

## C.12 Socioeconomics

This section presents comprehensive baseline population, housing, and employment data applicable to the proposed Project and alternatives. A discussion of growth-inducing effects is included in Section E.1.4, and is not evaluated within this socioeconomic analysis. Similarly, Environmental Justice is addressed in Section E.2.11 and is not evaluated within the Socioeconomics section. As illustrated in Figure B.2-1 within Section B (Project Description), the study area for the proposed Project and alternatives includes Los Angeles County, the Cities of Santa Clarita, Lancaster, and Palmdale, with portions of the project ROW located within unincorporated areas of Los Angeles County and National Forest System (NFS) lands. Regional, local, and site-specific socioeconomic information is presented in Sections C.12.1.1 through C.12.1.3. Current demographic data are provided from the Year 2000 U.S. Census. Estimates of population, housing, and employment are prepared annually through a joint effort of the Southern California Association of Governments (SCAG) for jurisdictions, subregional areas, and major statistical areas.

### C.12.1 Affected Environment

#### C.12.1.1 Demographic Characteristics

As indicated in Table C.12-1, the U.S. Census Year 2000 population of Los Angeles County was 9,519,338 residents. During the period between 2000 and 2020, the population of Los Angeles County is estimated to increase by approximately 28 percent, resulting in a 2020 population of approximately 12,249,200 residents. In comparison, the year 2000 population of the City of Santa Clarita was 151,088 residents, which accounts for 1.6 percent of the total Los Angeles County population. Year 2020 population projections for the City of Santa Clarita expect the population to increase to 197,821 residents, which is an increase of 31 percent. The year 2000 population of the City of Lancaster was 118,718 residents, which accounts for 1.2 percent of the total Los Angeles County population. Year 2020 population projections for the City of Lancaster expect the population to increase to 149,584 residents, which is an increase of 26 percent. The year 2000 population of the City of Palmdale was 116,670 residents, which accounts for 1.2 percent of the total Los Angeles County population. Year 2020 population projections for the City of Palmdale expect the population to increase to 144,942 residents, which is an increase of 24 percent.

Location	2000	2010	2020	2000-2020 Change (%)
Los Angeles County	9,519,338	10,868,900	12,249,200	2,729,862 (28%)
City of Santa Clarita	151,088	172,229	197,821	46,733 (31%)
City of Lancaster	118,718	132,574	149,584	30,866 (26%)
City of Palmdale	116,670	130,463	144,942	28,272 (24%)

Source: Sources: U.S. Census, 2000 and SCAG, 2002.

#### C.12.1.2 Housing Characteristics

As indicated in Table C.12-2, the 2000 U.S. Census showed that there were 3,270,909 housing units within Los Angeles County, of which 4.2 percent were vacant. Between 2000 and 2020, the number of housing units within Los Angeles County is estimated to increase by approximately 30 percent, resulting in 4,252,181 housing units by the year 2020. In comparison, the City of Santa Clarita contained 52,442 housing units in 2000, which accounts for 1.6 percent of the total Los Angeles County housing units. Year 2020 projections for

the City of Santa Clarita expect the number of housing units to total 70,245, which is an increase of 34 percent. The City of Lancaster contained 41,745 housing units in 2000, which accounts for 1.3 percent of the total Los Angeles County housing. Year 2020 projections for the City of Lancaster expect the number of housing units to increase to 55,938 by the year 2020, which is an increase of 34 percent. The City of Palmdale contained 37,096 housing units in 2000, which accounts for 1.1 percent of the total Los Angeles County housing. Year 2020 projections for the City of Palmdale expect the number of housing units to increase to 50,451 by the year 2020, which is an increase of 36 percent.

Location	2000	2010	2020	2000-2030 Change (%)
Los Angeles County Vacancy Rate	3,270,909 137,135 (4.2%)	3,863,330	4,252,181	981,272 (30%)
City of Santa Clarita Vacancy Rate	52,442 1,655 (3.2%)	61,210	70,245	17,803 (34%)
City of Lancaster Vacancy Rate	41,745 3,521 (8.4%)	48,868	55,938	14,193 (34%)
City of Palmdale Vacancy Rate	37,096 2,811 (7.6%)	44,721	50,451	13,355 (36%)

\*Totals include both occupied and unoccupied housing units  
 Sources: U.S. Census, 2000 and SCAG, 2002.

As indicated in Table C.12-3, the 2000 U.S. Census showed that the average owner-occupied housing cost within Los Angeles County was \$201,400. In comparison, the year 2000 average housing cost in the City of Santa Clarita was \$216,900, while the average housing cost in the City of Lancaster was \$97,800 and the average housing cost in the City of Palmdale was \$113,600 during the same period.

Location	2000
Los Angeles County	\$201,400
City of Santa Clarita	\$216,900
City of Lancaster	\$97,800
City of Palmdale	\$113,600

Source: U.S. Census, 2000.

### **C.12.1.3 Employment Characteristics**

To examine labor force characteristics, it is assumed that most workers would commute one to two hours to the proposed Project area. Due to the location of the project area, and the size of the labor force within Los Angeles County, it is assumed that all labor force would come from within Los Angeles County. The majority of the labor force that would be involved in construction of the proposed Project is listed in the California Employment Development Department’s (EDD) labor force statistics as “Construction,” and many of the workers fall into the “Specialty Trade Construction” workforce under “Construction” (EDD, 2005). Table C.12-4 provides the total number of workers within the study area for the year 2000, including those identified as employed within the “Construction” category.

As shown in Table C.12-4, of the total 4,312,264 workers within Los Angeles County, 202,829 (or 4.7 percent) worked in the construction trades in the year 2000. In comparison, the City of Santa Clarita contains 4,612 workers in the construction trades (or 5.8 percent of the total year 2000 workforce), while the City of

Lancaster contains 2,723 workers in the construction trades (or 5.5 percent of the total year 2000 workforce) and the City of Palmdale contains 5,261 workers in the construction trades (or 12.1 percent of the total year 2000 workforce).

Location	2000
Los Angeles County	4,312,264
Construction Trades	202,829 (4.7%)
Unemployment Rate	354,347(8.2%)
City of Santa Clarita	79,198
Construction Trades	4,612 (5.8%)
Unemployment Rate	3,788 (4.9%)
City of Lancaster	49,136
Construction Trades	2,723 (5.5%)
Unemployment Rate	5,445 (11.1%)
City of Palmdale	48,286
Construction Trades	5,261 (12.1%)
Unemployment Rate	4,709 (6.1%)

\*includes both civilian and military employment  
 Source: U.S. Census, 2000 and SCAG, 2002.

As shown in Table C.12-5, in the year 2002 within Los Angeles County, the largest number of business establishments and employees were in the professional and scientific services sector. However, the wholesale trades sector had the largest revenue dollars, while the manufacturing sector had the largest annual payroll.

Industry	Number of Establishments	Revenue in Dollars	Annual Payroll	Number of Employees
Manufacturing	17,208	108,146,795	19,997,875	531,125
Wholesale Trade	22,503	198,703,926	11,180,002	268,215
Retail Trade	28,636	92,100,128	9,229,786	378,933
Information Services and Public Admin.	8,419	N/A	11,950,462	196,046
Real Estate and Construction	11,748	18,288,717	2,892,245	80,912
Professional and Scientific Services	27,228	46,298,686	18,648,945	472,705
Waste Management and Remediation	10,161	14,014,569	6,351,948	276,704
Educational Services	1,816	1,201,198	418,327	17,668
Health Care and Social Assistance	25,087	39,939,654	14,872,337	410,340
Arts, Entertainment, and Recreation	9,028	11,672,471	5,195,906	89,734
Accommodation and Food Services	17,074	14,211,642	4,078,661	290,380
Other Services	16,091	10,637,545	2,816,107	121,669

Source: U.S. Census, 2002.

## C.12.2 Regulatory Framework

### C.12.2.1 Federal

**National Environmental Policy Act (NEPA).** Under NEPA, an EIS must discuss social and economic effects if they are related to the natural or physical effects, and the definition of “effects” includes economic and social factors. Implementation of NEPA (40 CFR Parts 1500-1508) defines (Section 1508.8) “effects” to include, among other things, economic and social effects, whether direct, indirect, or cumulative.

**Executive Order 12898 – Environmental Justice.** On February 11, 1994, President Clinton issued an “Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (Executive Order 12898, 1994). This Order is designed to focus federal attention on environmental and human health conditions in minority communities and low-income communities. The Order is further intended to promote non-discrimination in federal programs substantially affecting human health and the environment and to provide for information access and public participation relating to such matters. Environmental Justice is addressed in Section E.2.11 of this document and is not further addressed in this section.

