

**APPENDIX A
CALIFORNIA ENVIRONMENTAL QUALITY ACT
(CEQA) INITIAL STUDY CHECKLIST**

Appendix A
Environmental Checklist Form

1. Project title:

Proposed Viejo System

2. Lead agency name and address:

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA. 94102-3298

3. Contact persons and phone numbers:

Mr. Thomas Burhenn,
Manager of Regulatory Operations
(626) 302-9652

Mr. Daniel C. Pearson
Manager of Land Services, Environmental Affairs Division
(626) 302-9562

4. Project location:

The proposed substation site is located on Lot A, Tract No. 14951 approximately one-quarter mile north of El Toro Road, one mile east of Santa Margarita Parkway, and southeast of the SR 241 Foothill Transportation Corridor in the City of Lake Forest, California.

The project study area also includes the existing 220 kV transmission and 66 kV subtransmission line corridor located between the proposed substation site and the Chiquita Substation 3.1 miles south in the City of Mission Viejo.

5. Project sponsor's name and address:

Southern California Edison
2244 Walnut Grove Avenue
Rosemead, CA. 91770

6. General plan designation:

The California Public Utilities Commission (CPUC) has primary jurisdiction over the Viejo System Project, because it authorizes the construction, operation, and maintenance of public utility facilities. Although such projects are exempt from local land-use and zoning regulations and permitting, General Order No. 131-D, Section III. C requires "the utility to communicate with, and obtain the input of, local authorities regarding land use matters and obtain any non-

discretionary local permits.” SCE has considered local and state land-use plans as part of the environmental review process.

The Proposed Viejo Substation site and immediate area is designated light industrial and open space in the City of Lake Forest General Plan. The proposed 66 kV subtransmission line is designated open space in the City of Lake Forest General Plan and recreation in the City of Mission Viejo General Plan.

7. Zoning:

The California Public Utilities Commission (CPUC) has primary jurisdiction over the Viejo System Project, because it authorizes the construction, operation, and maintenance of public utility facilities. Although such projects are exempt from local land-use and zoning regulations and permitting, General Order No. 131-D, Section III. C requires “the utility to communicate with, and obtain the input of, local authorities regarding land use matters and obtain any non-discretionary local permits.” SCE has considered local and state land-use plans as part of the current environmental review process.

The Proposed Viejo Substation site and immediate area is zoned Planned Community 8 (PC 8).

8. Description of Project:

Proposed Viejo Substation: The proposed Viejo Substation would be constructed on a 12.5 acre site in the City of Lake Forest, California. The proposed substation would be an, unmanned, automated, 560 MVA 220/66 kV and 66/12 kV low-profile substation that would support 5 66 kV subtransmission circuits, and four 12 kV distribution circuits. The Viejo Substation would also be equipped with SCE’s Substation Automation System (SAS). As part of the communication system, SCE is proposing to install two fiber optic cables to allow the substation to be monitored and controlled by a power management system from SCE’s Ellis Substation, located in the City of Huntington Beach, Orange County, California.

220 kV Transmission Line Modifications: To make the Viejo Substation an independent part of the 220 kV transmission and 66 kV subtransmission system, a 220 kV line source would be provided. These modifications would include turning and looping the Chino-San Onofre 220 kV transmission line through the proposed Viejo Substation and rerouting the San Onofre-Serrano 220 kV transmission line in order to allow the crossover of the Chino-San Onofre 220 kV transmission line for substation access. Approximately 0.3 circuit miles of overhead 220 kV transmission line would be relocated on and adjacent to the Viejo Substation site on 10 new TSPs.

