

PUBLIC UTILITIES COMMISSION505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298**MITIGATED NEGATIVE DECLARATION****SOUTHERN CALIFORNIA EDISON'S VIEJO SYSTEM PROJECT
APPLICATION NO. A.03-03-043****Introduction**

Pursuant to California Public Utilities Commission's (CPUC) General Order 131-D, Southern California Edison (SCE) has filed an application (A.03-03-043) with the CPUC for a Permit to Construct for the Viejo System Project (proposed project). The Application was filed on March 21, 2003, and includes the Proponent's Environmental Assessment (PEA), prepared by SCE pursuant to Rules 17.1 and 17.3 of CPUC's Rules of Practice and Procedure. The proposed project includes construction of the 220/66/12 kilovolt (kV) Viejo Substation on a 12.5-acre site located in the City of Lake Forest, and a 3.1-mile 66 kV subtransmission line along the corridor between the proposed Viejo Substation and the existing Chiquita Substation located in the City of Mission Viejo. In addition, the proposed project would include the replacement of 19 double-circuit tubular steel poles with 13 H-frame structures capable of carrying four 66 kV circuits, and the installation of two optical ground wires. SCE's project objective is to improve reliability and meet projected electrical load requirements in the south Orange County area. In accordance with the CPUC's General Order 131-D, approval of this project must comply with the California Environmental Quality Act (CEQA).

Pursuant to CEQA, the CPUC must prepare an Initial Study (IS) for the proposed project to determine if any significant adverse effects on the environment would result from project implementation. The IS utilizes the significance criteria outlined in Appendix G of the CEQA Guidelines. If the IS for the project indicates that a significant adverse impact could occur, the CPUC would be required to prepare an Environmental Impact Report.

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA Guidelines, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- (b) *The initial study identifies potentially significant effects, but:*
 - (1) *Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - (2) *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

Based on the analysis in the Initial Study, it has been determined that all project-related environmental impacts could be reduced to a less-than-significant level with the incorporation of feasible mitigation measures. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA. The mitigation measures included in this MND are designed to reduce or eliminate the potentially significant environmental impacts described in the Initial Study. Where a measure described in this document has been previously incorporated into the project, either as a specific project design feature or as an applicant-proposed measure, this is noted in the discussion. Mitigation measures are structured in accordance with the criteria in Section 15370 of the CEQA Guidelines.

Project Description

The proposed project would include construction of a new electrical substation within the City of Lake Forest, California, and the addition of a new 66 kV circuit within an existing transmission corridor crossing portions of the Cities of Lake Forest and Mission Viejo, California. The corridor currently contains two 220 kV transmission lines and two 66 kV circuits on lattice steel towers and double-circuited tubular steel poles, respectively. The Viejo System Project proposes to construct H-frame structures to carry the two existing 66 kV circuits and a new 66 kV circuit. These new H-frame structures would replace the existing double-circuited tubular steel poles and would have capacity to carry an additional fourth circuit (a fourth circuit is not proposed). Project components include:

- Construction of the Viejo Substation on a 12.5-acre site adjacent to State Route 241 in the City of Lake Forest
- Addition of a new 3.1-mile 66 kV line between the Chiquita and the proposed Viejo Substations.
- Replacement of 19 double-circuit tubular steel poles with 13 H-frame structures
- Replacement of three 220 kV lattice towers to relocate 0.3 miles of 220 kV line into the Viejo Substation

The Viejo System Project study area includes the proposed substation site and a 3.1-mile segment of the existing 220/66 kV transmission corridor located between the proposed substation site and the Chiquita Substation. The transmission corridor is located within the Cities of Lake Forest and Mission Viejo, and the site of the proposed substation is located in the Foothill Ranch Planned Community within the City of Lake Forest. All portions of the proposed project are located within Orange County, California.

Alternatives

The purpose of an alternatives analysis pursuant to CEQA is to identify options that would feasibly attain the project objectives while reducing the significant environmental impacts resulting from the proposed project. CEQA does not require the inclusion of an alternatives analysis in MNDs because the Initial Study concludes that, with incorporation of mitigation measures, there would be no significant adverse impacts resulting from the proposed project. Therefore, no alternatives analysis needs to be provided in the Initial Study. However, pursuant to Section IX.B.1.c of CPUC General Order 131-D, SCE's application did consider alternative routes and other methods to relieve forecast demand. The application discussed advantages and disadvantages of each option, and carried three route alignments forward for additional analysis in the Proponent's Environmental Assessment (PEA). Appendix 8 compares these options, as well as two additional route alignments considered by the CPUC.