**Forest Service Handbook 1909.17 - Economic and Social Analysis Handbook.** This handbook provides guidance on the evaluation of economic and social effects of policies, plans, programs, and projects with the goal of promoting consistent use of social and economic analysis in Forest Service Projects. In addition to providing guidance on using economic estimates and measures, the document also provides direction on selecting and analyzing social variables. Social variables discussed in the Forest Service Handbook include (USDA Forest Service, 2005):

- Lifestyles;
- Attitudes beliefs and values;
- Population;
- Housing Characteristics;
- Employment;
- Social Organization; and
- Land Use Patterns.

Some of these variables, such as population, housing, and employment, are addressed in this section. Land use patterns are addressed in Section C.4. Due to the type of this project and the qualitative nature of variables such as lifestyles, attitudes and beliefs, and social organization, these variables were not selected for analysis in this section based on both CEQA and NEPA requirements for socioeconomic analysis (as described below).

### C.12.2.2 State

**California Environmental Quality Act (CEQA).** Title 14 of the California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act, Article 9(a), Section 15131, states the following in regards to Economic and Social Effects:

- (a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace the cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the cause and effect. The focus of the analysis shall be on the physical changes.
- (b) Economic or social effects of a project may be used to determine the significance of physical changes caused by the project. For example, if the construction of a new freeway or rail line divides an existing community, the construction would be the physical change, but the social effect on the community would

be the basis for determining that the effect would be significant. As another example, if the construction of a road and the resulting increase in noise in an area disturbed existing religious practices in the area, the disturbance of the religious practices could be used to determine that the construction and use of the road and the resulting noise would be significant effects on the environment. The religious practices would need to be analyzed only to the extent to show that the increase in traffic and noise would conflict with the religious practices. Where an EIR uses economic or social effects to determine that a physical change is significant, the EIR shall explain the reason for that determination.

- (c) Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR. If information on these factors is not contained in the EIR, the information must be added to the record in some other manner to allow the agency to consider the factors in reaching a decision on the project.

### **C.12.2.3 Local**

#### **City of Santa Clarita General Plan: Economic Development and Community Revitalization Element.**

The following goals within the City of Santa Clarita General Plan are applicable to the proposed Project:

- Policy 2.5. Coordinate the timing of development with the phased provision of local infrastructure, including allocations of utility/pipeline/communications franchises within the planning area.
- Policy 4.6. Consider financial impacts in connection with the provision and ongoing maintenance of public services and infrastructure.
- Policy 7.3. Determine which rights-of-way are likely to change in character in the near future, and the degree to which right-of-way improvements can stimulate adjacent private land assembly and re-use.

**City of Lancaster General Plan: Plan for Economic Development and Vitality.** The following goals within the City of Lancaster General Plan are applicable to the proposed Project:

- Policy 16.3.1(b). Through the implementation of the Urban Structure Program, promote the development patterns designed to reduce municipal infrastructure and facility improvements and maintenance costs.

### **C.12.3 Significance Criteria**

NEPA provides no specific thresholds of significance for socioeconomic impact assessment. Significance varies, depending on the setting of the proposed action (40 CFR 1508.27[a]), but 40 CFR 1508.8 states that indirect effects may include those that are growth inducing and others related to induced changes in the pattern of land use, population density, or growth rate. With respect to CEQA, socioeconomic impacts are those that could be considered direct effects on the environment, such as changes to population and housing, and that are separate from strictly economic impacts, such as a loss of revenue. In EIR documents, the criteria typically used to determine the significance of project-related socioeconomic impacts are in the CEQA Checklist Form.

Socioeconomics impacts would be considered significant if the proposed Project:

- Criterion SOC1: Displace substantial numbers of existing housing or persons necessitating the construction of replacement housing elsewhere.
- Criterion SOC2: Cause substantial change in local employment.
- Criterion SOC3: Cause a substantial change in revenue for local businesses.
- Criterion SOC4: Cause a substantial change in public agency revenue.
- Criterion SOC5: Result in a substantial alteration of property values.

### **C.12.4 Applicant-Proposed Measures (APMs)**

SCE did not include any Applicant-Proposed Measures (APMs) for socioeconomic resources within the PEA.

### **C.12.5 Impact Analysis: Proposed Project/Action**

#### **Displace substantial numbers of existing housing or persons necessitating the construction of replacement housing elsewhere (Criteria SOC1)**

The proposed Project would involve the construction of a new 25.6-mile 500-kV transmission line between SCE's existing Antelope and Pardee substations, following an existing SCE 66-kV ROW. The project route does not contain any habitable housing structures and would not require the removal of any housing units. While residential developments occur along the route, all project developments would occur along the existing ROW and would not require the removal or relocation of any residential units or business uses. Therefore, no persons or housing would be displaced and no replacement housing would be required. No impacts would occur; therefore, no mitigation measures are recommended.

#### **Cause substantial change in local employment (Criterion SOC2)**

Construction employment for the proposed Project would include skilled or semi-skilled positions including line workers, welders, heavy equipment operators, surveyors, engineers, utility equipment workers, truck drivers, warehouse workers, clerical workers, and laborers. As indicated in Table C.12-4, Employment Characteristics, Los Angeles County contains a large construction workforce. As indicated in Section B, Project Description, Table B.2-2 Project Labor Force Requirements, the workforce necessary for construction of the proposed Project is anticipated to range from approximately 20 to 120 personnel, with an estimated average daily workforce of 50 personnel. The maximum required construction workforce of 120 personnel required for the proposed Project would comprise 0.06 percent of the total Los Angeles County construction workforce. Therefore, no workers are expected to relocate to the area permanently for construction and no new workers are required for operation of the Project. The Project would not result in any impacts to the existing local employment conditions; therefore, no mitigation measures are recommended.

#### **Cause a substantial change in revenue for local businesses (Criteria SOC3)**

A wide range of land uses are near or adjacent to the proposed Project route, including commercial and industrial uses, residential developments, agricultural uses, and the Angeles National Forest. While business uses occur along the route, all project developments would occur along the existing ROW and would not require the removal or relocation of any business uses. Impacts on local businesses could result from visual impacts, vehicular or pedestrian access impacts, land use impacts, or health and safety concerns (such as EMF). These issues and potential impacts are analyzed extensively in this document in Sections C.15 (Visual Resources), C.13 (Traffic/Transportation), C.9 (Land Use), and C.6 (Environmental Contamination). Where proposed Project impacts for these issue areas are found to be less than significant or have been mitigated to less-than-significant levels, any associated local business revenue impacts are unlikely to be significant. Therefore, no specific mitigation measures are recommended outside of those presented in Sections C.15 (Visual Resources), C.13 (Traffic/Transportation), C.9 (Land Use), and C.6 (Environmental Contamination) to mitigate potential impacts that could result in a substantial change to local business revenues.

***Impact S-1: Construction activities could cause a temporary decrease in revenues for Veluzat Motion Picture Ranch.***

As described in Sections C.9 (Land Use), C.10 (Noise), and C.15 (Visual Resources), Mile 18.6 to 20.3 of the proposed Project would create a new ROW in Haskell Canyon, traversing the Veluzat Motion Picture Ranch (Ranch) and resulting in temporary construction activities, which would preclude the Ranch's use of specific outdoor landscapes and sets. As this would occur on privately owned land, there would be no impact to NFS lands. As proposed, the Project would construct lattice steel towers and string conductor immediately adjacent to the outdoor sets, resulting in noise and dust that could interfere with film operations. Additionally, the presence of construction equipment would result in temporary visual obstructions. Consequently, construction of the proposed Project would result in impacts that would obstruct, restrict, and interfere with filming activities and any associated Ranch operations. By limiting the location and timing of filming, the proposed Project would negatively affect revenues for the Veluzat Motion Picture Ranch by precluding the facility's current business activities. This would be a significant impact. Mitigation Measure S-1 (Coordination with Veluzat Motion Picture Ranch for the Scheduling of Construction Activities) would address the temporary impacts associated with construction of the proposed Project and incorporation of this mitigation measure would reduce any significant impacts to business revenue to less-than-significant levels (**Class II**).

