D.13 Socioeconomics

This section addresses the environmental setting and impacts related to socioeconomics for the Proposed Project and alternatives. This analysis evaluates the potential for any short- and long-term project-induced population, housing, and/or employment impacts for areas adjacent to the proposed and alternative project corridors.

D.13.1 Environmental Setting for the Proposed Project

This section presents comprehensive baseline population, housing, and employment data. The study area for the project includes the Cities of Brisbane, Daly City, San Bruno, and South San Francisco, the Towns of Hillsborough and Colma, and the County of San Mateo. To examine labor force characteristics, it is assumed that most workers would make up to a one to two hour commute to the Proposed Project area. Counties within this one to two hour commute range include the nine counties in the San Francisco Bay Area region: Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, Solano, and Sonoma Counties.

Demographic Characteristics

Table D.13-1 provides population information from the 1990 and 2000 Censuses for the study area.

Minority and Low-Income Populations. Table D.13-2 provides the total minority population and minority percentages for the State and the study area for the year 2000. It also provides information on populations living below the poverty level for the State and the study area for the year 2000.

Housing. Housing in the region includes single-family residences, apartments, condominiums, and mobile homes. Table D-13.3 presents housing data for the jurisdictions traversed by the Proposed Project route for the year 2000.

Table D.13-1. Study Area Populations and Growth Rates

City/County/Town	1990 Population	2000 Population	Percent Increase 1990–2000
County of San Mateo	649,623	707,161	8.9
Brisbane	2,942	3,597	22.2
Colma	1,103	1,191	8.0
Daly City	92,311	103,621	12.3
Hillsborough	10,667	10,825	1.5
San Bruno	38,961	40,165	3.1
South San Francisco	54,312	60,552	11.5

Source: US Census, 1990 and 2000.

Labor Force and Unemployment. Table D-13.4 provides employment data for the jurisdictions traversed by the Proposed Project and alternative routes for the year 2000. The majority of the labor force involved in construction of the Proposed Project and alternatives are 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" work force under "Construction." Table D.13-5 provides the number of workers in the "Construction" and "Specialty Trade Construction" categories in February 2003 for the nine counties in the San Francisco Bay Area region. The Counties of Alameda and Contra Costa are grouped into the Oakland Primary Metropolitan Statistical Area (PMSA); the Counties of San Francisco, Marin, and San Mateo are grouped into the San Francisco PMSA; and Solano and Napa Counties are grouped in the Vallejo-Fairfield-Napa PMSA.

Table D.13-2. Demographic Profile for the Project Study Area

City/County	Total Population	Total Minority Population (%)	Individuals Below Poverty Level (%)
State of California	33,871,648	18,054,858 (53.3%)	4,706,130 (13.9%)
County of San Mateo	707,161	354,806 (50.2%)	40,692 (5.8%)
Brisbane	3,597	1,268 (35.3%)	201 (5.6%)
Colma	1,191	861 (72.3%)	58 (4.9%)
Daly City	103,621	85,277 (82.3%)	7,265 (7.0%)
Hillsborough	10,825	3,284 (30.3%)	299 (2.8%)
San Bruno	40,165	21,343 (53.1%)	1,774 (4.4%)
South San Francisco	60,552	42,065 (69.5%)	3,151 (5.2%)

Source: US Census, 2000.

Table D.13-3. San Mateo County Housing Data

Jurisdiction	Total Units	Vacant	Vacancy Rate (%)
County of San Mateo	260,576	6,473	2.5%
Brisbane	1,831	211	11.5%
Colma	342	13	3.8%
Daly City	30,775	536	1.7%
Hillsborough	3,804	115	3.0%
San Bruno	14,980	303	2.0%
South San Francisco	20,138	461	2.3%

Source: US Census, 2000.

Table D.13-4. San Mateo County Employment Data

Jurisdiction	Total Labor Force	Total Unemployed	Unemployment Rate (%)
County of San Mateo	373,911	12,191	2.2%
Brisbane	2,216	119	4.0%
Colma	534	17	1.8%
Daly City	52,914	2,008	2.4%
Hillsborough	4,699	59	0.7%
San Bruno	21,964	600	1.9%
South San Francisco	30,988	1,185	2.5%

Source: US Census, 2000.

Table D.13-5. Construction Labor Force Data for the San Francisco Bay Area Region

Jurisdiction/PMSA	Total Labor Force	Construction Labor Force	Specialty Trade Construction Labor Force
Oakland PMSA	1,303,700	63,100	38,300
San Francisco PMSA	930,600	42,800	23,200
Vallejo-Fairfield-Napa PMSA	284,200	15,800	9,900
Santa Clara County	932,700	38,700	27,400
Sonoma County	266,400	12,900	7,900

Source: EDD, 2003.

D.13.2 Applicable Regulations, Plans, and Standards

The following section presents the State, regional, and local environmental justice regulations, plans, and standards that pertain to the Proposed Project and alternatives. There are no federal regulations, plans, or standards related to socioeconomics that are directly applicable to the Proposed Project and alternatives.