66 kV Subtransmission Line Improvements: The two existing 66 kV subtransmission lines (Chiquita-Limestone-O’Neil and Chiquita-Limestone-Moulton) located in the 220 kV corridor would be cut into the proposed Viejo Substation resulting in the following four circuits:

- Limestone-Viejo
- Limestone-Moulton-Viejo
- Chiquita-Viejo No. 1
- Chiquita-O'Neil-Viejo

Also one new 66 kV subtransmission line would be constructed and labeled as Chiquita-Viejo 2. Construction of the proposed new 66 kV circuit would require the rebuild of the existing double circuit 66 kV subtransmission line (e.g., the Chiquita-Limestone-O'Neil and Chiquita-Limestone-Moulton lines) between the proposed Viejo Substation and Chiquita Substation.

Chiquita Substation Improvements: Improvements would be made to the Chiquita Substation to support the new 66 kV line that would be installed.

9. Surrounding land uses and setting:

Surrounding land use to the north and northwest is light industrial/business park. The SR 241 Foothill Transportation Corridor is located to the south/southwest. The Southern California Edison Viejo Conservation Bank and 220 kV corridor are located immediately adjacent to and east/northeast of the site

Land use adjacent to the 220 kV corridor are primarily developed parkland and residential housing.

10. Other agencies whose approval may be required:

California Department of Fish & Game

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | |
|-------------------------------|------------------------------------|------------------------|
| Aesthetics | Agricultural Resources | Air Quality |
| Biological Resources | Cultural Resources | Geology/Soils |
| Hazards & Hazardous Materials | Hydrology/Water Quality | Land Use/Planning |
| Mineral Resources | Noise | Population/Housing |
| Public Services | Recreation | Transportation/Traffic |
| Utilities/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

- 1) 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.
- 3) Once the lead agency has determined that a particular physical impact may occur, 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 tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in 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 that 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.

| ISSUES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| I. AESTHETICS. Would the project: | | | | |
| 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 which would adversely affect day or nighttime views in the area? | | | ■ | |
| II. AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | | | | |
| 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) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | | | | ■ |
| III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| 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? | | | | ■ |
| IV. BIOLOGICAL RESOURCES. Would the project: | | | | |

| ISSUES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| 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 US Fish and Wildlife Service? | | ■ | | |
| 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? | | | | ■ |
| V. CULTURAL RESOURCES. Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5? | | | | ■ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | | ■ | | |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | ■ | | |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | ■ | | |
| VI. GEOLOGY AND SOILS. Would the project: | | | | |
| 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? | | | ■ | |
| iii) Seismic-related ground failure, including liquefaction? | | | | ■ |
| iv) Landslides? | | | | ■ |
| b) Result in substantial soil erosion or the loss of topsoil? | | | ■ | |

| ISSUES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-----------|
| 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? | | | | ■ |
| VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project: | | | | |
| 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? | | | | ■ |
| 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? | | | | ■ |
| VIII. HYDROLOGY AND WATER QUALITY. Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | | | | ■ |
| 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 groundwater 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)? | | | | ■ |

| ISSUES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-----------|
| 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 onsite or offsite? | | | | ■ |
| 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 onsite or offsite? | | | | ■ |
| 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? | | | | ■ |
| 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) Inundation by seiche, tsunami, or mudflow? | | | | ■ |
| IX. LAND USE AND PLANNING. Would the project: | | | | |
| 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? | | | | ■ |
| X. MINERAL RESOURCES. Would the project: | | | | |
| 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? | | | | ■ |
| XI. NOISE. Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | ■ | |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | | | | ■ |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | | ■ |

| ISSUES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-----------|
| 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? | | | | ■ |
| XII. POPULATION AND HOUSING. | | | | |
| Would the project: | | | | |
| 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? | | | | ■ |
| XIII. PUBLIC SERVICES. | | | | |
| a) 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 for any of the public services: | | | | ■ |
| Fire protection? | | | | ■ |
| Police protection? | | | | ■ |
| Schools? | | | | ■ |
| Parks? | | | | ■ |
| Other public facilities? | | | | ■ |
| XIV. RECREATION. | | | | |
| a) 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? | | | | ■ |
| b) 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? | | | | ■ |
| XV. TRANSPORTATION AND TRAFFIC. | | | | |
| Would the project: | | | | |

| ISSUES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | | | | ■ |
| b) Exceed, either individually or cumulatively, a level of service standard 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) Result in inadequate parking capacity? | | | | ■ |
| XVI. UTILITIES AND SERVICE SYSTEMS. Would the project: | | | | |
| 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 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? | | | | ■ |
| XVII. 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? | | ■ | | |

| ISSUES | Potentially Significant Impact | Less Than Significant With Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| 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? | | | | ■ |

Sources and Explanation of Answers

This section contains a brief explanation for all answers provided in the environmental checklist form.