Environmental Determination

The Initial Study was prepared to identify the potential environmental effects resulting from proposed project implementation, and to evaluate the level of significance of these effects. The Initial Study is based on SCE's PEA filed on March 21, 2003, project site reconnaissance by the CPUC environmental team, and other environmental analyses for the project. Measures addressing potentially significant impacts, proposed in SCE's PEA, are referred to as Applicant Proposed Measures (APMs) and are incorporated into the Project Information section of the Initial Study (see Table C.1-3 in Section C, Initial Study). Based on the Initial Study analysis, additional mitigation measures are recommended to ensure that proposed project impacts are at insignificant levels upon implementation. The additional mitigation measures either supplement, or supersede the APMs. SCE has agreed to implement all of the additional recommended mitigation measures as part of the proposed project.

Implementation of the following mitigation measures would avoid potentially significant impacts identified in the Initial Study or reduce them to less-than-significant levels.

Aesthetics

A-1 SCE shall design and implement a landscape-screening plan that is effective in screening the proposed Viejo Substation from views from the Edison Trail. The Screening Plan shall include the strategic planting of trees and appropriate shrubs of sufficient height and density to screen views of the substation, to the extent possible, within five years of completion of substation construction. The Screening Plan shall be developed in consultation with the CPUC's Aesthetics Specialist to ensure the Plan would effectively meet the objectives of this measure. The Plan shall be submitted to the CPUC for review and approval during project design. The CPUC must approve the Screening Plan prior to implementation and the start of any construction. SCE must fully implement the plan within 30 days of the completion of the substation.

A-2 SCE shall design and install all permanent lighting at the Viejo Substation such that:

- Light bulbs and reflectors are not visible from public viewing areas including residential developments and nearby roads,
- Lighting does not cause reflected glare, and
- Illumination of the project, the vicinity, and the nighttime sky is minimized.

To meet these requirements, SCE shall submit a Lighting Mitigation Plan to the CPUC that includes but is not necessarily limited to the following:

- Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary;
- All lighting shall be of minimum necessary brightness consistent with worker safety; and
- High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.

Air Quality

The following mitigation measures accomplish these objectives to reduce NO_x emissions during construction to a level of insignificance:

AQ-1 To reduce simultaneous project-related NO_x emissions from on-highway haul trucks and off-road heavy construction equipment, given the constraints of the construction schedule, SCE

shall phase project construction, to the extent feasible, so that off-site disposal of excavated material from Viejo Substation grading and excavation does not occur simultaneously with transmission line construction or modification activity (including, but not limited to, access grading, excavation for tower bases, crane pads, tower delivery, or tower erection). During transmission line construction or modification, SCE shall phase the project construction schedule, to the extent feasible, so that grading and excavation for site access, tower bases, or crane pads do not occur simultaneously with tower delivery or erection.

- AQ-2** SCE shall obtain competitively bid construction materials, including heavy equipment, from the nearest feasible location, where cost and quality are comparable, and export excavated materials to the nearest feasible destination.
- AQ-3** SCE shall use diesel engines that meet, at a minimum, 1996 CARB or U.S. EPA-certified standards for off-road equipment that has a rating of more than 100 horsepower. Installing high-pressure diesel injectors and installing retard injection timing on any off-road equipment that was manufactured prior to 1996 may accomplish this.
- AQ-4** SCE shall substitute small electric-powered equipment for diesel- and gasoline-powered construction equipment where feasible.
- AQ-5** SCE shall maintain construction equipment per manufacturing specifications.
- AQ-6** SCE shall prohibit all vehicles from idling in excess of ten minutes if not being utilized for construction activities.

