Bachelor of Science (B.S.) Anthropology, Loyola University; GIS Certificate, Mesa College (Prepared Cultural Resources Inventory Report)

Karen Crawford, Senior Archaeologist; Master of Arts (M.A.) Anthropology, University of California, Davis; B.A. Anthropology, California State University, Long Beach; Register of Professional Archaeologists (Prepared Cultural Resources Inventory Report)

Robin Hoffman, Senior Archaeologist; Master of Arts (M.A.) Latin American and Iberian Studies, University of California, Santa Barbara; Bachelor of Arts (B.A.) Anthropology, Central Washington University; Register of Professional Archaeologists (Prepared Cultural Resources Inventory Report)

Timothy Yates, Senior Historian/Architectural Historian; Doctor of Philosophy (Ph.D.) History, University of California, Davis; Master of Arts (M.A.) American Studies, California State University, Fullerton; Bachelor of Arts (B.A.) History, University of California, Santa Cruz (Prepared Cultural Resources Inventory Report)

LSA Associates

Claudia Bauer, Senior Biologist (Prepared 2015 Jurisdictional Delineation Report)

Paleo Solutions

Geraldine Aron, President; M.S. Geology, California State University, Long Beach (Prepared Paleontological Inventory Assessments)

Agency Consultations

City of Corona Fire Department (Provided information pertaining to Section 4.14 Public Services)

Bruno Anderson, Contract Information Technology Manager, City of Norco (Provided information pertaining to Section 4.10 Land Use and Planning)

Denny Chen, Land Use Associate Planner, City of Ontario (Provided information pertaining to Section 4.10 Land Use and Planning)

Eric Clayton, Criminal Information Technician, Riverside County Sheriff's Department, Jurupa Valley Station (Provided information pertaining to Section 4.14 Public Services)

Marc Donohue, City Clerk, City of Eastvale (Provided information pertaining to Section 4.10 Land Use and Planning)

Scott Forbes, Lieutenant, Riverside County Sheriff's Department (Provided information pertaining to Section 4.14 Public Services)

David Jones, Geologist, Riverside County (Provided information pertaining to Section 4.6 Geology and Soils)

Russell Leonard, Crime Analyst, Corona Police Department (Provided information pertaining to Section 4.14 Public Services)

Kevin Mensen, Investigations Bureau Lieutenant, Chino Police Department (Provided information pertaining to Section 4.14 Public Services)

Jon McLinn, Division Chief, San Bernardino County Fire Department (Provided information pertaining to Section 4.14 Public Services)

Maria Sanchez, Norco Fire Department (Provided information pertaining to Section 4.14 Public Services)

Jason Walsh, Assistant Fire Marshal, Riverside County Fire Department (Provided information pertaining to Section 4.14 Public Services)

Ron Watson, Sergeant, Ontario Police Department (Provided information pertaining to Section 4.14 Public Services)

Linda White, Assistant to the Superintendent, Corona-Norco Unified School District (Provided information pertaining to Section 4.14 Public Services)

APPENDIX C: PUBLIC INVOLVEMENT

APPENDIX C: PUBLIC INVOLVEMENT

Southern California Edison (SCE) encourages communication and outreach to local communities, local businesses, elected and appointed officials, and other interested parties. SCE's goal is to ensure that it understands and addresses, where possible, issues of interest or potential concern regarding its proposed projects. This appendix provides a detailed description of the public involvement activities that SCE conducted for the Circle City Substation and Mira Loma-Jefferson Subtransmission Line Project (Proposed Project).

Proposed Project Website

SCE's website (www.sce.com/circlecity) provides information about the Proposed Project, including a description, map, and estimated timeline of activities. SCE utilized social media advertisements on Facebook and Twitter within the Proposed Project study area in November 2015 to promote awareness of the Proposed Project website as a resource for the public.

Proposed Project Hotline

SCE created an information hotline (866-464-2005) for the Proposed Project that local residents can call with questions about the Proposed Project. This hotline will be maintained through the Proposed Project's regulatory review and approval process.

Proposed Project Open Houses and Informational Mailers

SCE also reached out to community members by distributing an informational mailer in early August 2012. This mailer also advertised a series of two open houses that were held. SCE held its first open house on August 30, 2012 in the City of Eastvale and a second open house on September 4, 2012 in the City of Corona. SCE sent a second informational mailer in November 2015. Copies of the mailers and the information presented during the open houses are provided in this appendix.

Jurisdictional and Agency Briefings

As described in the Executive Summary, SCE consulted with representatives from Riverside County, the City of Chino, the City of Corona, the City of Eastvale, the City of Norco, and the City of Ontario. SCE also consulted with BNSF Railway, the California Department of Transportation, the Riverside County Transportation Commission, and Riverside County Flood Control. Communications with these jurisdictions and agencies occurred between 2009 and 2015. The presentation provided to these agencies is included in this appendix.



Project Summary: Circle City Substation and Mira Loma-Jefferson Subtransmission Line

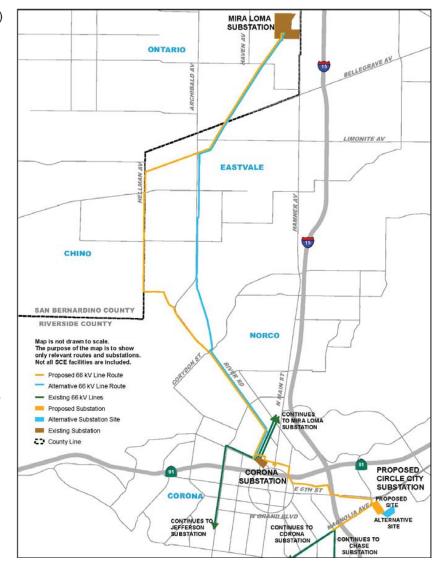
The Circle City Project is Southern California Edison's (SCE) proposal to upgrade the region's electrical infrastructure and improve reliability in the cities of Corona, Eastvale, and Norco. Portions of our existing infrastructure serving the area are near or at their reliable operating limits. Much of the electrical infrastructure that serves our communities was built decades ago, when the typical household's electrical needs were very different. The proposed project addresses growth in the area and increasing electrical usage by our customers. The proposed project is necessary for SCE to continue to safely provide reliable power to our customers.

What is the Proposed Project?

- Construction of a new 66/12 kilovolt (kV) substation (Circle City Substation) in Corona.
- Construction of 2 new double-circuit 66 kV subtransmission source lines to serve the proposed substation.
- Construction of a new 66 kV subtransmission line (Mira Loma-Jefferson line) starting at the existing Mira Loma Substation to a location adjacent to the existing Corona Substation. Upgrade from single to double circuit in some locations.
- Installation of telecommunications and distribution facilities.

What is the Timeline?

- 2009-2015: SCE conducted project planning and public outreach activities.
- 4th quarter, 2015: SCE plans to file the project application with the California Public Utilities Commission (CPUC), starting regulatory review process.
- 2015-2017: CPUC Regulatory Review (Please visit project website for more information).
- 2019: Subject to all regulatory approvals, project construction is anticipated to begin.
- 2021: Project expected to be operational and in-service.



Visual Simulations of the Proposed Project

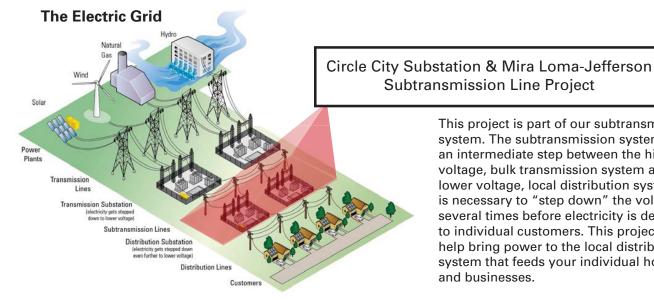








Additional visual simulations are available on our project website



This project is part of our subtransmission system. The subtransmission system is an intermediate step between the higher voltage, bulk transmission system and the lower voltage, local distribution system. It is necessary to "step down" the voltage several times before electricity is delivered to individual customers. This project will help bring power to the local distribution system that feeds your individual homes and businesses.

Where Can I Get More Information?



Circle City Substation & Mira Loma-Jefferson Subtransmission Line Project

Project Overview

SCE is committed to ensuring that residents and businesses in the region have the solid, robust electrical system essential to meet your 21st century needs. The Circle City Substation and Mira Loma-Jefferson Line Project is Southern California Edison's (SCE) proposal to upgrade the region's existing electrical infrastructure. The project will serve the cities of Corona, Norco, Chino, Eastvale, and Ontario.

Portions of SCE's existing electrical infrastructure serving the area are near or at their operating limits. The proposed project is necessary for SCE to continue safely providing reliable power to our customers. Much of the electric infrastructure that serves our communities today was built decades ago, when the typical household's electrical needs were very different.

The project team has evaluated a number of different alternatives within the project area and based on these evaluations the team has developed the proposed project including the substation site and the preferred and alternative 66 kV subtransmission line routes. As part of its public outreach process, SCE invites you to learn more about the project. SCE will host two public open houses for the public to learn about the proposed project, view maps of potential line routes, provide feedback, and ask any questions.

Project Description

The project includes the following components:

- Circle City Substation Construction of a new distribution substation and source lines on approximately 11 acres located in Corona.
 A distribution substation is a facility where electricity is lowered to a voltage that can be distributed and used by residents and businesses.
- The Mira Loma-Jefferson 66 kiloVolt (kV) subtransmission line would be approximately 10.7 miles in length and would be constructed from the existing Mira Loma Substation (located in Ontario) to a location adjacent to the existing Corona Substation (located in Corona). Construction of the Mira Loma-Jefferson line would be a combination of both overhead and underground construction.