I. AESTHETICS

During operation, the Viejo System Project would not adversely impact scenic vistas or scenic resources. The proposed site is currently graded, flat and located within a light industrial area. The project would change views from neighboring properties. Proposed LST and TSP structures and conductors would be visible; however, the Viejo Substation itself would be partially screened by a wall and perimeter fencing. Views from residential properties northeast of the site would be partially blocked by adjacent topography. It is likely; however, that the top portion of the new structures would be visible. The viewshed is not considered significant nor does the proposed site contain scenic visual resources.

The proposed Viejo Substation would have both security and operational lighting. The security lights would be low intensity lights and incorporated into the landscape and architectural aspects of the station. The security lights would be photo sensor controlled. The photo sensors would generally be in operation from the onset of nightfall until the break of dawn. Operations lighting would consist of high pressure sodium lights located in the switchracks, around the transformer banks, and in areas of the yard where manual activity may have to take place during night time hours. Lights would normally be off and controlled by a manual switch. No new sources of permanent light and glare would be created.

The proposed Viejo Substation would not adversely impact scenic views or scenic resources nor would new sources of permanent illumination be created. Thus, the proposed Viejo Substation is not anticipated to have a significant impact on aesthetic resources.

The proposed subtransmission line improvements would occur within an existing SCE corridor; and thus, would not adversely impact scenic vistas or damage scenic resources. No lighting would be installed within the corridor; thus, no new sources of light or glare would be created.

II. AGRICULTURE RESOURCES

No agricultural resources occur within or adjacent to the proposed Viejo Substation site or the 220 kV corridor. Thus, the project would have no impact on agricultural resources.

III. AIR QUALITY

Construction of the proposed Viejo System Project would generate emissions from the operation of heavy equipment and support vehicles. In addition, some dust could be generated during clearing, grading or scraping activities associated with site preparation. Particulate matter and exhaust emissions are not anticipated to exceed the South Coast Air Quality Management District impact thresholds.

After construction, the proposed project would not generate emissions; and thus, would not affect implementation of air quality management plans or expose people to substantial pollutant concentrations. The proposed project would not generate or expose people to odors.

IV. BIOLOGICAL RESOURCES

The proposed Viejo System Project would have an adverse impact on coastal sage scrub habitat and associated "identified" species associated with this habitat type unless mitigation is incorporated.

SCE is a participating landowner in the Central and Coastal Sub-region NCCP. As a participating landowner, SCE development activities and uses that are addressed by the Central and Coastal NCCP are considered fully mitigated under the Central and Coastal NCCP Act and the state and federal ESAs for impacts to covered habitats and habitat occupied by "identified" species. Take of Identified Species is authorized on all lands owned or controlled by participating landowners outside of the Reserve System, but within the Central and Coastal Sub-region. To minimize impacts on coastal California gnatcatchers presently using or in close proximity to coastal sage scrub, the *Minimization/Mitigation Measures – Construction Related Impacts* discussed above will be implemented. All *Additional Mitigation Measures* as discussed in Section 5.5.5 will also be implemented.