Further revenue impacts to the Veluzat Motion Picture Ranch could result from noise impacts limiting filming activities during project construction. Noise impacts are analyzed extensively in Section C.10 (Noise). While direct construction noise impacts to the Veluzat Motion Picture Ranch are considered significant and unavoidable, as presented in Section C.10 Noise, potential revenue impacts resulting from construction noise impacts are undeterminable at this time. While construction noise would impact the Ranch, many revenue-related activities could continue during this time that would be unaffected by noise (scheduling of future filming, office activities, production planning, set construction, etc.). Furthermore, it is possible that no filming activities would occur during the construction phase of the proposed Project when noise would impact the Ranch. Therefore, while noise impacts are considered significant, Mitigation Measure S-1 (Coordination with Veluzat Motion Picture Ranch for the Scheduling of Construction Activities) would address the temporary impacts associated with construction noise of the proposed Project and reduce potentially significant impacts to business revenue related activities at the Veluzat Motion Picture Ranch to a less-than-significant level (**Class II**).

***Mitigation Measures for Impact S-1***

- S-1: Coordination with Veluzat Motion Picture Ranch for the Scheduling of Construction Activities.**  
Two months prior to the commencement of construction activities, SCE shall coordinate with Veluzat Motion Picture Ranch to determine when construction activities adjacent to or within Ranch properties can be scheduled to prevent conflicts with filming activities on the Ranch.

***Impact S-2: Operational activities could cause a decrease in revenues for Veluzat Motion Picture Ranch.***

As described above and in Sections C.9 (Land Use), C.10 (Noise), and C.15 (Visual Resources), Mile 18.6 to 20.3 of the proposed Project would create a new permanent ROW, which would traverse the Veluzat Motion Picture Ranch and preclude long-term use of the Ranch's outdoor landscapes and sets. The lattice steel towers and conductors built under the proposed Project would visually interfere with film operations. Operation of the new 500-kV lines would also result in corona noise, which would also interfere with audio recording during outdoor filming activities. These operational impacts resulting from the proposed Project would obstruct, restrict, and interfere with filming activities and associated Ranch operations. Similar to the temporary impacts described above, by limiting the location and timing of filming, the operation of the proposed Project would

negatively affect revenues for the Veluzat Motion Picture Ranch by limiting the facility's current business activities. As proposed, no mitigation is available that could reduce the permanent impacts of the Project to Veluzat Motion Picture Ranch revenues to less-than-significant levels. Section C.15 (Visual Resources) proposes mitigation measures to reduce these impacts; however, the proposed Project would result in significant and unavoidable visual impacts (**Class I**) that could result in long-term business revenue impacts to the Veluzat Motion Picture Ranch. As this would occur on privately owned land, there would be no impact to NFS lands.

***Impact S-3: Construction activities could cause a decrease in revenues for agricultural landowners.***

As described in Sections C.9 (Land Use), Mile 2.6 to 2.7 and 4.7 to 5.1 of the proposed Project would traverse agricultural lands in the North Area (north of ANF) of the proposed route. No new permanent roads would be constructed over the agricultural lands in this area, and although the ROW would be widened by 130 feet, this would not preclude the agricultural use of these lands. Removal of 66-kV lattice steel towers and construction of new 500-kV towers in these areas, however, would require construction equipment to traverse the agricultural land. This could temporarily restrict crop production or potentially damage crops if activities occurred during growing season. The restriction of crop production or damage to crops could potentially decrease revenues for the agricultural landowners whose crops would be affected by Project activities. As this would occur on privately owned land, there would be no impact to NFS lands.

Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners), described in Section C.9 (Land Use and Public Recreation), would require that SCE coordinate construction scheduling with landowners and restore agricultural land damaged by Project activities. This measure would also reduce impacts to agricultural revenues by minimizing losses to crop production, and subsequently, would also minimize any lost crop revenues associated with the proposed Project. Mitigation Measure L-5 would reduce these impacts to a less-than-significant level (**Class II**).

**Cause a substantial change in public agency revenue (Criterion SOC4)**

The proposed Project would be owned, operated, and financed by SCE. Completion of the proposed Project would result in improved electricity transfer between the Antelope and Pardee substations. The proposed Project would not preclude or necessitate the supply or transfer of electricity between SCE and its customers. The proposed Project would also benefit the local economy through payment of property taxes.

***Impact S-4: Operational activities would substantially benefit public agency revenue.***

Local property tax revenues are a function of tax rates charged within the affected jurisdictions. SCE's property taxes are expected to increase as a result of the proposed Project. The State of California Board of Equalization (BOE) assesses infrastructure facilities annually. Dispersion of property tax revenue is determined at a local level based upon the location of the taxable property. Any increase in property tax revenue as a result of the proposed Project would result in a beneficial impact to the local economy as a result of tax revenue spending. The NFS would receive no revenue from the installation of the proposed Project on NFS lands, so no revenue benefits would be realized by the ANF.

Therefore, the proposed Project would not result in an adverse change in public resource revenue. Furthermore, the proposed Project would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues as a result of the



proposed Project are considered a beneficial (**Class IV**) impact. Therefore, no mitigation measures are recommended.

### **Result in a substantial alteration of property values (Criterion SOC5)**

During the public scoping process for the proposed Project, the public expressed a great deal of interest and concern regarding the potential impacts of transmission line projects on property values. As such, this section addresses issues associated with the potential for impacts on property values and industrial facilities such as transmission lines in an effort to provide the reader with detailed background information based on extensive literature review and the property value issues of past similar projects.

#### ***Impact S-5: Operational activities would substantially decrease property values along the Project alignment.***

The California Public Utilities Commission (CPUC), during public comment periods for recent transmission line EIRs, has experienced a high level of public concern associated with the siting of transmission lines and any associated impacts on property values. The State of California Energy Commission (CEC), in their review and licensing of several power plant projects between 2000 and 2003, received similar public input regarding concerns with power plant siting and property values. As a result, CEC Staff conducted thorough research of the literature on proximity impact analysis for property values and cited the Kinnard-Dickey (2005) paper, *A Primer on Proximity Impact Research: Residential Property Values Near High-Voltage Transmission Lines*, as a comprehensive study on this topic. The CPUC has since also used this approach for addressing concerns regarding property values in two recent transmission line EIRs. The Kinnard-Dickey paper uses three procedures to measure the difference between sale prices, marketing periods and/or sales volume of properties in the proximity of transmission or distribution lines and those of competitive properties that are not located in the proximity of transmission or distribution lines. The three procedures cited in the Kinnard-Dickey paper include:

- **Paired Sales Analysis** - finding sales of properties within the impact area and comparing them with sales of similar, competitive properties in the control area. Any price differentials are noted, and any pattern of such differences is identified. More recent studies apply statistical testing procedures to the results when sufficient numbers of paired sales are available;
- **Survey Research/Opinion** - this method is used as either a supplement or substitute for analysis of market sales transaction data. Potential purchasers either will or will not buy; they either will or will not pay the same or similar prices for proximate properties. It is important to note that Survey Research/Opinion merely reflects responses to hypothetical situations by interviewees who are not necessarily prospective buyers - especially in the impact area under study; and
- **Market Impact Studies Using Multiple Regression Analysis (MRA) in the Hedonic Pricing Model Format** - gathering data files on as many market sales transactions as possible within the impact area and within one or more similar control areas over a specified time period -- usually a few years prior to an awareness of the proposed Project. The extended time period is used to identify and measure any price/value impact that might occur within the impact area after an awareness of the project occurs. This type of "before and after" analysis supplements the comparison of levels and trends and prices, marketing time, and sales volume within the impact area and those in the control area. The post-announcement sales information also provides a basis for testing the likely duration of any value impact that might be identified. The MRA approach to market proximity impact analysis is preferred in the current professional and academic literature because the model reflects what buyers and sellers actually do as opposed to what potential buyers say they might do under specified hypothetical circumstances. Further, the use of large sets of sales data indicates that the results are more representative of the market than those of the paired sales studies.

The results of these three procedures used in the Kinnard-Dickey paper show that three possible effects to the market value of residential properties have been claimed:

- **Diminished Price** - which is identified by comparing unit prices that are proximate to power lines to unit prices of similar and competitive properties more distant from power lines;
- **Increased Marketing Time** - even when proximate properties sell at or near the same prices as more distant control properties, claimants argue that proximate properties take longer to sell. Such increased marketing time can represent a loss to the seller by deferring receipt, availability, and use of sale proceeds; and
- **Decreased Sales Volume** - is a more subtle indicator of diminished property value if potential buyers decide not to buy in the impact area. A measurable decrease in sales volume in the impact area compared with sales volume in the control area where otherwise similar properties purportedly still are selling can represent evidence of decreased market value from proximity to the high voltage transmission lines (or claimed hazard).