YOU ARE INVITED

Public Open House Thursday, August 30, 2012, 5-7 p.m. Eastvale Elementary School 13031 Orange Street Eastvale, CA 92880

Public Open House Tuesday, September 4, 2012, 5-7 p.m. Corona Public Library 650 South Main Street Corona, CA 92882



About Southern California Edison

An Edison International (NYSE:EIX) company, Southern California Edison is one of the nation's largest electric utilities, serving a population of more than 14 million via 4.9 million customer accounts in a 50,000-square-mile service area within Central, Coastal, and Southern California. SCE is committed to expanding and renewing essential distribution and transmission networks in our service territory, making the power grid greener and more reliable for our customers.

Project Contact Information

For more information, please call the project hotline at 1-866-464-2005 or visit www.sce.com/circlecity

If you have questions or comments about the project, please contact your local SCE public affairs representative:

For Corona and Norco:

Louis Davis, Region Manager (951) 249-8468 or Louis.Davis@sce.com

For Chino

Lydia Roman, Region Manager (909) 930-8501 or Lydia.Roman@sce.com

For Eastvale:

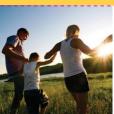
Raymond Hicks, Region Manager (951) 928-8238 or Raymond.Hicks@sce.com

For Ontario

Christian Nelson, Region Manager (909) 930-8495 or Christian.Nelson@sce.com

FOR OVER 100 YEARS...LIFE. POWERED BY EDISON.











Preliminary Project Timeline

 2011-2012
 SCE conducted project planning and public outreach activities.

 4th Quarter 2012
 SCE files project with the California Public Utilities Commission.

 4th Quarter 2014
 Project decision expected, project construction to begin.

2016 Project in-service date.

Project Approval Process

SCE will need to submit an application for project approval to the California Public Utilities Commission (CPUC), which is the state regulatory agency that sets electricity rates and authorizes the construction of certain electrical facilities. SCE's application will include a Proponent's Environmental Assessment, which will evaluate the environmental impacts of the project. Project review and approvals may be needed from other federal agencies; these agencies will be identified as the project moves forward. Throughout this process, the public will have a number of opportunities to learn more about the project and provide feedback.

WELCOME

To Southern California Edison Company's

Mira Loma Jefferson Line Project Circle City Substation & OPEN HOUSE



Project Approval Process

Project Planning

Project Application

Agency Environmental Review

Agency Decision

SCE plans project scope, site, route, engineering and various alternatives; communicates with local jurisdictions and the public

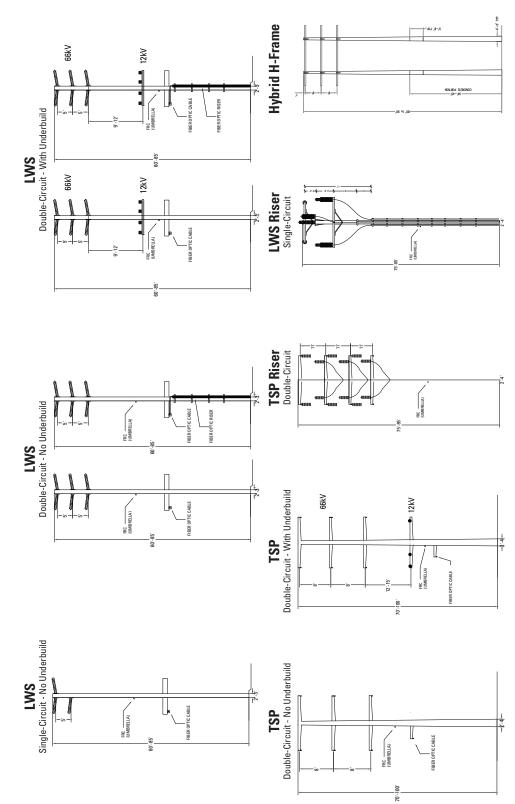
SCE develops and files an application for the project, which will include a Proponent's Environmental Assessment

Agencies review application; prepare environmental documents; hold opportunities for public comment

Agencies complete their environmental review and will each issue a decision regarding SCE's proposed work



Typical Pole Type

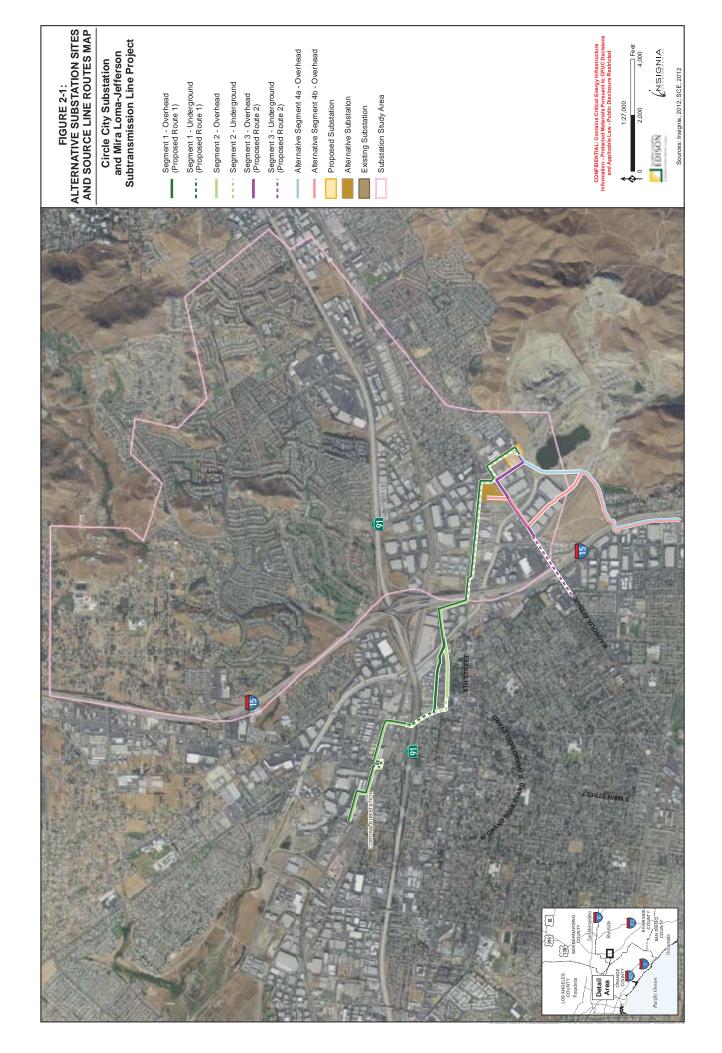




NOT TO SCALE









What are Electric and Magnetic Fields (EMF)?

- Electric and magnetic fields (EMF) are invisible lines of force that surround any electrical device. Power lines, electrical wiring, appliances and electrical equipment all produce EMF. The strength of these fields decreases rapidly with distance from the EMF source.
- The California Public Utilities Commission (CPUC) requires SCE to utilize no-cost and low-cost measures in the design of new facilities as a precautionary-based EMF policy to reduce public exposure to EMF.
- and 06-01-042, the following no-cost and low-cost magnetic field reduction measures will be considered for this • In accordance with "EMF Design Guidelines" filed with the CPUC in compliance with CPUC Decisions 93-11-013
- Utilize pole heights that meet or exceed SCE's preferred EMF design criteria
- Utilize double-circuit (subtransmission portion) construction that reduces spacing between circuits as compared with single-circuit construction
- Arrange conductors of proposed transmission and subtransmission lines for magnetic field reduction
- Place major substation electrical equipment (such as transformers, switchracks, buses and underground duct banks) away from the substation property lines
- A Field Management Plan (FMP) detailing the field reduction measures that will be incorporated into the design of the proposed project will be filed along with the project application.





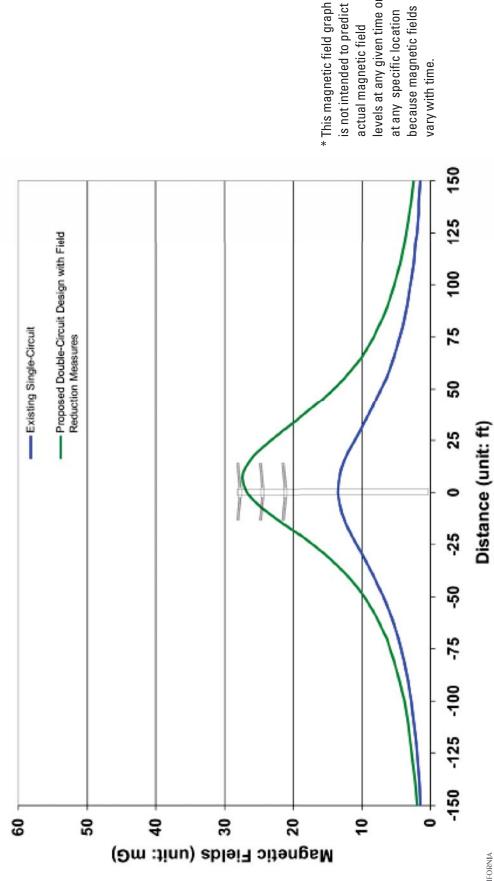
Notes About Magnetic Field Graphs

- portions of the line routes. Finalized calculations will be included in the Final Field Management Plan for the proposed cost and low-cost EMF reduction policy. The displayed graphs show preliminary calculated magnetic field levels for SCE utilizes computer models to study possible design options for the proposed project in the context of CPUC's no-
- The magnetic field graphs are only intended to show relative differences in magnetic field levels between the existing design and proposed subtransmission design under a specific set of modeling assumptions.
- location because magnetic fields vary with time. The magnetic fields will continuously vary with customer electricity The magnetic field graphs are not intended to predict actual magnetic field levels at any given time or at any specific usage, load growth and other factors beyond SCE's control.
- By implementing appropriate no-cost and low-cost magnetic field reduction measures, SCE attempts to reduce magnetic fields to levels lower than they would be if SCE had not considered various magnetic field reduction



Magnetic Field Reduction Example – 66 kV Subtransmission Line

Typical Magnetic Field Calculations*



levels at any given time or

because magnetic fields at any specific location

vary with time.