Any impacts to plants that are Identified Species are fully authorized under the Central and Coastal NCCP, while impacts to plants that are Conditionally Covered Species, such as foothill mariposa lily have mitigation provisions associated with the amount of allowable take. Planned activities impacting foothill mariposa lily populations smaller than 20 individuals are fully authorized under the Central and Coastal NCCP. For impacts to populations between 20 and 100 individuals, the activity shall be consistent with a mitigation plan that addresses impacts, modifications to the impacts associated with the construction of the activity, restoration techniques, and monitoring of existing or created populations. Potential impacts in the Central and Coastal NCCP to sensitive annual and bulb plant species cannot be analyzed until surveys are conducted in 2003. Additional surveys for this species will be conducted in 2003. The CPUC will be notified of the results of these surveys no later than June 9, 2003. If it is found that the Viejo System Project would impact between 20 to 100 individuals, mitigation will be implemented consistent with the mitigation measures described in the NCCP (II-254).

Many-stemmed dudleya was not detected during surveys and has a low potential to occur within the 220 kV corridor because the corridor lacks suitable habitat. However, if the species is found

within the corridor during SCE's surveys to be conducted in Spring 2003, measures will be implemented to avoid or reduce impacts to this species.

Implementation of all of the above-mentioned mitigation measures will reduce all impacts to biological resources to less than significant levels.

V. CULTURAL RESOURCES

Archaeological Resources: No known archaeological sites occur on or directly adjacent to the Viejo Substation site. No new resources were identified during the field survey performed as part of the cultural resources investigation for the proposed project. However, previously recorded archaeological resources occur in close proximity. As a result, SCE will conduct archaeological monitoring for all LST and TSP related ground-disturbing activities north of El Toro Road. Monitoring will reduce any potential impacts to less than significant levels,

Paleontological Resources: An analysis indicates that high sensitivity geologic units underlie the substation site and the proposed Alternative 1A 66 kV subtransmission line route. Construction of the substation and the proposed Alternative 1A 66 kV subtransmission line route may result in the destruction of significant paleontological resources unless proper mitigation measures are implemented. Implementation of the measures discussed in Section 5.6.5.1, Paleontological Resources, would mitigate all potential impacts to paleontological resources to a less than significant level.

VI. GEOLOGY AND SOILS

The proposed Viejo Substation site is not located within the Alquist-Priolo Earthquake Fault Zoning area; and thus, is not subject to the Alquist-Priolo Earthquake Fault Zoning Act. The site is not within proximity to any active earthquake faults; however, like all of southern California, it is subject to impact from seismic activities. The closest known active faults to the substation site are the Whittier-Elsinore, Newport-Inglewood, San Jacinto and the San Andreas fault zones. Since there is potential for an earthquake in the area, the substation would be constructed in accordance with the Institute of Electrical and Electronics Engineers (IEEE) 693 "Recommended Practices for Seismic Design of Substations" and buildings would be designed in accordance with the Uniform Building Code to minimize impact from possible seismic ground shaking, seismic-related ground failure or liquefaction.

The proposed Viejo Substation site is flat with cut-slopes rising to the east towards the transmission line corridor and natural slopes descending to the west to the SR 241 Foothill Transportation Corridor. The southern portion of the Foothill Ranch Planned Community is free of any significant slope stability problems (Southern California Edison, 1994). As noted, liquefaction within the alluvial sediments of the site is considered remote (Pacific Soils Engineering, Inc. W.O. 500071GP, 1994).

During construction, erosion control measures would be necessary to avoid and/or minimize soil erosion and deposition of surface materials off-site. Because project disturbance would be greater than 5 acres, specific erosion control measures would be identified as part of the

National Pollution Discharge Elimination System (NPDES) permit and Stormwater Pollution Prevention Plan (SWPPP) required for the project.

Geologic characteristics within the corridor are consistent with those associated with the proposed Viejo Substation site. As noted above, NPDES and SWPPP documentation would indicate appropriate mitigation measures to avoid and/or minimize erosion from cleared areas. Installation of foundations prior to the construction of the H-Frame structures will ensure stability and prevent movement during construction.