The findings of the Kinnard-Dickey paper indicate the need to address a range of issues to more accurately analyze impacts on property values due to environmental changes. Specific issues that must be addressed to ensure accurate proximity impact analysis for specific property values include the following:

- The need to distinguish between fear of health hazards by current and potential residents and the market behavior of buyers and sellers in the same area; misleading to confuse opinion responses of hypothetical buyers based on fear with actual past and likely behavior of buyers in market areas identified as proximate to high voltage transmission lines or claimed hazard.
- Studies of both attitudes and market behavior of purchasers who are near sources of claimed hazards show that the more informed a potential buyer is, the less likely that buyer is to be deterred from purchasing near the claimed hazard. Knowledge of occurrence probabilities, awareness of findings of reproducible scientific studies, and understanding of the causal nexus (if any) lead to a greater willingness of the potential buyer to live near the claimed hazard, and has been found to minimize price effects on proximate residential properties.
- Some MRA studies indicate that any observed negative price, marketing time, and sales volume effects tend to be statistically insignificant; results could easily have occurred randomly or by chance. Therefore, they do not necessarily represent a consistent, systematic market response to locations proximate to high voltage transmission lines (or claimed hazard).
- In some MRA studies negative price effects in the range of five to nine percent were identified up to 200 feet distant from the edge of the high voltage transmission line ROW. These studies found that effective screening of views can diminish or eliminate the negative price effect. In addition, any observed negative value impacts decrease, and most likely disappear over time (four to ten years).
- While fear (whether reasonable or not) of health hazards is admissible in courts as an explanation of why diminution in property values has occurred, it is not a measure of the diminution in market value (amount) due to the lack of corroborating market sales data. Even if buyer attitudes have been influenced with the emerging support of fear concerns in both court cases and market-wide survey research studies, such studies focus directly on the attitudes and opinions of potential buyers, while market proximity impact studies reflect, identify, and measure the influence of those attitudes and opinions through actual market behavior.

Furthermore, according to the Kinnard-Dickey paper, issues requiring further research to determine impacts to property values, include:

- Conflicts with findings of paired sales studies and opinion/attitude survey research;
- Consistency and comparability of results regarding property characteristics, characteristics of the claimed hazard, and variation of data availability among market areas at different times;
- Buyer and seller behavior; and
- Preference for proximity impact analysis of recorded market sales versus survey research/opinion based on interviews and whether both are required to achieve appropriate market impact indicators.

The Kinnard-Dickey paper cites several examples of proximity impact analyses, methodologies used to measure impacts, and types of possible proximity impacts on residential property values. The study concludes that differing, sometimes conflicting, findings have emerged from market studies. In general, claims of diminished property value through decreased marketability are based on the reported concern about hazards to

human health and safety; and increased noise, traffic, and visual impacts associated with living in proximity to locally unwanted land uses (LULUs) such as power plants, freeways, high voltage transmission lines, landfills, hazardous waste sites, etc. The issue of property value impacts associated with such industrial facilities has been given much attention over the past 20 years, and as a result, has been the subject of extensive study.

The MRA method, as supported by the Kinnard-Dickey paper, requires that data be collected on as many market sales transactions as possible within the impact area and within one or more similar control areas over a few years prior to an awareness of a proposed Project to accurately reflect what buyers and sellers actually do as opposed to what potential buyers say they might do under specified hypothetical circumstances. Furthermore, as supported by the Kinnard-Dickey paper, to accurately assess what particular environmental and physical changes associated with the proposed Project could affect property values within an immediate distance, a market study of current and future values of properties potentially affected by the proposed Project would have to be conducted to evaluate property values with and without the proposed Project being constructed.

Because the data that would be required to conduct a detailed analysis of the proposed Project impacts to property values is unavailable as it would be based on future property values, consequently, the conclusions of the Kinnard-Dickey paper analysis are applied to this analysis. It is concluded, then, that the Project would not generate effects that would significantly impact property values. Where proposed Project impacts are less than significant or have been mitigated to less-than-significant levels, then any associated property value impacts would also be less than significant and no mitigation is recommended (**Class III**). Due to the public nature of the NFS lands traversed by the proposed Project, this impact would not apply to NFS lands.

## **C.12.6 Alternative 1: Partial Undergrounding of Antelope-Pardee Transmission Line**

### **C.12.6.1 Affected Environment**

Alternative 1 would place sections of the proposed 500-kV transmission line underground in specific high-impact segments of the proposed Project route. Alternative 1 would deviate from the proposed Project route in two locations, but modifications to the route would occur in the same jurisdiction as the proposed Project routes that would be replaced. Therefore, the affected population, employment, and housing resources potentially impacted by this alternative would be identical to those presented for the proposed Project in Section C.12.1, (Affected Environment).

### **C.12.6.2 Impacts and Mitigation Measures**

#### **Displace substantial numbers of existing housing or persons necessitating the construction of replacement housing elsewhere (Criterion SOC1)**

This alternative would follow roughly the same transmission line route as the proposed Project, between SCE's existing Antelope and Pardee Substations. The route for Alternative 1 does not contain any habitable housing structures and would not require the removal of any housing units. While residential developments can occur adjacent to the route, development associated with this alternative would not require the removal or relocation of any residential units or business uses. Therefore, no persons or housing would be displaced and no replacement housing would be required under this alternative. No impacts would occur; therefore no mitigation measures are recommended.

### **Cause substantial change in local employment (Criterion SOC2)**

Construction employment for Alternative 1 would include skilled or semi-skilled positions including line workers, welders, heavy equipment operators, surveyors, engineers, utility equipment workers, truck drivers, warehouse workers, clerical workers, and laborers. The construction requirements for the overhead portions of Alternative 1 would be the same as the proposed Project. Construction of the underground transmission facilities for Alternative 1 would require specialized procedures and equipment and a longer schedule.

As indicated in Table C.12-4, Employment Characteristics, Los Angeles County contains a large construction workforce of 202,829. Table B.4-3 provides a summary of the labor force requirements for Alternative 1. Even though construction of the underground portion of Alternative 1 would require more workers than would be required for overhead facilities, the available construction workforce would meet all labor needs. Even if the maximum required workforce for Alternative 1 were to double to 240 personnel, this would still represent only 0.12 percent of the Los Angeles County construction workforce. As with the proposed Project, no workers are expected to relocate to the area permanently for construction of this alternative. While maintenance of underground transmission lines is necessarily more complex than overhead lines, no new workers would be required for operation of this alternative. Alternative 1 would result in no impacts to the existing local employment conditions.

### **Cause a substantial change in revenue for local businesses (Criterion SOC3)**

The two portions of Alternative 1 that differ from the proposed Project are not within the vicinity of any businesses. Consequently, Alternative 1 would result in the same impacts to local business revenues as described for the proposed Project. Construction activities could cause a temporary decrease in revenues for Veluzat Motion Picture Ranch (Impact S-1). Mile 18.6 to Mile 20.3 of Alternative 1 would be the same as described for the proposed Project. Underground portions of Alternative 1 would not occur along this segment. Therefore, impacts to the Veluzat Motion Picture ranch would be identical for Alternative 1 as those presented above for the proposed Project. As described above, Mitigation Measure S-1 (Coordination with Veluzat Motion Picture Ranch for the Scheduling of Construction Activities) would address the temporary impacts associated with construction of Alternative 1. Incorporation of this mitigation measure would reduce Impact S-1 to business revenue to less-than-significant levels for Alternative 1 (**Class II**).

In addition, operation activities associated with Alternative 1 could cause a decrease in revenues for Veluzat Motion Picture Ranch (Impact S-2). Underground portions of Alternative 1 would not occur along the segment containing the Veluzat Motion Picture Ranch. Therefore, impacts to the Veluzat Motion Picture Ranch from operation of Alternative 1 would be identical to those presented above for the proposed Project. As described above for the proposed Project, no mitigation is available that could reduce the permanent impacts of the proposed transmission line to Veluzat Motion Picture Ranch revenues to less-than-significant levels. Therefore, Impact S-2 for Alternative 1 would be significant and unavoidable (**Class I**).

Construction activities could cause a decrease in revenues for agricultural landowners (Impact S-3) as well. Underground portions of Alternative 1 would not occur along segments of the route containing agricultural uses. Therefore, impacts to agricultural uses would be identical for Alternative 1 as those presented above for the proposed Project. Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners), described in Section C.9 (Land Use and Public Recreation), would require that SCE coordinate construction scheduling with landowners and restore agricultural land damaged by construction activities. This measure would also reduce impacts to agricultural revenues by minimizing losses to crop production and, subsequently, would also minimize any lost crop revenues associated with Alternative 1. Therefore, Impact S-3 for Alternative 1 would be less than significant with mitigation incorporated (**Class II**).