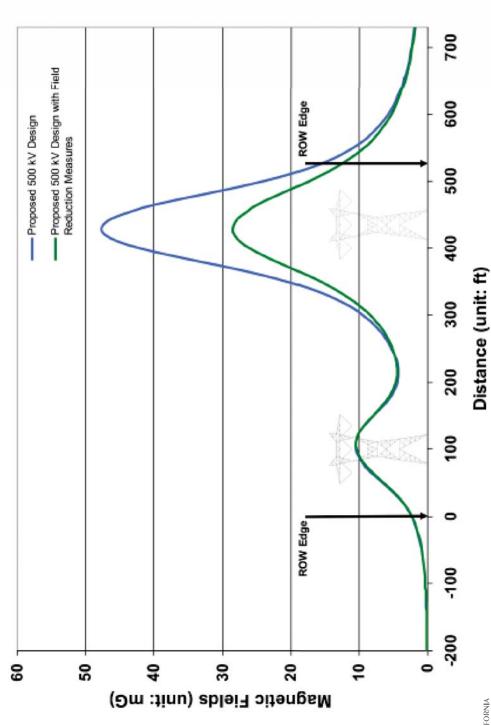
is not intended to predict

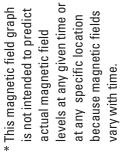
actual magnetic field



Magnetic Field Reduction Example – 500 kV Transmission Line

Typical Magnetic Field Calculations*









Existing View from Magnolia Avenue near South Promenade Avenue looking southeast (VP 2)



Visual Simulation of Proposed Project (Circle City Substation and Source Line)





Existing View from East 6th Street near Magnolia Avenue looking west (VP 15)



Visual Simulation of Proposed Project (Source Line Route 1)





Existing View from Magnolia Avenue near Sherborn Street looking southwest (VP 19)



Visual Simulation of Proposed Project (Source Line Route 2)





Existing View from River Road Park looking northwest (VP 26)



Visual Simulation of Proposed Project (Subtransmission Line)





Existing View from Hellman Avenue at Landerwood Drive looking north (VP 32)



Visual Simulation of Proposed Project (Subtransmission Line)



Project Update for the City of Eastvale

Circle City Substation & Mira Loma-Jefferson **Sub-Transmission Line**

Adriana Mendoza Region Manager Southern California Edison

August 18, 2015



Projected Timeline and Overview

2009 - 2014

SCE conducted project planning and public outreach activities.

2015

SCE will continue to conduct public outreach activities.

4th Qtr. 2015

SCE will file project with the California Public Utilities Commission.

2019

expect project construction to begin. necessary regulatory approvals, we Following CPUC decision and all

2021

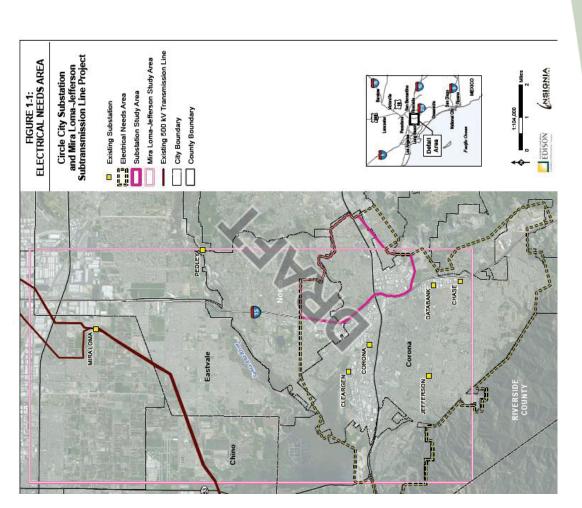
Project expected to be operational and in-service.



Project Need Overview

Growing Demand

- Existing facilities serving these customers are near or are at their operating limits.
- Maintaining reliability requires conditions, which is when customers need it most. planning for peak load
- surrounding region will benefit network, supporting reliability The City of Eastvale and the from improvements to the for all customers.



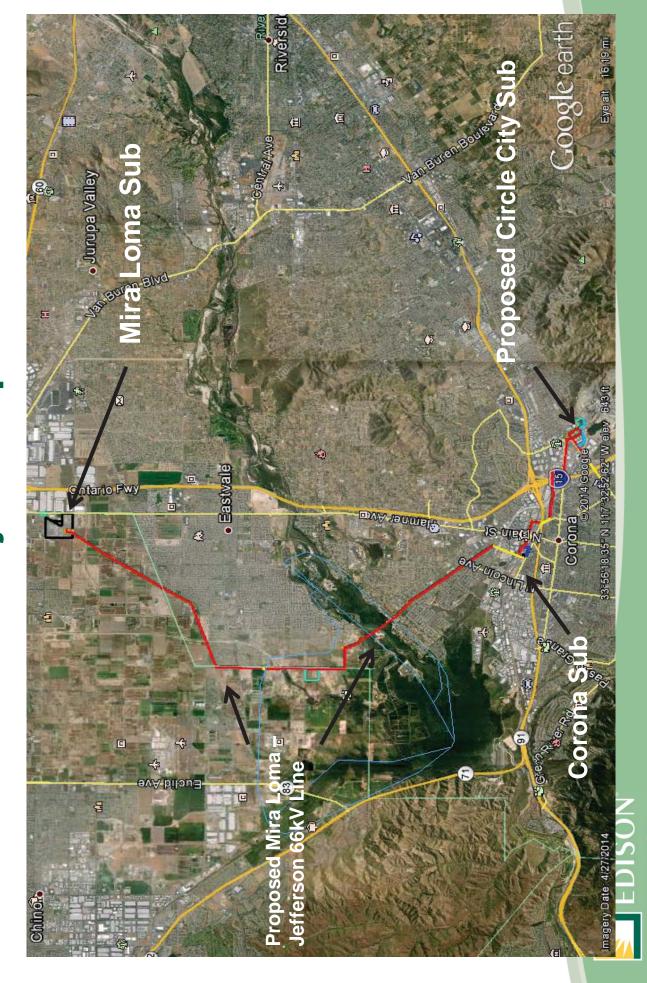


How Circle City Supports Growth

Project components support load growth and reliability:

- Circle City Substation: Construction of a new 66/12 kilovolt (kV) distribution substation in the City of Corona.
- 10.9 mile Mira Loma-Jefferson 66 kV Sub-Transmission Line: Construction of a new single circuit sub-transmission line, 10.9 miles in length, from Mira Loma Substation to the Corona Substation.
- new 3.5 mile double circuit line from Corona Substation and a 1.2 4.7 miles of sub-transmission source lines: Construction of a mile double-circuit tap line into the new Circle City Substation.





Public Outreach and Engagement

Agency & Local Government Coordination (2009-2015)

- CPUC, Caltrans, BNSF Railway Company
- Riverside County, City of Chino, City of Corona, City of Eastvale, City of Norco, City of Ontario

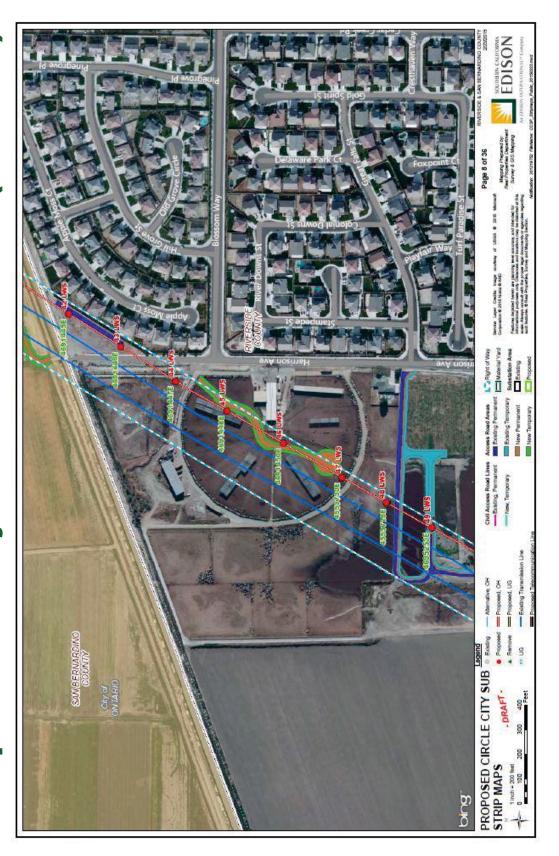
Open Houses in Eastvale and Corona areas (2012)

Impacts for Eastvale:

- Hellman Avenue
- Eastern, ½ mile alignment proposed overhead, underground alternative
- New Residential Developments



Proposed Project in Eastvale (1 of 13)