VII. HAZARDS AND HAZARDOUS MATERIALS

In August 2001, SCE conducted a public-record search in connection with the development of a property located one-quarter mile southwest of the proposed site. The search did not reveal any environmental concerns for any of the neighboring properties. A Hazardous Materials Assessment was performed on the proposed site on September 14, 2002. No hazardous or other materials were observed during the site visit.

While the proposed Viejo Substation site is free of any hazardous materials, construction would involve vehicles that could potentially leak oil while on site. SCE will follow its SWPPP to further prevent and/or minimize such risks.

Operation of the Viejo Substation would not involve the use of hazardous materials; and thus, would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous waste. The Viejo Substation will not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The site is also not located within an airport land use plan nor is the project within the vicinity of a private airstrip. The Viejo Substation would not impair implementation of or physically interfere with an adopted emergency response plan or evacuation plan nor will it expose people or structures to wildland fires.

The operation of the proposed project would not create additional hazards to the area. In compliance with State and Federal law, SCE will minimize fire risk by maintaining a brush clearance of no less than ten feet around energized components of the power line during construction and during subsequent operation of the line.

VIII. HYDROLOGY AND WATER QUALITY

Potential discharge, if any, would be limited to runoff during precipitation. As noted, a NPDES permit would be obtained and a SWPPP prepared to ensure consistency the Santa Ana Regional Water Quality Board's (SARWQB) water quality standards and/or discharge requirements.

All existing hillside drainage structures would be cleaned and repaired. A concrete curb and 3-foot drainage swale would be placed along the full length of and to the outside of the east fence to direct hillside runoff north, away from the substation pad. The site would have a crushed rock surface that would allow surface storm water to sheet flow from the southerly end of the

substation to three (3) existing concrete catch basins located at the northerly end of the graded pad, where it would be pumped and conveyed to the public storm water system through existing reinforced concrete pipes.

Runoff volumes are not forecasted to be substantial; and therefore, would not exceed the capacity of existing or planned storm water drainage systems. The proposed Viejo Substation site is not located on or in proximity to any known source of groundwater nor would groundwater resources be impacted during construction. All water would come from municipal sources.

There are no streams or rivers within close proximity to the Viejo Substation site; thus; no stream or river would be altered in a manner that would result in substantial erosion or siltation on or off site nor would storm water be directed into such resources. No housing would be constructed as part of the proposed project nor would structures be placed within a 100-year floodplain structure.

The existing and proposed subtransmission line route traverses over Aliso Creek, which is located just north of El Toro Road. No H-Frame structures would be constructed in proximity to Aliso Creek and all conductors would span the creek. The TSP nearest the creek is located several hundred feet to the south. Aliso Creek is located within the San Diego Regional Water Quality Control Board (SDRWQCB) jurisdiction. To minimize potential erosion during TSP removal, construction activities would be subject to storm water control measures identified in the SWPPP prepared to meet SARWQB and SDRWQCB requirements. Thus, the streambed and/or flow of Aliso Creek would not be impacted. Construction of the subtransmission line towers would not create nor contribute to runoff water that could exceed the capacity of existing or planned storm water drainage systems. No project components would be placed within the 100-year floodplain, as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation maps.

IX. LAND USE AND PLANNING

Construction: The proposed Viejo Substation site is part of the Foothill Ranch Planned Community Development. The substation site was zoned for light industrial use. The use of this site for a substation is consistent with the current land use designation. Construction of the proposed Viejo Substation would not cause the physical division of an established community or conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project as defined in Section 4.10 of this document.

The proposed Viejo Substation is located in a light industrial area. No established residential communities are located adjacent to the site. The nearest established community is located approximately 1 mile northeast of the site and would not be impacted by the proposed development. The proposed Viejo Substation would be considered a light industrial use; and thus, would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

The proposed site is located adjacent to the SCE Viejo Conservation Bank. Construction activities associated with the proposed Viejo System Project would not impact the adjacent SCE Viejo Conservation Bank.