***Impact S-6: Construction activities could cause a temporary decrease in revenues for Bouquet Canyon Stone Company.***

Construction activities could cause a temporary decrease in revenues for Bouquet Canyon Stone Quarry (Impact S-6). During excavation of the trench for the underground cable between Mile 18.6 and Mile 20.3, access to the Bouquet Canyon Stone Quarry on Del Sur Ridge Road would be temporarily disrupted and possibly blocked. This could potentially disrupt business for the quarry. To reduce the severity of the impact to less than significant levels, Mitigation Measure T-9 (Provide Continuous Access to Properties) from Section C.13 (Traffic and Transportation) would be implemented. Impact S-6 for Alternative 1 would be less than significant with mitigation incorporated (**Class II**). As this would occur on NFS lands, this would be a direct impact to NFS lands.

**Cause a substantial change in public agency revenue (Criterion SOC4)**

As described above in the Criteria SOC4 analysis provided for the proposed Project, Alternative 1 would not result in a change in public resource revenue. Identical to the proposed Project, facilities constructed under Alternative 1 would be owned, operated, and financed by SCE. Furthermore, Alternative 1 would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues (Impact S-4) as a result of Alternative 1 are considered to be beneficial impacts (**Class IV**).

**Result in a substantial alteration of property values (Criterion SOC5)**

This alternative would generally follow the same route as the proposed Project, with the exception of the underground segment in Santa Clarita, which would occur within city streets. Operational activities could decrease property values along the project alignment (Impact S-5). Due to the alignment of the underground portion of the proposed transmission line for Alternative 1 in Santa Clarita, potential property value changes resulting from visual impacts would be avoided. For the remaining segments of the proposed route identified for Alternative 1, property value impacts would be identical to the proposed Project. Impact S-5 for Alternative 1 would be less than significant with no mitigation necessary (**Class III**).

## **C.12.7 Alternative 2: Antelope-Pardee East Mid-Slope**

### **C.12.7.1 Affected Environment**

This alternative would generally follow the proposed route, but would relocate most of the towers off the top of the Del Sur Ridge, placing the ROW on the east side of the ridge facing Bouquet Canyon. The route followed by Alternative 2 would be within the same jurisdictions as the proposed Project. The affected population, employment, and housing resources potentially impacted by this alternative would be identical to those presented for the proposed Project in Section C.12.1 (Affected Environment).

### **C.12.7.2 Impacts and Mitigation Measures**

#### **Displace substantial numbers of existing housing or persons necessitating the construction of replacement housing elsewhere (Criteria SOC1)**

The relocation of most of the towers off the top of Del Sur Ridge associated with Alternative 2 would occur within the ANF. This portion of the ANF does not contain any habitable housing structures and would not require the removal of any housing units. Therefore, no persons or housing would be displaced and no replacement housing would be required. No impacts would occur; therefore, no mitigation measures are recommended.

### **Cause substantial change in local employment (Criterion SOC2)**

Table B.4-6 provides a summary of the labor force requirements for Alternative 2. Alternative 2 would have the same labor force requirements and impacts as the proposed Project. No workers are expected to relocate to the area permanently for construction of this alternative. Alternative 2 would result in no impacts to the existing local employment conditions.

### **Cause a substantial change in revenue for local businesses (Criteria SOC3)**

This alternative would follow generally the same route as the proposed Project, but would relocate most of the towers off the top of Del Sur Ridge within the ANF, roughly from Mile 5.7 to Mile 17.5 of the proposed Project route, as shown in Figure B.4-9. No business or agricultural uses are located along this segment within the ANF, including the Veluzat Motion Picture Ranch. Therefore, Alternative 2 would result in identical impacts to existing local businesses as described above for the proposed Project.

Construction activities could cause a temporary decrease in revenues for Veluzat Motion Picture Ranch (Impact S-1). Construction impacts to the Veluzat Motion Picture ranch would be identical for Alternative 2 as those presented above for the proposed Project. Mitigation Measure S-1 (Coordination with Veluzat Motion Picture Ranch for the Scheduling of Construction Activities) would address the temporary impacts associated with construction of Alternative 2. Incorporation of this mitigation measure would reduce Impact S-1 to a less-than-significant level (**Class II**).

Operation activities could cause a decrease in revenues for Veluzat Motion Picture Ranch (Impact S-2). This impact for Alternative 2 would be identical to the proposed Project. As described above for the proposed Project, no mitigation is available that could reduce the permanent impacts of the proposed transmission line to Veluzat Motion Picture Ranch revenues to less than significant levels. Therefore, Impact S-2 for Alternative 2 would be significant and unavoidable (**Class I**).

Construction activities could cause a decrease in revenues for agricultural landowners (Impact S-3). Impacts to agricultural uses would be identical for Alternative 2 as those presented above for the proposed Project. Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners), described in Section C.9 (Land Use and Public Recreation), would require that SCE coordinate construction scheduling with landowners and restore agricultural land damaged by construction activities. This measure would also reduce impacts to agricultural revenues by minimizing losses to crop production, and subsequently, would also minimize any lost crop revenues associated with Alternative 2. Therefore, Impact S-3 for Alternative 2 would be less than significant with mitigation incorporated (**Class II**).

### **Cause a substantial change in public agency revenue (Criterion SOC4)**

Identical to the proposed Project, facilities constructed under Alternative 2 would be owned, operated, and financed by SCE. As described above for the proposed Project, Alternative 2 would also not result in a change in public resource revenue. Furthermore, Alternative 2 would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues (Impact S-4) as a result of Alternative 2 are considered a beneficial (**Class IV**) impact.

### **Result in a substantial alteration of property values (Criterion SOC5)**

The relocation of the towers off the top of Del Sur Ridge within the ANF, roughly from Mile 5.7 to Mile 17.5 of the proposed Project route as presented for this alternative, would result in identical property value impacts for Alternative 2 as for the proposed Project.

Operation activities could substantially decrease property values along the project alignment (Impact S-5). Although Alternative 2 would locate the towers off of Del Sur Ridge between Mile 5.7 and Mile 17.5, this would not change the views of any private property owners. Consequently, impacts would be the same as described for the proposed Project. Impact S-5 for Alternative 2 would be less than significant with no mitigation necessary (Class III).

## **C.12.8 Alternative 3: Antelope-Pardee Single-Circuit 500-kV Towers between Haskell Canyon and Pardee Substation**

### **C.12.8.1 Affected Environment**

This alternative is a minor variation of the proposed Project and would include constructing single-circuit 500-kV towers between Haskell Canyon and the Pardee Substation, from Mile 20.3 to Mile 25.6, rather than constructing double-circuit 500-kV towers and removing the existing single-circuit 500-kV towers. The route followed by Alternative 3 would be the same as the proposed Project route. Because this alternative is limited to construction within the same corridor as the proposed Project, the affected population, employment, and housing resources potentially impacted by this alternative would be identical to those presented for the proposed Project in Section C.12.1 (Affected Environment) for the proposed Project.

### **C.12.8.2 Impacts and Mitigation Measures**

#### **Displace substantial numbers of existing housing or persons necessitating the construction of replacement housing elsewhere (Criteria SOC1)**

The route for Alternative 3 would be identical to the proposed Project route. The Project route does not contain any habitable housing structures and would not require the removal of any housing units. Development of Alternative 3 would occur within an existing SCE ROW and would not require the removal or relocation of any residential units or business uses. Therefore, no persons or housing would be displaced and no replacement housing would be required. No impacts would occur; therefore, no mitigation measures are recommended.

#### **Cause substantial change in local employment (Criterion SOC2)**

As described in Section B.4.4.3 (Alternative 3 Construction and Operation) the construction and operational activities for Alternative 3 would be the same as the proposed Project. Construction employment for Alternative 3 is then anticipated to range from approximately 20 to 120 personnel, with an estimated average daily workforce of 50 personnel. The maximum required construction workforce of 120 personnel required for Alternative 3 would comprise 0.06 percent of the total Los Angeles County construction workforce (as indicated in Table C.12-4, Employment Characteristics). No workers are expected to relocate to the area permanently for construction and no new workers are required for operation of Alternative 3. This alternative would result in no impacts to the existing local employment conditions.

#### **Cause a substantial change in revenue for local businesses (Criteria SOC3)**

The route followed by Alternative 3 would be the same as the proposed Project route. The construction of single-circuit 500-kV towers between Haskell Canyon and the Pardee Substation, from Mile 20.3 to Mile 25.6, would not result in a change to local business impacts associated with the proposed Project. Therefore, Alternative 3 would result in identical impacts to existing local business conditions as described above for the proposed Project.