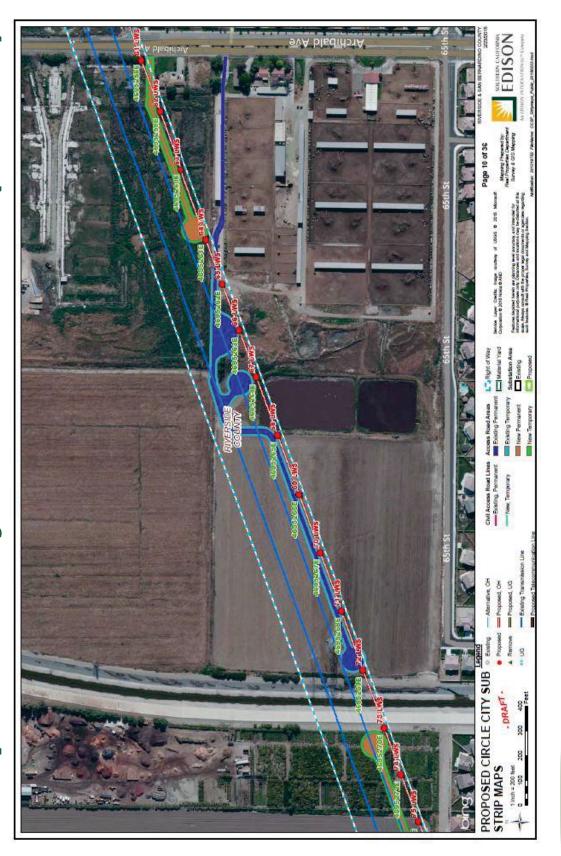


Proposed Project in Eastvale (2 of 13)



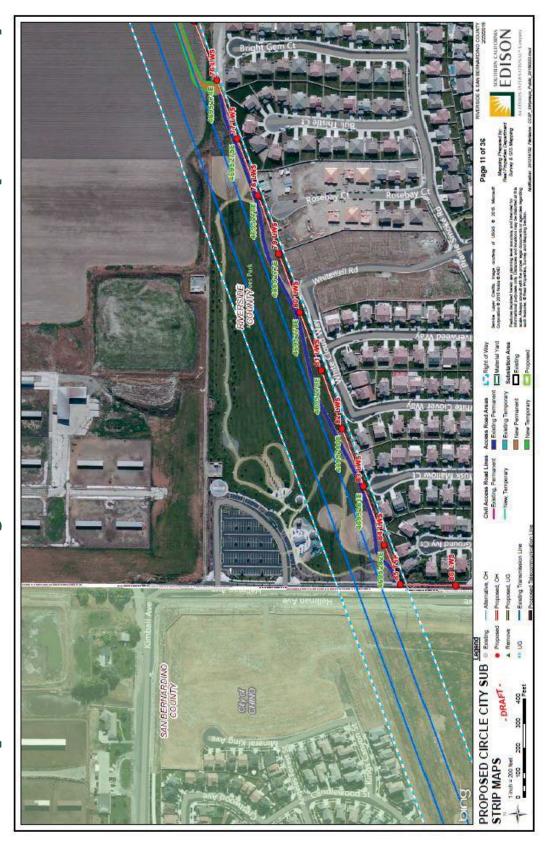


Proposed Project in Eastvale (3 of 13)



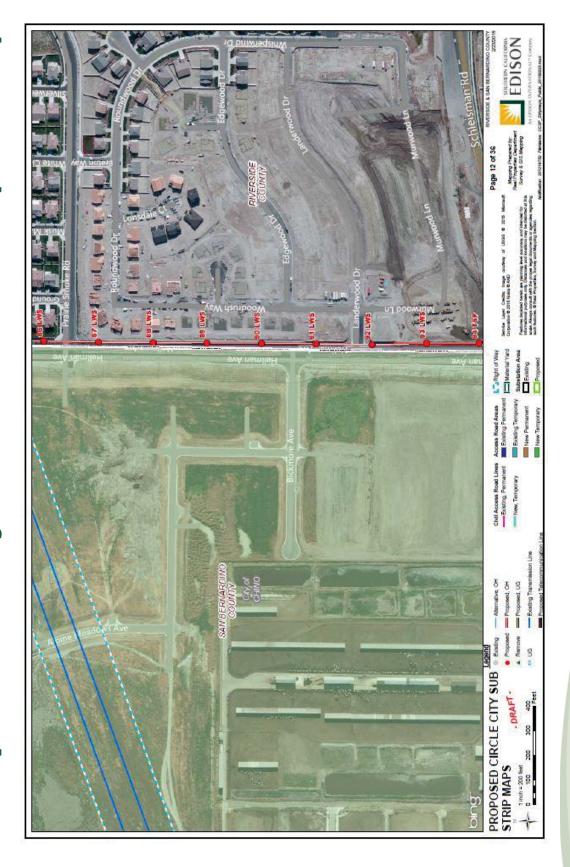


Proposed Project in Eastvale (4 of 13)



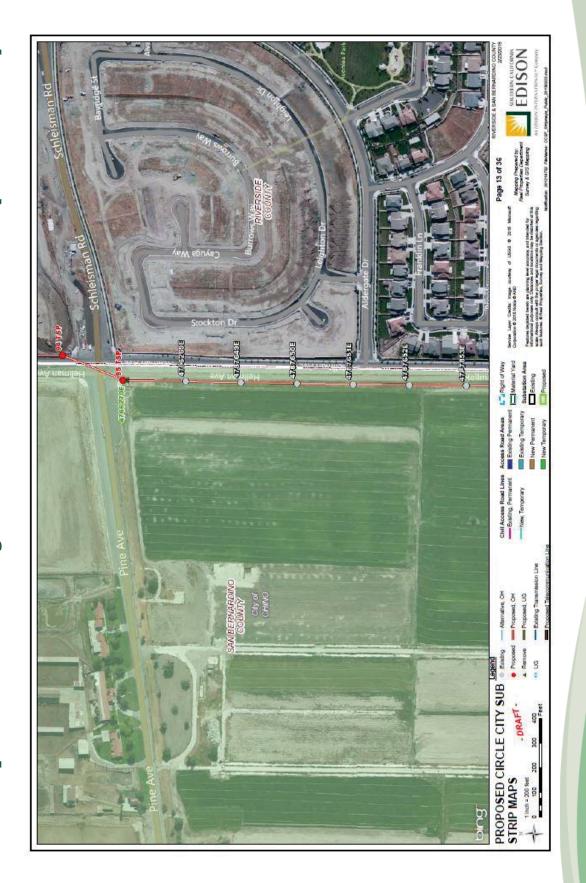


Proposed Project in Eastvale (5 of 13)



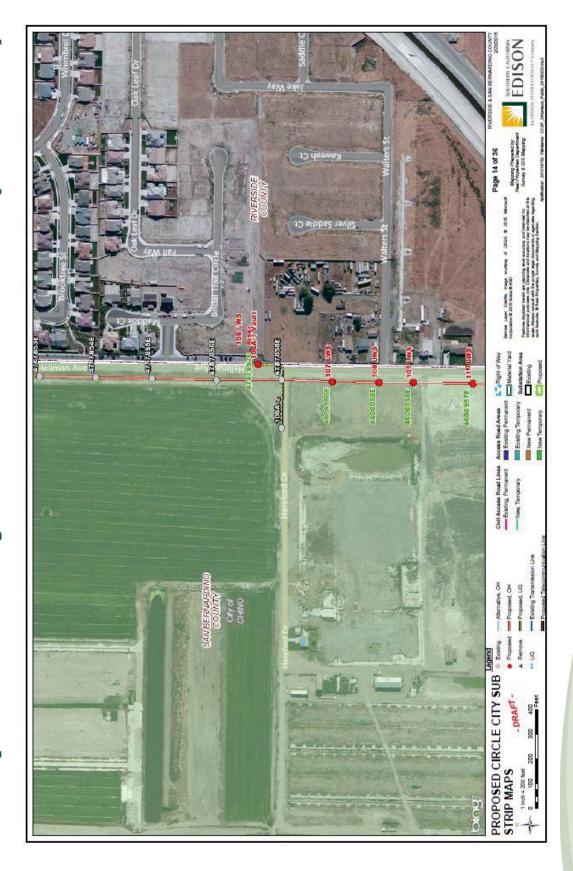


Proposed Project in Eastvale (6 of 13)



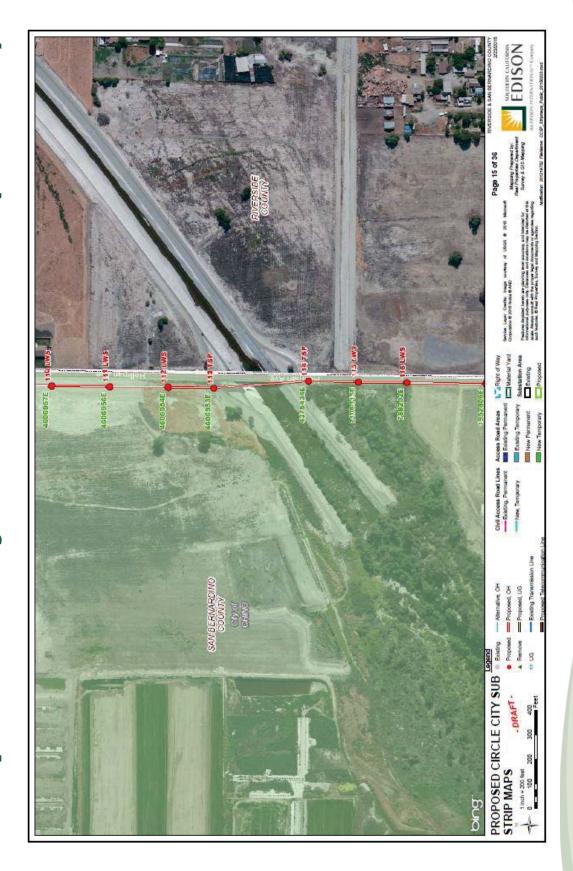


Proposed Project in Eastvale (7 of 13)