Construction of the proposed subtransmission line would occur within an existing utility corridor; and thus, comply with applicable land use plans, policies and regulations for the City of Lake Forest and the City of Mission Viejo. The SCE corridor runs adjacent to light industrial and residential areas, and runs through recreational and open space areas, in both the City of Lake Forest and the City of Mission Viejo. However, because a new corridor is not being established, the project would not divide an established community or conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

X. MINERAL RESOURCES

In 1994, Pacific Soils Engineering conducted a geo-technical evaluation of the proposed Viejo Substation site and found no evidence of a mineral resource classified MRZ-2. The proposed site is not delineated as a locally important mineral resource recovery site in either the General Plan for the City of Lake Forest or Foothill Ranch Planned Community Specific Plan. No mineral resources would be impacted by project construction.

The subtransmission line corridor is not located in an area that contains known mineral resources nor is it delineated as a locally important mineral resource by the City of Lake Forest General Plan, Foothill Ranch Planned Community Development Specific Plan or the City of Mission Viejo General Plan. No impacts to mineral resources would occur.

Once operational the proposed substation and subtransmission lines would have no impact on mineral resources.

XI. NOISE

Substation construction would be subject to the City of Lake Forest Noise Ordinance (Chapter 11.16, Section 11.16.4-6 *Exterior Noise Standards*). It is designed to protect sensitive properties such as residences and does not apply to commercial or light industrial receivers. To remain in compliance, activities on site must not cause noise levels at receiving property lines to exceed 55 dBA during the daytime. Regulations are primarily designed to minimize noise associated with operation activities as temporary noise associated with substation construction would be exempted from the provisions of Chapter 11.16. As defined in Section 11.16.4-6 under Section 4-6-7(e), noise sources associated with construction, repair, remodeling, or grading of any real property are exempt provided activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a Federal Holiday.

Construction of the proposed substation and subtransmission line improvements would generally adhere to the provisions set by the City of Mission Viejo and the City of Lake Forest. It may be necessary, particularly during cut over activities, to work during nighttime hours when loads on the lines are reduced. In these instances, SCE will to the best of their ability comply with all local ordinances. However, should the need arise due to work outside the

aforementioned local ordinances, SCE would comply with variance procedures requested by the Cities of Lake Forest and Mission Viejo.

Monitoring data show that daytime sound levels at the Viejo Substation site average near 45 dBA. During nighttime hours, sound levels dropped to a minimum of 32.8 dBA between 3 and 4 a.m. Noise sources in the project area include traffic noise from SR 241, located south of the site, aircraft flyovers, local traffic and activities at business locations adjacent to the site.

As part of the noise analysis, potential noise levels associated with the operation of two new 220/66 kV. MVA transformers were studied. Study results show that the transformers would slightly increase noise levels at the Viejo Substation property line; however, noise would not be audible at the nearest commercial or residential receivers. Thus, because sensitive properties would not be subject to permanent increases in ambient noise levels, no noise impacts are anticipated to occur.

Once operational, the proposed substation and subtransmission lines would not cause noise impacts.

XII. POPULATION AND HOUSING

Construction of the Viejo System Project is being proposed in response to anticipated population growth within SCE's service area. The project is not anticipated to induce population growth; however, it would allow SCE to continue providing service to current and future customers. The proposed Viejo System Project would not displace existing housing and/or people necessitating relocation and/or construction of replacement housing elsewhere.

Operation of the proposed Viejo Substation is essential to meet projected electrical load requirements in the South Orange County area. Project operation would not displace any existing housing or people necessitating the construction of replacement housing. The proposed Viejo System Project is being constructed to meet projected electrical load requirements in the South Orange County area, and would not induce population growth either directly or indirectly. Construction would not displace any existing housing or people necessitating the construction of replacement housing.

XIII. PUBLIC SERVICES

The proposed project would improve the capacity and reliability of the utility system within SCE's South Orange County service area. Construction of the proposed Viejo System Project would have no effect on the provision of fire and/or police services or change the service ratios for schools, parks or other public services.