Construction activities could cause a temporary decrease in revenues for Veluzat Motion Picture Ranch (Impact S-1). Construction impacts to the Veluzat Motion Picture ranch would be identical for Alternative 3 to those presented above for the proposed Project. As described above, Mitigation Measure S-1 (Coordination with Veluzat Motion Picture Ranch for the Scheduling of Construction Activities) would address the temporary impacts associated with construction of Alternative 3. Impact S-1 for Alternative 3 would be less than significant with mitigation incorporated (**Class II**).

Operation activities could cause a decrease in revenues for Veluzat Motion Picture Ranch (Impact S-2). Operational impacts to the Veluzat Motion Picture ranch would be identical for Alternative 3 to those presented above for the proposed Project. No mitigation is available that could reduce the permanent impacts of the proposed transmission line to Veluzat Motion Picture Ranch revenues to less-than-significant levels. Therefore, Impact S-2 for Alternative 3 would be significant and unavoidable (**Class I**).

Construction activities could cause a decrease in revenues for agricultural landowners (Impact S-3). Impacts to agricultural uses from Alternative 3 would be identical to those presented above for the proposed Project. Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners), as described in Section C.9 (Land Use and Public Recreation), would require that SCE coordinate construction scheduling with landowners and restore agricultural land damaged by construction activities. This measure would also reduce impacts to agricultural revenues by minimizing losses to crop production, and subsequently, would also minimize any lost crop revenues associated with Alternative 3. Impact S-3 for Alternative 3 would be less than significant with mitigation incorporated (**Class II**).

#### **Cause a substantial change in public agency revenue (Criterion SOC4)**

Identical to the proposed Project, facilities constructed under Alternative 3 would be owned, operated, and financed by SCE. Alternative 3 would also not result in a change in public resource revenue. Furthermore, Alternative 3 would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues (Impact S-4) as a result of the Alternative 3 are considered a beneficial (**Class IV**) impact.

#### **Result in a substantial alteration of property values (Criterion SOC5)**

The route followed by Alternative 3 would be the same as the proposed Project route. This would result in identical property value impacts for Alternative 3 as for the proposed Project.

Operation activities could substantially decrease property values along the Project alignment (Impact S-5). The single-circuit towers for Alternative 3 would add visual complexity to the existing 500-kV ROW in this area between Haskell Canyon and Pardee Substation. While this could potentially result in visual impacts or health and safety concerns that could affect property values, as described for the proposed Project, the effects are generally smaller than anticipated. Impact S-5 for Alternative 3 would be less than significant (**Class III**).

### **C.12.9 Alternative 4: Antelope-Pardee Re-Routing of New Right-of-Way along Haskell Canyon**

#### **C.12.9.1 Affected Environment**

This alternative would follow the proposed Project route until approximately mile 17.5, north of Haskell Canyon Road. At this point, Alternative 4 would divert from the proposed Project route for approximately 3.1 miles, in order to circumvent the Veluzat Motion Picture Ranch. Alternative 4 would rejoin the proposed Project route at Mile 20.3 of the proposed Project, or Mile 20.6 of the proposed route for Alternative 4, which is



approximately 25.9 miles long. The route followed by Alternative 4 would be located within the same jurisdictions as the proposed Project. Therefore, the affected population, employment, and housing resources potentially impacted by this alternative would be identical to those presented for the proposed Project in Section C.12.1 (Affected Environment).

### **C.12.9.2 Impacts and Mitigation Measures**

#### **Displace substantial numbers of existing housing or persons necessitating the construction of replacement housing elsewhere (Criteria SOC1)**

The new ROW necessary for Alternative 4 would occur within a portion of the ANF. This portion of the ANF does not contain any habitable housing structures and would not require the removal of any housing units. Therefore, no persons or housing would be displaced and no replacement housing would be required. No impacts would occur; therefore, no mitigation measures are recommended.

#### **Cause substantial change in local employment (Criterion SOC2)**

As described in Section B.4.5.3 (Alternative 4 Construction and Operation), the construction and operational activities for Alternative 4 would be similar as the proposed Project. Construction employment for Alternative 4 is then expected to be the same as the proposed Project and range from approximately 20 to 120 personnel, with an estimated average daily workforce of 50 personnel. The maximum required construction workforce of 120 personnel required for the Alternative 4 would comprise 0.06 percent of the total Los Angeles County construction workforce (as indicated in Table C.12-4, Employment Characteristics). No workers are expected to relocate to the area permanently for construction and no new workers are required for operation of Alternative 4. This alternative would result in no impacts to the existing local employment conditions.

#### **Cause a substantial change in revenue for local businesses (Criteria SOC3)**

During the public scoping meeting held on July 14, 2005, it was requested that SCE find a new route for the proposed Project that would avoid traversing through the Veluzat Motion Picture Ranch (Veluzat Ranch or ranch) and planned development in the Santa Clarita area. Specifically, the owners of Veluzat Ranch, which use the ranch for shooting television shows and motion pictures, expressed concerns regarding the proposed Project's effects on the ranch's operations. The development of Alternative 4 took into consideration the need to avoid possible conflicts with ranch operations, which could include interference of the transmission line with aerial filming and/or ground filming, as well as the possibility of disrupting filming due to maintenance activities, which would result in traffic and noise impacts to the ranch. Other concerns voiced by the owners of the Veluzat Ranch are that the transmission line may generate EMF and electronic interference that would disturb the electronic equipment used during filming. Therefore, Alternative 4 circumvents Veluzat Ranch in order to address the concerns discussed above, thereby avoiding detrimental impacts to the economic viability of the ranch as a result of compromised operations. Alternative 4 would result in no impacts to the Veluzat Motion Picture Ranch.

Construction activities could cause a decrease in revenues for agricultural landowners (Impact S-3). Impacts to agricultural uses would be identical for Alternative 4 as those presented above for the proposed Project. Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners), described in Section C.9 (Land Use and Public Recreation), would require that SCE coordinate construction scheduling with landowners and restore agricultural land damaged by construction activities. This measure would also reduce impacts to agricultural revenues by minimizing losses to crop production, and subsequently, would also minimize any lost crop revenues associated with Alternative 4. Impact S-3 for Alternative 4 would therefore be less than significant with mitigation incorporated (**Class II**).

### **Cause a substantial change in public agency revenue (Criterion SOC4)**

Identical to the proposed Project, facilities constructed under Alternative 4 would be owned, operated, and financed by SCE. As described above for the proposed Project, Alternative 4 would also not result in a change in public resource revenue. Furthermore, Alternative 4 would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues (Impact S-4) as a result of Alternative 4 are considered a beneficial (**Class IV**) impact.

### **Result in a substantial alteration of property values (Criterion SOC5)**

The Alternative 4 route would continue to have the potential to impact property values along the route, similar to the proposed Project. Operation activities would substantially decrease property values along the Project alignment (Impact S-5). Alternative 4 would be identical to the proposed Project with the exception of the portion of the route between Mile 17.5 and Mile 20.6 of the proposed route for Alternative 4. The location of the re-routed transmission line along this segment would not affect the views of any private property owners. Consequently, impacts would be the same as described for the proposed Project. Impact S-5 for Alternative 4 would be less than significant with no mitigation necessary (**Class III**).

## **C.12.10 Alternative 5: Antelope-Pardee Sierra-Pelona Re-Route**

### **C.12.10.1 Affected Environment**

Alternative 5 would begin at Antelope Substation, heading south to the Vincent-Pardee corridor, and eventually connecting to Pardee Substation. This alternative would traverse the land under the jurisdiction of the BLM; the Cities of Lancaster, Palmdale, and Santa Clarita; and the unincorporated communities of Leona Valley, Agua Dulce, Forrest Park, and Bouquet Canyon in Los Angeles County. Alternative 5 consists predominately of open space land uses, with agricultural and residential uses scattered along the route. A number of notable land uses would be traversed by, or located adjacent to, the route. With the exception of the City of Palmdale, the route followed by Alternative 5 would be located within the same jurisdictions as the proposed Project. Therefore, the affected population, employment, and housing resources potentially impacted by this alternative would be similar to those presented for the proposed Project in Section C.12.1, Affected Environment, for Los Angeles County as a whole.

### **C.12.10.2 Impacts and Mitigation Measures**

#### **Displace substantial numbers of existing housing or persons necessitating the construction of replacement housing elsewhere (Criteria SOC1)**

Alternative 5 could require the removal of residential structures for the new overhead 500-kV transmission line, routed south from Antelope Substation to the Pardee Substation via the existing Pardee-Vincent corridor.