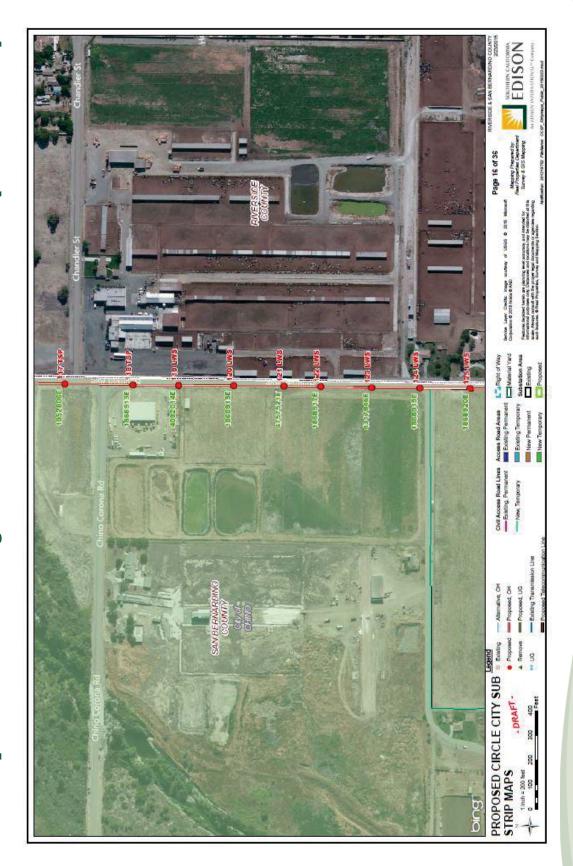


Proposed Project in Eastvale (8 of 13)



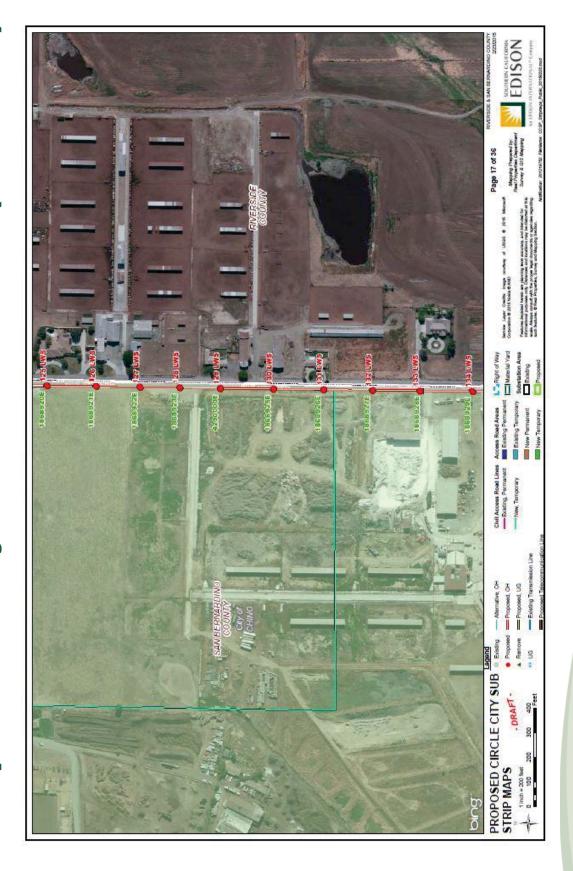


Proposed Project in Eastvale (9 of 13)



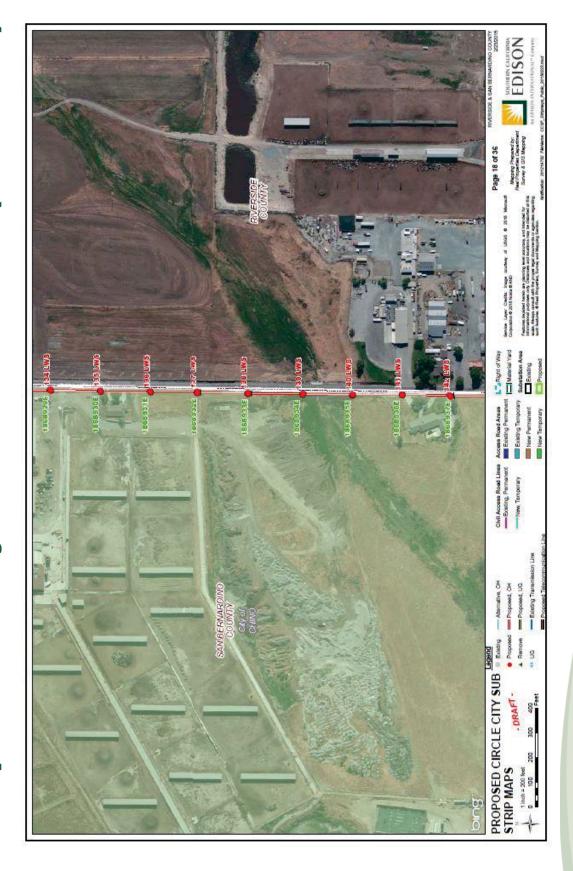


Proposed Project in Eastvale (10 of 13)



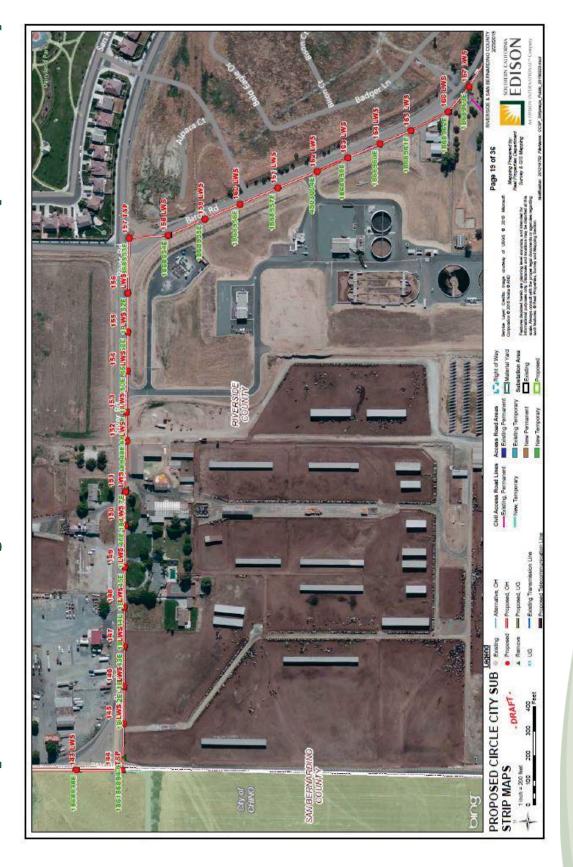


Proposed Project in Eastvale (11 of 13)



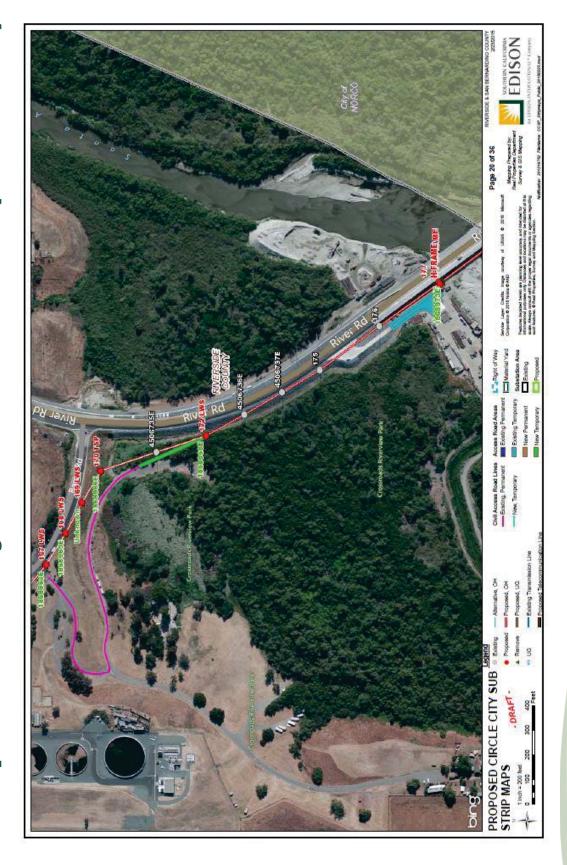


Proposed Project in Eastvale (12 of 13)





Proposed Project in Eastvale (13 of 13)





Next Steps

- Project Mailings August/September 2015
- Project Brochure / Open House Invite
- Open House Events September/October 2015
- 9/30 Auburndale Intermediate School, Corona
- 10/1 Eastvale Community Center, Eastvale
- Project Filing with CPUC Q4 2015



Circle City Project

Information Line

866-464-2005

Website

www.sce.com/circlecity

Email

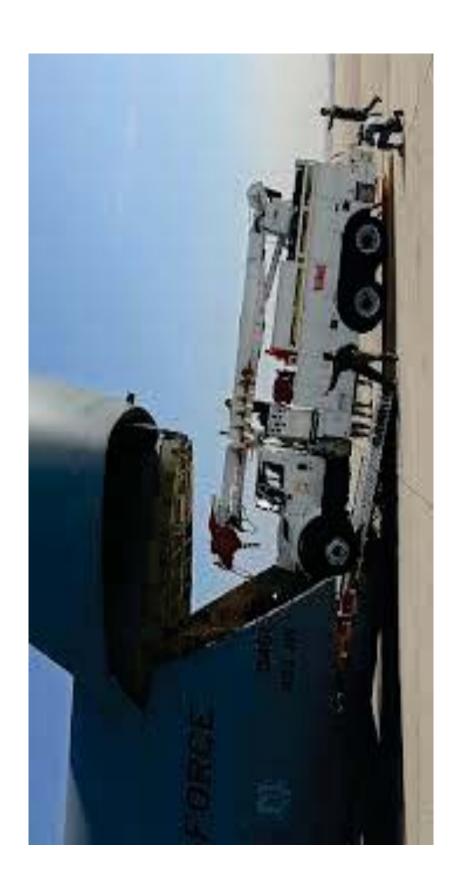
transmissionprojects@sce.com ("Circle City" in subject line)

Contact SCE

- **Customer Service**
- 800-655-4555
- Outages/Downed Lines/ Streetlight Repair 800-611-1911
- www.sce.com
- Social Media
- Twitter.com/SCE
- Facebook.com/SCE
- YouTube.com/SCE



Questions?