Impacts on Sensitive Species

- BIO-1** SCE shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews. All construction crews and contractors shall participate in WEAP training prior to starting work on the project. The WEAP training shall include a review of the special-status species and other sensitive resources that could exist in the project area (including their life history and habitat requirements), the locations of sensitive biological resources, and their legal status and protection under the U.S. Endangered Species Act of 1973 (6 USC 1536). The education program shall include materials describing sensitive resources, resource avoidance, permit conditions, and possible fines for violations of State or federal environmental laws. The program shall cover the mitigation measures, environmental permits, proposed project plans, reclamation plans, and any other required plans.

SCE shall be responsible for ensuring that all project personnel and subcontractors adhere to the guidelines and restrictions set forth in the WEAP training. Training shall be conducted as needed to update crews as they commence work on the project or as crews advance into sensitive areas. Project personnel shall receive a hardhat sticker or be issued a card verifying compliance with the WEAP. In addition, a record of all personnel trained during the project shall be maintained and made available for compliance verification.

- BIO-2** In the event that SCE encounters unanticipated sensitive biological resources outside of the Central and Coastal NCCP (California gnatcatchers, cactus wrens, or other sensitive bird species) or species not covered by the Central or Coastal NCCP, SCE shall halt construction within 250 feet of the biological resources and notify the CPUC within 24 hours. Work shall commence after a qualified biologist, in consultation with the appropriate resource agency and CPUC, has determined that impacts to the species will be reduced to less-than-significant levels. See the Unanticipated Biological Resource Flowchart (Figure C-1) in the Mitigation Monitoring Plan (Section C).
- BIO-3** SCE shall limit construction activities, staging areas, and access roads to the project footprint defined in the SWPPP, at all times. Prior to construction, SCE shall clearly delineate all work

areas, approved access roads, and laydown areas. Use of areas outside the project area will be subject to approval by the CPUC. See the Temporary Extra Work Space Request Form (Figure C-2) in the Mitigation Monitoring Plan (Section C).

- BIO-4** SCE shall conduct pre-construction surveys in the Central and Coastal NCCP to quantify the number of foothill mariposa lilies present and flag known populations prior to commencing construction.
- BIO-5** SCE shall remove trash and litter from the project right-of-way at the conclusion of each work week and prohibit open fires (e.g., barbecues), hunting, and pets from the project area.
- BIO-6** SCE shall conduct project-wide raptor surveys and remove trees, if necessary, outside the nesting season (Feb 1-August 31), if possible. If a tree containing a raptor nest must be removed during the nesting season, SCE shall coordinate with the CDFG and USFWS and obtain written verification prior to moving the nest.

Impacts on Riparian Habitat

- BIO-7** Construction equipment and vehicles shall not be operated within riparian habitat without obtaining a Streambed Alteration Agreement or written approval from the CDFG that a Streambed Alteration Agreement is not required. Riparian buffer zones shall be clearly marked for avoidance prior to construction. No removal of native riparian vegetation shall occur unless authorized by the Streambed Alteration Agreement.
- BIO-8** SCE shall conduct restoration and re-seeding of areas temporarily disturbed by project construction and implemented the restoration plan during the optimal time for seedling establishment.

Impacts on Wetlands

- BIO-9** SCE shall provide a Storm Water Pollution Prevention Plan (SWPPP) for construction activities associated with the Viejo System Project to the CPUC prior to ground disturbance. Cultural Resources

Cultural Resources

- CR-1** SCE shall plan construction to avoid CA-ORA-905 and shall install protective fencing around CA-ORA-905 prior to construction. If avoidance is not feasible, SCE shall submit a data recovery plan to the CPUC for review and approval prior to data recovery. The data recovery plan shall include collection and analysis of all surface artifacts. Locations from where the artifacts were collected shall be documented on a site map using the point provenience method. The plan shall provide for subsurface testing, followed by recovery of a valid sample of subsurface cultural material, if testing indicates its presence. The plan shall also include preparation of a report that provides the results of data recovery.
- CR-2** SCE shall immediately halt all construction activities within 100 feet of any potential unanticipated cultural or historical resources encountered during construction. A qualified archaeological or cultural resources specialist shall examine the findings, assess their significance, and identify any additional exploratory measures deemed necessary for the further evaluation of and/or mitigation to reduce adverse impacts to any potential historical or archaeological resources. SCE shall notify the CPUC monitor and the local jurisdiction (City or County) immediately in the event of a potential unanticipated cultural resource.