#### ***Impact S-7: Construction activities would require the removal of existing housing.***

Alternative 5 would travel adjacent to through the community of Leona Valley through approximately 0.5 miles of NFS lands adjacent to several residences located south of Leona Avenue and east of 107th Street West. Traveling south of Leona Valley, the route would cross adjacent to a single-family residence and the Nessa Ranch located on Bouquet Canyon Road. Due to the corridor necessary for construction and operation of the 500-kV line, as well as restrictions on placement of the route, it is possible that residences within the planned corridor would need to be purchased and removed by SCE. Preliminary routing indicates that purchase and removal of homes may be needed; however, the current routing for Alternative 5 is preliminary

and subject to change based on the outcome of detailed alignment studies, which would not be initiated unless this alternative is approved. Based on the potential for removal of homes with this alternative, Impact S-7 for Alternative 5 is considered significant and unavoidable (Class I).

### **Cause substantial change in local employment (Criterion SOC2)**

Alternative 5 is approximately 37.2 miles long. The size of the workforce for Alternative 5 would correspond appropriately with the length of the route, as required for construction of this alternative. The existing construction workforce in Los Angeles County is of 202,829. Even if the maximum required workforce were to double to 240 personnel, this would still represent only 0.12 percent of the available Los Angeles County construction workforce. Similar to the proposed Project, no workers are expected to relocate to the area permanently for construction of this alternative. No new workers would be required for operation of this alternative. Alternative 5 would result in no impacts to the existing local employment conditions.

### **Cause a substantial change in revenue for local businesses (Criteria SOC3)**

Alternative 5 would involve the construction of a route that would have the potential to impact local businesses. This alternative would also travel through extensive agricultural lands. As shown in Figure B.4-13, this alternative would provide for a completely overhead 500-kV transmission line, routed south from Antelope Substation to the Pardee Substation via the existing Pardee-Vincent corridor. This route would avoid the Veluzat Motion Picture Ranch. Therefore, Alternative 5 would result in no impacts to the Veluzat Motion Picture Ranch. Construction activities could cause a decrease in revenues for agricultural landowners (Impact S-3). Alternative 5 would impact agricultural land due to its route alignment. However, Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners), described in Section C.9 (Land Use and Public Recreation), would require that SCE coordinate construction scheduling with landowners and restore agricultural land damaged by construction activities. This measure would reduce impacts to agricultural revenues by minimizing losses to crop production, and subsequently, would also minimize any lost crop revenues associated with Alternative 5. Therefore, Impact S-3 for Alternative 5 would be less than significant with mitigation incorporated (Class II).

### **Cause a substantial change in public agency revenue (Criterion SOC4)**

Identical to the proposed Project, facilities constructed under Alternative 5 would be owned, operated, and financed by SCE. As described above for the proposed Project, Alternative 5 would also not result in a change in public resource revenue. Furthermore, Alternative 5 would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues (Impact S-4) as a result of Alternative 5 are considered a beneficial (Class IV) impact.

### **Result in a substantial alteration of property values (Criterion SOC5)**

Operation activities could substantially decrease property values along the Project alignment (Impact S-5). Alternative 5 would impact residential lands due to its route alignment. This would result in the possibility for Alternative 5 to cause changes in property value. As described for the proposed Project, however, the effects are generally smaller than anticipated. Impact S-5 for Alternative 5 would be less than significant (Class III).

## **C.12.11 No Project/Action Alternative**

Under the No Project/Action Alternative, the proposed transmission and substation upgrades would not be implemented and, therefore, the impacts associated with the proposed Project and alternatives described in Sections C.12.5 through C.12.11 above would not occur. As a result, the No Project/Action Alternative would

result in no impacts to the existing construction workforce, local business conditions, or existing property values. As discussed under Section C.12.15 (Cumulative Impacts), population growth in the area is expected to continue with or without the project, to which there would be no contribution by the No Project/Action Alternative.

However, as identified in Section B.4.8.2, in the absence of the proposed Project, other indirect actions would occur. SCE would need to accommodate the power load by upgrading existing transmission infrastructure or building new transmission facilities along a different alignment. Construction methods, resulting impacts, and regulatory requirements associated with other transmission projects would be similar to those identified for the proposed Project; as such, socioeconomic impacts associated with construction and operation of other transmission projects would be expected to be similar to the proposed Project.

### C.12.12 Impact and Mitigation Summary

Table C.12-6 presents a summary of the impacts and proposed mitigation measures for socioeconomics. Applicable mitigation measures are listed below the impact significance classification for each alternative.

<b>Table C.12-6. Impact and Mitigation Summary – Socioeconomics</b>						
Impact	Impact Significance					
	Proposed Project	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
S-1: Construction activities could cause a temporary decrease in revenues for Veluzat Motion Picture Ranch.	Class II	Class II	Class II	Class II	No Impact	No Impact
	S-1	S-1	S-1	S-1	None	None
S-2: Operational activities could cause a decrease in revenues for Veluzat Motion Picture Ranch.	Class I	Class I	Class I	Class I	No Impact	No Impact
	None	None	None	None	None	None
S-3: Construction activities could cause a decrease in revenues for agricultural land owners.	Class II	Class II	Class II	Class II	Class II	Class II
	L-5*	L-5*	L-5*	L-5*	L-5*	L-5*
S-4: Operational activities would substantially benefit public agency revenue.	Class IV	Class IV	Class IV	Class IV	Class IV	Class IV
	None	None	None	None	None	None
S-5: Operational activities would substantially decrease property values along the Project alignment.	Class III	Class III	Class III	Class III	Class III	Class III
	None	None	None	None	None	None
S-6: Construction activities could cause a temporary decrease in revenues for Bouquet Canyon Stone Company.	No Impact	Class II	No Impact	No Impact	No Impact	No Impact
	None	T-9**	None	None	None	None
S-7: Construction activities would require the removal of existing housing	No Impact	No Impact	No Impact	No Impact	No Impact	Class I
	None	None	None	None	None	None

Class I = Significant and unavoidable impact; Class II = Significant but mitigated to a less-than-significant level; Class III = Less-than-significant impact; Class IV = Beneficial impact.

\* Please see Section C.9.5, Land Use and Public Recreation, Proposed Project/Action, Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners).

\*\* Please see Section C.13.5, Traffic and Transportation, Proposed Project/Action, Mitigation Measure T-9 (Provide Continuous Access to Properties).

### C.12.13 Cumulative Effects

#### Geographic Extent

The geographic extent for the analysis of cumulative impacts on Socioeconomics is Los Angeles County as a whole. This is defined as the geographic extent or the cumulative impact area because potential workers, available housing, and impacted business operations are located within Los Angeles County. Therefore, proposed Project cumulative impacts would be on socioeconomic resources within Los Angeles County as a whole.

## Existing Cumulative Conditions

Past development and population growth within Los Angeles County have impacted the population, housing demand, business revenues and conflicts, as well as property values within the County. As the population increases through an indirect and direct influence of development, housing demands and workforce expands to serve the growing population and development needs. In addition, continued development creates more infrastructure and development affecting business operations, revenues, and property values. Section C.12.1, Affected Environment, describes existing socioeconomic conditions within the County and immediate project area.

Development of the proposed Project in conjunction with the projects described in Section B.5 and the overall continued development of Los Angeles County would continue to result in the potential for impacts to local businesses and residential structures from displacement issues, revenue changes, and factors affecting existing property values. While it is not expected that operation of energy and transportation projects listed would substantially change existing business revenues or property values, the large number of development projects described in Table B.3-1 would have the potential to impact existing development, and would be cumulatively considerable.

## Cumulative Impact Analysis

The potential for the utilities and service systems impacts of the proposed Project described in Sections C.12.5 through C.12.11 to combine with the effects of other projects within the geographic scope of the cumulative analysis are described below.

- **Construction activities could cause a temporary decrease in revenues for Veluzat Motion Picture Ranch (Impact S-1).** For the proposed Project and Alternatives 1 through 3, Mitigation Measure S-1 (Coordination with Veluzat Motion Picture Ranch for the Scheduling of Construction Activities) would address the temporary impacts associated with construction impacts on the Veluzat Motion Picture Ranch, and incorporation of this mitigation measure would reduce any significant impacts to business revenue to less-than-significant levels. The Project's incremental contribution to the overall revenue impacts due to combined construction of projects in the north County would not be significant. Also, given that construction impacts from cumulative projects are temporary in nature, the combined effect of all construction activities would not significantly decrease revenues for businesses in the area. In addition, the temporary revenue impacts resulting from all of the cumulative projects in the area would not be cumulatively significant (**Class III**).