Thank You For Your Time!

Adriana Mendoza-Ramos

Region Manager

Local Public Affairs

Adriana.Mendoza@sce.com

Direct: 909.930.8495

Cell: 909.557.6914

Twitter: @SCE_AdrianaR



Additional Slides



Full Project Map with Detail







Proposed Substation Layout

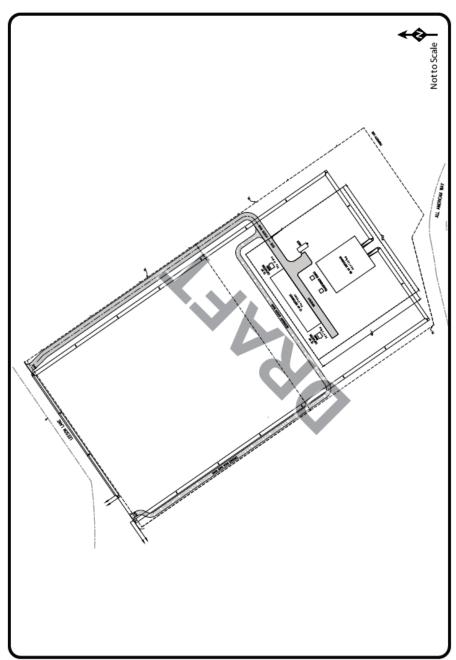


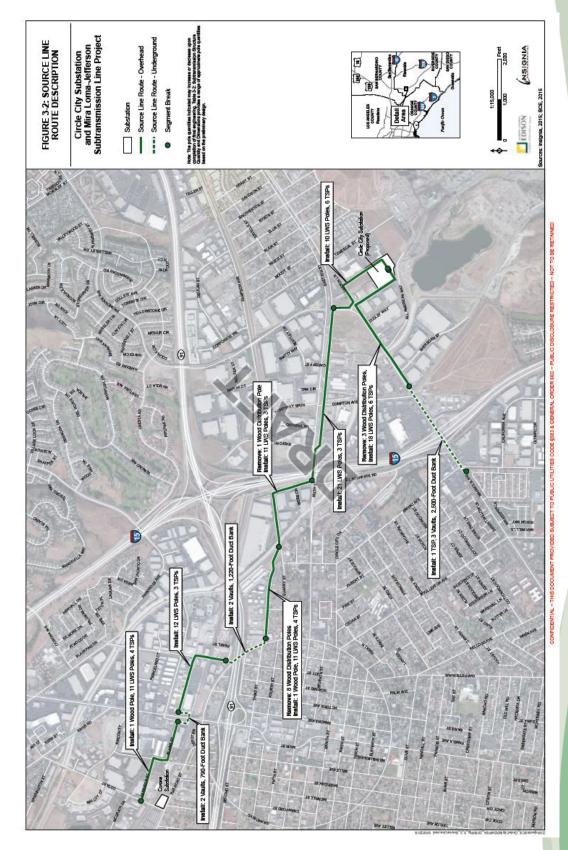
Figure 3.1: Proposed Project Substation Layout



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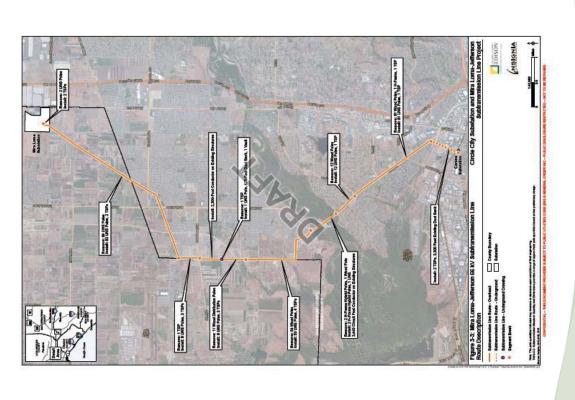


Source Line Route Description



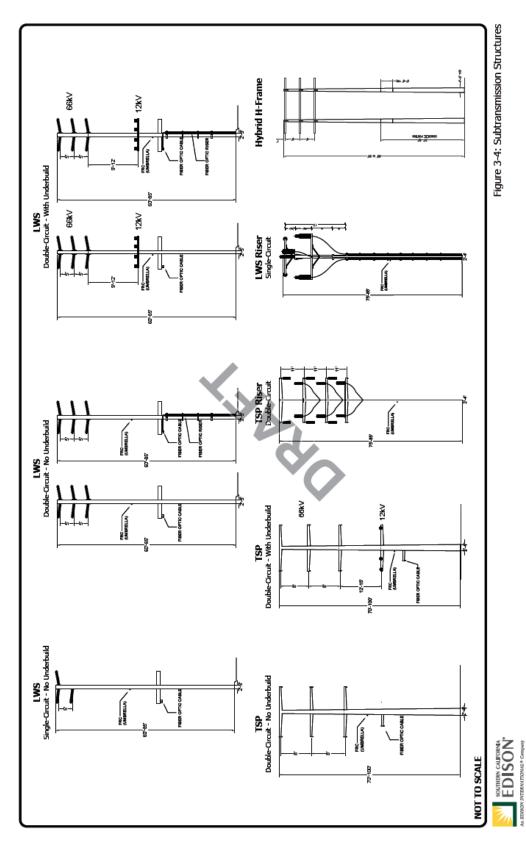


Sub-Transmission Line Route Description





Sub-Transmission Structures

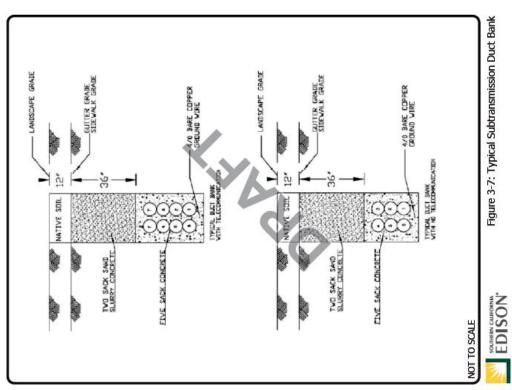




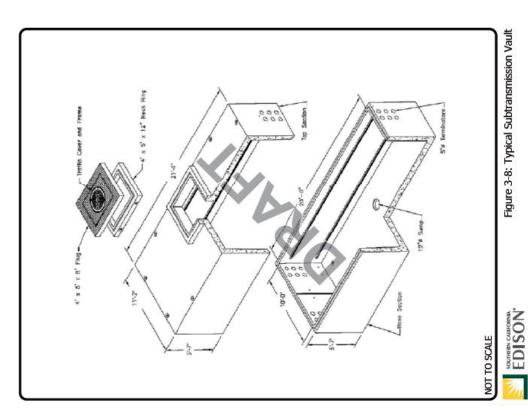
CONFIDENTIAL - THIS DOCUMENT PROVIDED SUBJECT TO PUBLIC UTILITIES CODE \$183.4 GENERAL ORDER 665 - PUBLIC DISCLOSURE RESTRICTED - NOT TO BE RETAINE



Sub-Transmission Duct Banks and Vaults









CONFIDENTIAL - THIS DOCUMENT PROVID

Circle City 66/12kV Substation &

Mira Loma Jefferson 66kV Sub-transmission Line

Project Overview

August 22, 2012



Project Overview

- The Mira Loma-Jefferson 66 kiloVolt (kV) subtransmission line will be approximately 10.7 miles in length and constructed from the existing Mira Loma Substation (located in Ontario) to a location adjacent to the existing Corona Substation (located in Corona).
- In Eastvale, the proposed line would utilize an existing corridor out of American Heroes Park and would parallel Hellman Avenue to the city of Norco
- SCE prefers to utilize existing utility corridors wherever possible
- Circle City 66/12kV Substation Construction of a new distribution substation and source lines on approximately 11 acres located in
- A distribution substation is a facility where electricity is lowered to a voltage that can be distributed and used by residents and businesses.



Anticipated Project Timeline

- Late Summer/Fall 2012 SCE hosts project open house(s)
- Late 2012 SCE files project with the California Public **Utilities Commission**
- Fourth Quarter 2014 Project decision expected, project construction to begin
- 2016 Anticipated Project in-service date



Project Open House

SCE invites you to learn more about the project. SCE will host two public open houses for the public to learn about the proposed project, view maps of potential line routes, provide feedback, and ask any questions.