Construction of the proposed subtransmission line improvements would temporarily affect access to recreational resources as described in the following section. However, the service ratio would not be affected during either construction or operation.

XIV. RECREATION

The proposed Viejo Substation site is located within a light industrial area. No regional parks or recreational facilities occur on or in proximity to the site. No recreational impacts are anticipated to occur during project construction.

Construction of the proposed subtransmission line would not cause increased use of existing neighborhood and regional parks or other recreational facilities. However, because much of the corridor is located within developed recreation areas, construction of the project would have a temporary impact on recreational facilities. As noted, areas would be cleared and/or cordoned off for H-Frame tower installation and TSP removal. For safety reasons, park users would be prohibited from entering work areas. SCE will follow the work safety measures and traffic control plans in the *Work Area Protection and Traffic Control Manual* (California Joint Utility Traffic Control Committee 1996). The text in this manual conforms to guidelines established by the federal and state Departments of Transportation. Warning equipment would be placed to provide adequate notice to pedestrians they are approaching an excavation, obstruction, or other hazards. Warning signs would be removed as soon as the excavation, obstruction, or other hazard is cleared.

Once in operation, no impacts to recreational resources would occur.

XV. TRANSPORTATION/TRAFFIC

During construction of the proposed Viejo Substation, approximately 160-200 truck trips would be generated to haul up to 5,500 cubic yards of material off-site. Assuming clearing, grubbing and soil removal occurred over a period of one month (30 days), approximately 5-7 truck trips per day would be required. Additional trips would be required initially to bring materials and equipment to the site. Workers would generate between 15-20 trips daily.

Construction traffic would be similar in scope to ongoing activities occurring within the Foothill Ranch Planned Community. There is a possibility that vehicular traffic on adjacent arterials may temporarily be slowed due to truck ingress and egress. Because the road network to and from the proposed site is comprised of urban arterials, no impact to traffic circulation is anticipated. Operation of the substation would require periodic maintenance visits. These are anticipated to occur 2-3 times per month and would not adversely impact traffic.

During construction of the subtransmission line, temporary traffic slow downs may occur as equipment is moved from public roadways onto SCE access roads. Because construction would not occur on public roadways, no impact to traffic circulation is anticipated. Operation of the subtransmission lines would require periodic maintenance visits. These are anticipated to occur 2-3 times per month and would not adversely impact traffic.

XVI. UTILITIES AND SERVICE SYSTEMS

The proposed project would improve the capacity and reliability of the utility system within SCE's South Orange County service area. The proposed project would not require wastewater disposal; and thus, would not exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board. The project would not require nor 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.

Underground storm drains are in place and would connect with the existing City of Lake Forest stormwater system. Potable water would be used on site only for fire suppression. Thus, there would no increase in demand for new or expanded entitlements to provide sufficient water supplies. Public services such as police and fire would be provided by the City of Lake Forest.

During construction of the subtransmission line improvements, as with all SCE crews or SCE approved contractors, Underground Service Alert (USA) would be contacted in the prescribed amount of time to ensure minimal impact to other utilities. Thus, construction of the new subtransmission line is not anticipated to have an impact on utilities or the provision of public services. Once in operation, the project would have no adverse impact on the provision of public services or utilities within the study area.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

As discussed herein, the proposed project has potential to degrade the quality of the environment, reduce wildlife habitat, reduce the number or restrict the range of a rare or endangered species and eliminate important examples of the major periods of California history or prehistory. However, implementation of mitigation as discussed in Sections 5.5.5 and 5.6.5 would mitigate all potential impacts to less than significant levels.

For the reasons described in Chapters 5, 6, 7, 8 and 9, neither the proposed project nor alternative subtransmission line routes have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.

For the reasons described in Chapters 7 and 8, neither the proposed project nor alternative subtransmission line routes have the potential to cause impacts that are individually limited, but cumulatively considerable.

For the reasons discussed in this document, neither the proposed project nor alternative subtransmission line routes have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.