As described above, in Sections C.12.9 and C.12.10, Alternatives 4 and 5 would result in transmission lines that would avoid the Veluzat Motion Picture Ranch and would not contribute to cumulative growth in proximity to the Ranch resulting in temporary decreases in revenues for the Ranch. Therefore, these Alternatives would not contribute cumulatively to temporary revenue impacts to the Veluzat Motion Picture Ranch.

- **Operation activities could cause a decrease in revenues for Veluzat Motion Picture Ranch (Impact S-2).** Similar to the temporary impacts described above, by limiting the location and timing of filming, the operation of the proposed Project and Alternatives 1 through 3 would negatively affect revenues for the Veluzat Motion Picture Ranch by limiting the facility's current business activities. As proposed, no mitigation is available that could reduce the permanent impacts of the Project to Veluzat Motion Picture Ranch revenues to less-than-significant levels. However, the Project's incremental contribution to the overall revenue impacts due to combined operation of projects in the north County would not be significant, because impacts to the Veluzat Ranch are location-specific. In addition, it would be too speculative to determine the potential for long-term preclusion and a permanent decrease in overall business revenues resulting from the implementation of cumulative projects. However, given the rapid rate of growth and development in the area and the large number of residential and mixed-use developments slated for implementation, businesses could experience positive effects from the high influx of population to the area. Therefore, revenue impacts resulting from all of the cumulative projects in the area would not be cumulatively significant (**Class III**).

As described above, in Sections C.12.9 and C.12.10, Alternatives 4 and 5 would result in a transmission line that would avoid the Veluzat Motion Picture Ranch and would not contribute to cumulative growth in proximity to the Ranch that could result in permanent decreases in revenues for the Ranch. These alternatives would result in no cumulative impacts related to permanent decreases in revenues to the Veluzat Motion Picture Ranch.

- **Construction activities could cause a decrease in revenues for agricultural landowners (Impact S-3).** The restriction of crop production or damage to crops resulting from proposed Project and Alternatives 1 through 4 construction activities could potentially decrease revenues for the agricultural landowners whose crops would be affected by Project activities. In addition, Alternative 5 would result in a slight increase in agricultural lands impacted. Mitigation Measure L-5 (Establish Agreement and Coordinate Construction Activities with Agricultural Landowners), described in Section C.9 (Land Use and Public Recreation), would reduce these impacts to agricultural revenues by minimizing losses to crop production, and subsequently, would also minimize any lost crop revenues associated with the proposed Project. The Project's incremental contribution to the overall revenue impacts on agricultural landowners due to combined construction of projects in the north County would not be significant. Also, given that construction impacts from cumulative projects are temporary in nature, the combined effect of all construction activities would not significantly decrease revenues for agricultural landowners in the area. The temporary revenue impacts resulting from all of the cumulative projects in the area would not be cumulatively significant (**Class III**).
- **Operation activities would substantially benefit public agency revenue (Impact S-4).** Neither the proposed Project nor any of the alternatives would result in an adverse change in public resource revenue. Furthermore, the proposed Project and alternatives would not preclude or limit the operations of any public agency or result in a change in revenue to any public agencies. Potential changes to public agency revenues as a result of the proposed Project or alternatives (Impact S-4) are considered beneficial. The Project's incremental contribution to the overall revenue impacts due to combined operation of projects in the north County would not be significant. In addition, the combined operation of all cumulative projects would likely result in beneficial revenue impacts to public agencies through property taxes, sales taxes, etc. Therefore, revenue impacts resulting from all of the cumulative projects in the area would cumulatively be beneficial (**Class IV**).
- **Operation activities would substantially decrease property values along the Project alignment (Impact S-5).** The incremental contribution of the proposed Project or the alternatives to decreases in property values would not be significant. The proposed Project in addition to the projects described in Table B.3-1, Cumulative Projects Scenario: Approved and Pending Projects Within Five Miles of the Proposed Project Route, would represent the rapid rate of growth and development in the area indicating that the north County is consistently becoming a more desirable place to site homes and businesses, which typically leads to an increase in property values in an area. Therefore, the combined effect of the proposed Project or alternatives and all cumulative projects on property values would not be cumulatively significant (**Class III**).
- **Construction of the proposed Project could cause a temporary decrease in revenues for Bouquet Canyon Stone Company (Impact S-6).** Construction of the proposed Project and Alternatives 2 through 5 would have no impact to the Bouquet Canyon Stone Company. Therefore, the proposed Project and these Alternatives would have no cumulative contribution to temporary revenue impacts for the Bouquet Canyon Stone Company.  
Construction activities could cause a temporary decrease in revenues for the Bouquet Canyon Stone Quarry (Impact S-6) along Alternative 1. To reduce the severity of the impact to less than significant levels, Mitigation Measure T-9 (Provide Continuous Access to Properties) from Section C.13 (Traffic and Transportation) would be implemented. The Project's incremental contribution to the overall revenue impacts due to combined construction of projects in the north County would not be significant. Also, given that construction impacts from cumulative projects are temporary in nature, the combined effect of all construction activities would not significantly decrease revenues for businesses in the area. In addition, the temporary revenue impacts resulting from all of the cumulative projects in the area would not be cumulatively significant (**Class III**).
- **Construction activities would require the removal of existing housing (Impact S-7).** Construction of the proposed Project and Alternatives 1 through 4 would not require the removal of any existing housing. Therefore, the proposed Project and these Alternatives would have no cumulative contribution to impacts associated with the removal of housing.  
Due to the ROW necessary for construction and operation of the 500 kV line along Alternative 5, as well as restrictions on placement of the route, it is anticipated that residences within the ROW would need to be purchased and removed by SCE. Therefore, Impact S-7 for Alternative 5 would be significant and unavoidable. In addition, although the north County is currently experiencing rapid growth and development, the majority of development projects are not being sited in areas where removal of residences would be necessary. Therefore, although the implementation of Alternative 5 would have significant unavoidable impacts with respect to the removal of existing housing, its overall cumulative contribution to the combined potential of housing loss in conjunction with other reasonably foreseeable projects would not be significant. Impacts associated from removal of housing due to all of the cumulative projects in the area would not be cumulatively significant (**Class III**).

## Cumulative Effects on National Forest System Lands

- **Construction activities could cause a temporary decrease in revenues for Veluzat Motion Picture Ranch (Impact S-1).** The Veluzat Motion Picture Ranch is not located within NFS Lands. Therefore, this impact does not apply to the Forest Service and no cumulative impacts to NFS Lands would occur with any temporary decrease in revenues for the Veluzat Motion Picture Ranch as a result of proposed Project or Alternatives 1 through 5 construction.
- **Operation activities could cause a decrease in revenues for Veluzat Motion Picture Ranch (Impact S-2).** The Veluzat Motion Picture Ranch is not located within NFS Lands. Therefore, this impact does not apply to the Forest Service and no cumulative impacts to NFS Lands would occur with any permanent decrease in revenues for the Veluzat Motion Picture Ranch as a result of proposed Project or Alternative 1 through 5 operation.
- **Construction activities could cause a decrease in revenues for agricultural landowners (Impact S-3).** Agricultural lands used for economic purposes are not located within NFS Lands. Therefore, this impact does not apply to the Forest Service and no cumulative impacts to NFS Lands would occur with any decrease in revenues for agricultural landowners as a result of proposed Project or Alternatives 1 through 5 construction or operation.
- **Operation activities would substantially benefit public agency revenue (Impact S-4).** This impact does not apply to the Forest Service and no cumulative impacts to NFS Lands would occur with any change to public agency revenues as a result of proposed Project or Alternatives 1 through 5 operation.
- **Operation activities would substantially decrease property values along the Project alignment (Impact S-5).** This impact does not apply to the Forest Service and no cumulative impacts to NFS Lands would occur with any change to public agency revenues as a result of proposed Project or Alternatives 1 through 5 operation.
- **Construction of the proposed Project could cause a temporary decrease in revenues for Bouquet Canyon Stone Company (Impact S-6).** The Bouquet Canyon Stone Company is located on NFS Lands. Therefore, this would directly impact the Forest Service. Consequently, any temporary decrease in revenues for the Bouquet Canyon Stone Company as a result of proposed Project or Alternatives 1 through 5 operation would combine with the impacts on revenue of other projects to result in cumulative impacts to NFS Lands