Public Open House
Thursday August 30, 2012, 5:00 – 7:00 p.m.
Eastvale Elementary School (Auditorium)
13031 Orange Street
Eastvale, CA 92880

Public Open House

Tuesday September 4, 2012, 5:00 – 7:00 p.m.

Corona Public Library

650 South Main Street

Corona, CA 92882



Additional Information

Website: www.sce.com/circlecity

Next Steps:

- Upcoming project open houses

August 30 – Eastvale

September 4 – Corona





We welcome any questions you Thank you for your time. may have.



SOUTHERN CALIFORNIA EDISONIA

BACK UP SLIDES – USE AS NEEDED

CPUC General Order 131-D

- SCE is a public utility regulated by California Public Utilities Commission (CPUC)
- Under CPUC General Order 131-D, the CPUC has exclusive jurisdiction over the location and construction of public utilities facilities
- GO 131-D was adopted by the CPUC to be responsive to:
- the requirements of CEQA;
- the need for public notice and the opportunity for affected parties to be heard by the CPUC; and
- the obligations of utilities to serve their customers in a timely and efficient manner.



CPUC General Order 131-D- Cont

- SCE must seek and receive CPUC approval prior to the construction
- Affected jurisdictions and other interested parties will have an opportunity to review and comment upon SCE's application before the CPUC makes a decision
- Prior to construction, SCE will still need to obtain the appropriate local ministerial permits



Proponent's Environmenta Assessment (PEA)

- environmental assessment for the project referred to as a The CPUC requires that SCE include in its application, an Proponent's Environmental Assessment (PEA)
- The PEA will:
- Provide a description of the Proposed Project and its alternatives.
- Evaluate potential impacts for all California Environmental Quality Act (CEQA) resource categories
- Consider potential impacts during both construction and operation
- The PEA is intended to be the means by which the CPUC can quickly focus upon potentially significant environmental impacts of a project and may be used as an aid by the CPUC in preparing the Initial Study to determine whether to prepare a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR)



Application and Review Process

various alternatives and local jurisdictions and communicates with SCE plans project scope, site, route, engineering and the public.

files the Proponent's ncluding testimony. SCE develops and Assessment (PEA) and application, Environmental

meeting and/or engage in CPUC reviews PEA, may MND for review, and may hold public meetings. issues a Draft EIR or agency consultation, hold public scoping

ALJ writes a proposed have alternates, and parties are invited to Commissioners may decision. CPUC comment.

CPUC certifies the EIR or alternate decision or or MND and approves the proposed decision denies project.

CPUC finalizes the EIR Evidentiary hearings or MND, addressing may be held by the Administrative Law public comment. Judge (ALJ).





Public Involvement

- Public outreach and communications are critical elements of SCE's planning process
- comments will be available through future public the proposed project, ask questions and submit Opportunities for the public to learn more about meetings and mailings
- SCE will meet with local property owners, local parties throughout all phases of this project government officials, and other interested



Project Update for the City of Corona

Circle City Substation & Mira Loma-Jefferson **Subtransmission Line**

Region Manager, Local Public Affairs Southern California Edison Adriana Mendoza-Ramos

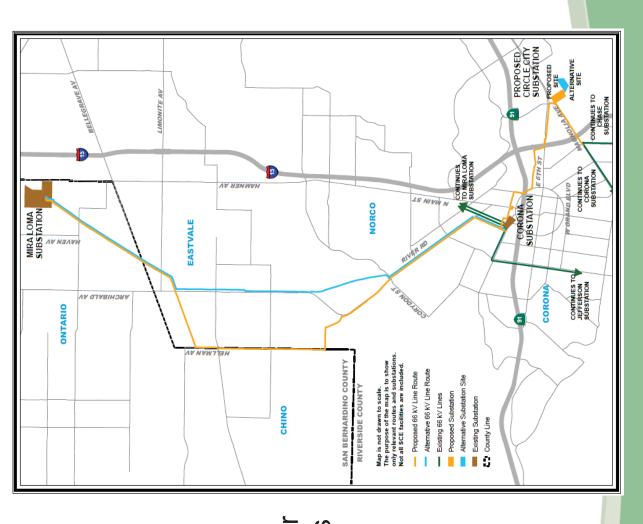
September 2, 2015



Project Need and Overview

Growing Demand

- customers are served by the Corona, Chace and Jefferson Substations 59,340 metered
- these customers are near or at their operating limits Existing facilities serving
- customers need it most peak load conditions-Maintaining reliability requires planning for which are when





Project Timeline and Public Input

2011-2012

SCE conducted project planning and public outreach activities.

Sept/Oct 2015

SCE will continue to conduct public outreach activities. 4th Quarter 2015 SCE will file project with the California

Public Utilities Commission.

2019

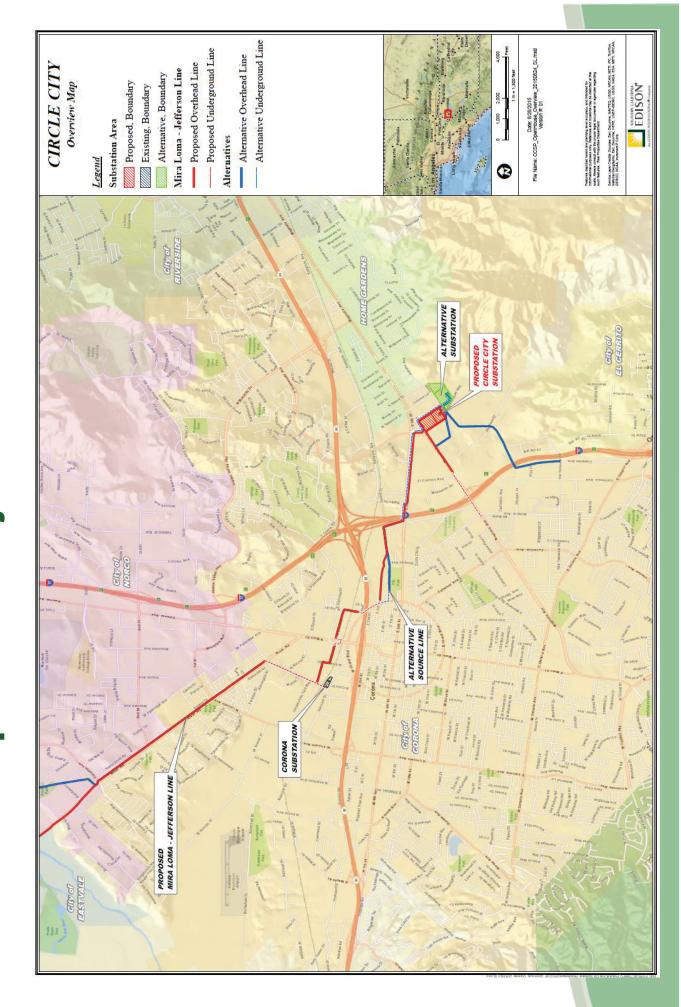
Subject to all necessary regulatory approvals, we expect project construction to begin.

2021

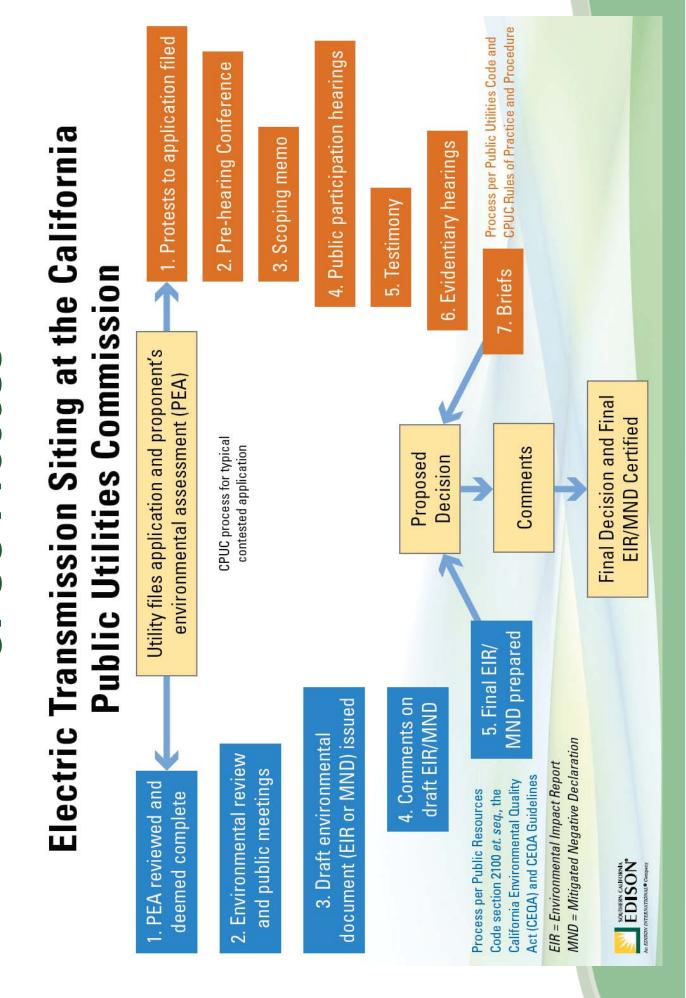
Project expected to be operational and in-service.