SCE shall incorporate the following provisions into the grading and construction contracts to address the potential to encounter currently unknown cultural resources:

- If the find is determined to be historical or contain significant archaeological resources, and if avoidance of the resource is not possible, the archaeological or cultural resources specialist shall prepare a plan for the methodical excavation of those portions of the site that would be adversely affected. The plan shall be designed to result in the extraction of archaeological data to address important regional research considerations and shall be submitted to the CPUC for approval prior to implementation. The work shall be performed by the archaeological or cultural resources specialist, and shall result in a detailed technical report at the conclusion of data recovery and shall be submitted to the CPUC and the California Historical Resources Regional Information Center. Construction shall not resume within 100 feet of the site without written authorization by the CPUC. Refer to the Unanticipated Cultural Resource Flow Chart (Figure C-3) in the Mitigation Monitoring Plan (Section C).
- During the Worker Environmental Training Program (WEAP), SCE shall ensure that project personnel are informed that law prohibits collection of significant historical or archaeological resources. WEAP training will identify prehistoric or Native American resources including chert or obsidian flakes, projectile points, mortars and pestles, as well as dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources can include nails, bottles, or other items often found in refuse deposits.
- If human remains are discovered, SCE shall immediately cease all construction activities within 100 feet of the find. SCE shall cordon off the area and there shall be no further excavation or disturbance of the discovery site or any nearby area reasonably suspected to overlie adjacent human remains until SCE has complied with the provisions of State CEQA Guidelines Section 15064.5(e). SCE shall immediately notify the County Coroner and the CPUC monitor. If the remains are found to be Native American, the County Coroner shall notify the Native American Heritage Commission (Commission or NAHC) within 24 hours. The most likely descendant of the deceased Native American shall be notified by the Commission and given the chance to make recommendations for the remains. If the Commission is unable to identify the most likely descendent (MLD), or if no recommendations are made within 24 hours, remains may be re-interred with appropriate dignity elsewhere on the property in a location not subject to further subsurface disturbance after written approval by the CPUC. If recommendations from the MLD are made and not accepted, the Native American Heritage Commission will mediate the problem. Refer to the Unanticipated Discovery of Human Remains Flow Chart (Figure C-4) in the Mitigation Monitoring Plan (Section C).

Geology and Soils

GEO-1 SCE shall perform geotechnical studies for the length of the project alignment to make design and construction recommendations for slope stability, liquefaction potential, subsidence, collapse, or seismic ground failure. Prior to construction SCE shall provide the CPUC with written verification that the applicable geotechnical studies have been conducted and that suitable structural features have been incorporated into the substation design to minimize damage from seismic-related ground failure.

Hazards and Hazardous Materials

HAZ-1 The northern one-half mile of the alignment crosses undeveloped, fire-prone areas. Specific care should be exercised to prevent fires in this area when constructing new towers. During construction, fire prevention protocols shall be used, which include spark arrestors on vehicles and equipment; fire mats or shields during grinding, welding and torch cutting, carrying water and fire extinguishers; and not operating or parking vehicles in areas of dry, fire-prone vegetation. Operation of the project shall include brush clearing at substation facilities and maintenance of access roads consistent with applicable fire codes to provide access for fire-fighting equipment and personnel.

Recreation

R-1 Avoidance of Peak Use Periods and On-Site Notification. SCE shall provide onsite notification, and notify affected jurisdictions, of recreational access closures at least two weeks in advance, through the posting of signs and/or notices at all public entrances. Documentation of such notification should be submitted to CPUC.

A Mitigation Monitoring Plan has been prepared to ensure that the APM and mitigation measures presented above are properly implemented. The plan describes specific actions required to implement each measure, including information on timing of implementation and monitoring requirements. Any work conducted in the public right-of-way shall require approval of an encroachment permit or other applicable ministerial permit issued by the affected jurisdiction, and any necessary traffic control plans shall be provided to the affected jurisdiction for review and approval.

Based on the analysis and conclusions of the Initial Study, the impacts of the project as proposed by SCE would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented herein, which have been incorporated into the proposed project.