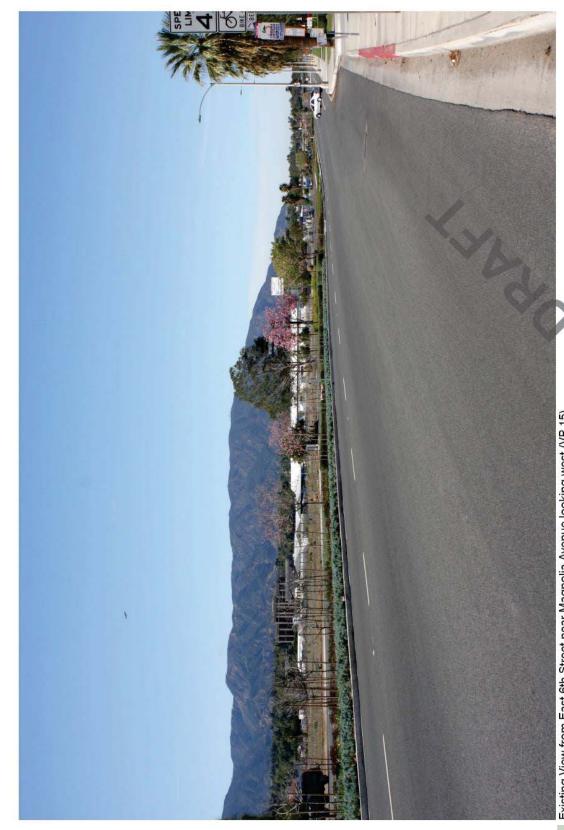
Proposed Project in Corona



CPUC Process

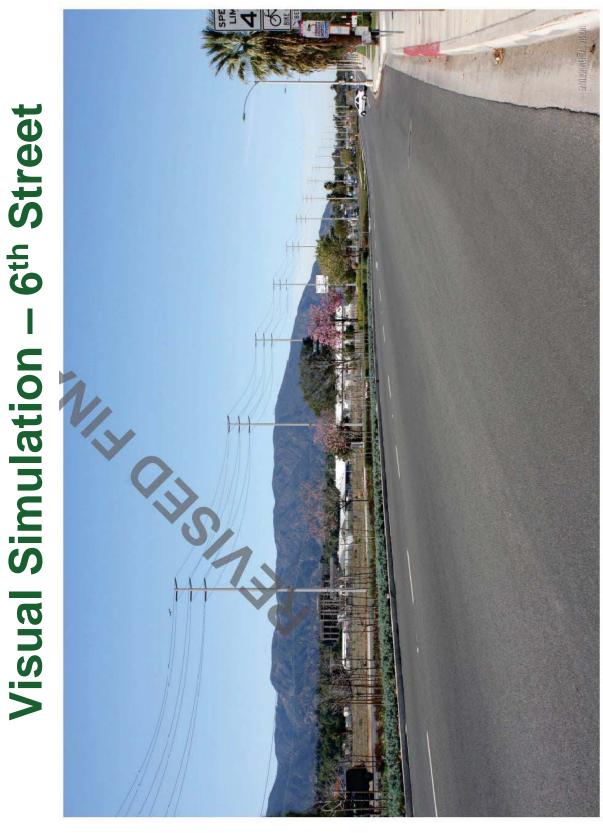


Prior Photo – 6th Street





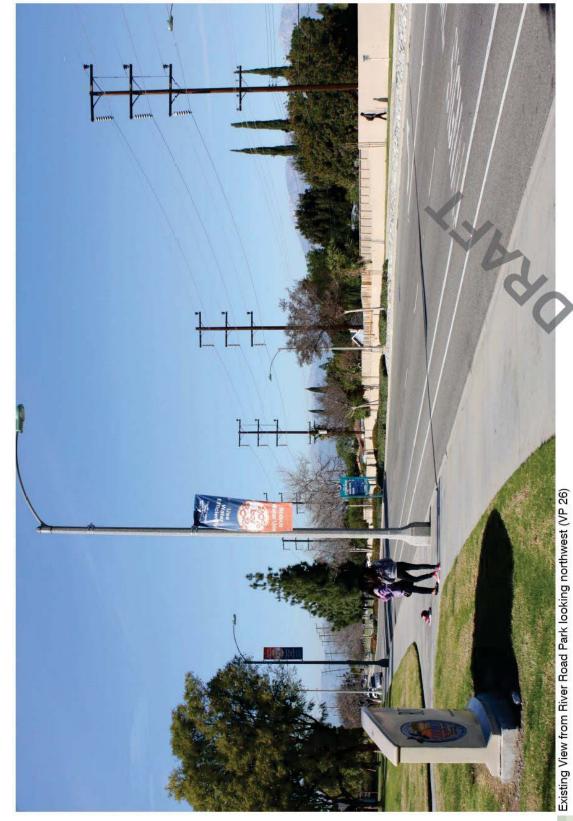




Visual Simulation of Proposed Project (Source Line Route)

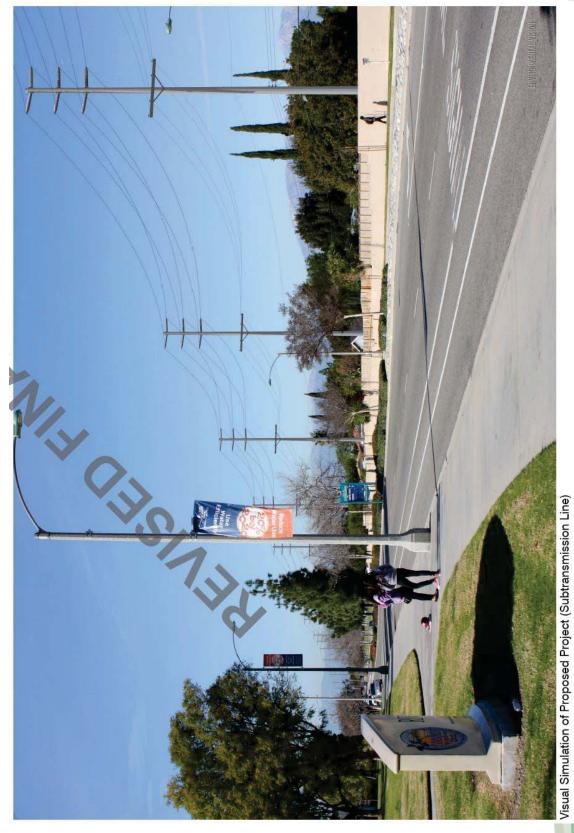


Prior Photo - River Road



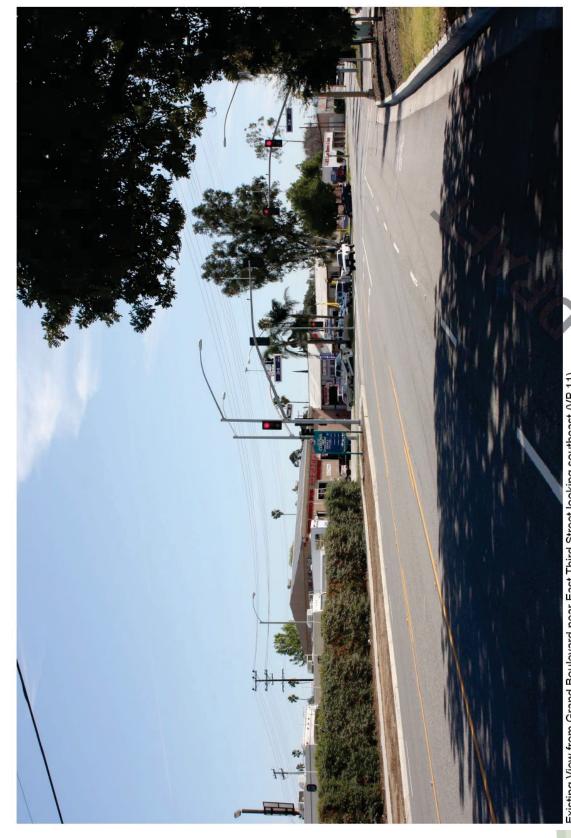


Visual Simulation - River Road





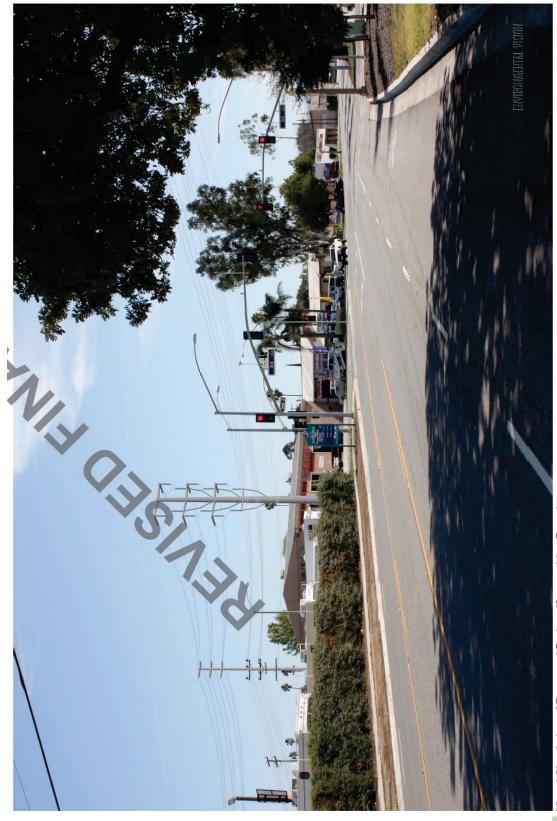
Prior Photo - Grand Ave.



Existing View from Grand Boulevard near East Third Street looking southeast (VP 11)



Visual Simulation - Grand Ave.



Visual Simulation of Proposed Project (Source Line Route)



Subtransmission Structures