D.13.2.1 State

Under CEQA, California Code of Regulation 14, Section 15131 states the following:

- Economic or social effects of a project shall not be treated as significant effects on the environment.
- Economic or social factors of a project may be used to determine the significance of physical changes caused by the project.
- 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 and or avoid the significant effects on the environment.

D.13.2.2 Regional and Local

The Association of Bay Area Governments (ABAG) developed "A Land Use Policy Framework for the San Francisco Bay Area" in July 1990, to establish a guidance framework for regional comprehensive planning. ABAG includes the governments of the nine counties in the Bay Area, described above in Section D.13.1, and 99 of the 101 cities in the Bay Area. The policies in the framework encourage efficient use of existing land uses and infrastructure, subregional coordination on items of regional importance, and actions and programs which improve revenue generation and cost sharing. The following policy is applicable to the Proposed Project and alternatives:

- **Policy Four** – Provision of housing opportunities for all income levels are encouraged by developing city and county plans and policies that improve housing supply and affordability to meet local and regional needs.

D.13.3 Environmental Impacts and Mitigation Measures for the Proposed Project

D.13.3.1 Significance Criteria

Socioeconomic impacts potentially resulting from project construction and project operation would occur under the following conditions:

- If the Proposed Project or alternatives would induce substantial population growth in an area, either directly (for example, by proposing new homes or businesses), or indirectly (for example, through extension of roads or other infrastructure);
- If the Proposed Project or alternatives would create a significant demand for labor; or
- If the Proposed Project or alternatives would displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.

D.13.3.2 Applicant Proposed Measures

The Applicant did not propose any measures to reduce any potential project-related socioeconomic impacts.

D.13.3.3 230 kV/60 kV Overhead Transmission Line

Project-Related Population Growth

The Proposed Project is designed to increase system reliability and facilitate the possible retirement of power plants currently serving San Francisco. As the project would be accommodating existing power demands in the City of San Francisco rather than facilitating future expansion, it is not expected that the project would increase regional population. Therefore, there would be no population growth related impacts associated with the Proposed Project.

Impact S-1: Induce Demand for Labor

Approximately 14.7 miles of overhead transmission line would be installed from Jefferson Substation to the new transition station. The length of time required for construction of the overhead segment of the Proposed Project is approximately 13 months and would require 24 separate construction crews, each crew ranging from 4 to 12 crew members, for a total of between 100 to 200 crew members.

It is expected that workers required for project construction would be from the local Bay Area labor force. Tables D.13-4 and D.13-5 show a strong labor force with a range of unemployment rates, and a sizable construction labor force. As such, there is an adequate available labor force within daily commuting distance to supply the work force for the project. Impacts would be less than significant (Class III) and mitigation measures are not required

Impact S-2: Displacement of People or Existing Housing

Because few, if any, workers are expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would likely occur. Temporary accommodations may be needed during construction, but with numerous hotels and motels in the area, impacts are expected to be less than significant (Class III) and mitigation measures are not required.

D.13.3.4 230 kV Underground Transmission Line

As previously described in Section D.13.3.3, because the project would be accommodating existing power demands in the City of San Francisco rather than facilitating future expansion, it is not expected that the project would induce growth in the region. Therefore, there would be no population growth related impacts associated with the Proposed Project.

Approximately 13 miles of underground 230 kV single-circuit transmission line would be installed from the transition station to the Martin Substation. The length of time required for construction of the underground segment of the Proposed Project is approximately 12 months and would require an estimated 15 separate construction crews, each crew ranging from 4 to 22 crew members, for a total of between 150 to 250 crew members.

As discussed in Section D.13.3.3, the Applicant is expected to utilize the local Bay Area labor force which would be more than adequate to supply workers for the project. Therefore, impacts associated with induced labor demand (Impact S-1) would be adverse, but less than significant (Class III) and would not require mitigation measures.

With the available labor force in the Bay Area region, few, if any, workers are expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations would likely arise at times during construction, but with numerous hotels and motels in the area, impacts associated with displacement of people or existing housing (Impact S-2) would be adverse, but less than significant (Class III) and mitigation measures would not be required.

D.13.3.5 Transition Station, Substations, Switchyards, and Taps

Operation of the transition station, modified substations, switchyards, and taps would not require any additional workers for operations or maintenance. As such, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth is expected as a direct or indirect result of the project.

A transition station is needed to convert the overhead circuit to underground, the modifications of the Jefferson, Martin, Ralston, Carolands, Monta Vista, Millbrae, and San Mateo substations and the Hillsdale Junction Switchyard are needed to accommodate the new features of the project, and the 60 kV connection taps are necessary to accommodate the Proposed Project. Construction of the transition station would take only a few months and would require less than 50 workers. Modification to the substations, switchyard, and taps would be made to existing infrastructure and would require relatively few workers.

As discussed in Section D.13.3.3, the Applicant is expected to utilize the local Bay Area labor force, which would be more than adequate to supply workers for the project. Impacts on labor demand (Impact S-1) would be adverse, but less than significant (Class III) and mitigation measures are not required.

With the available labor force in the Bay Area region, few, if any, workers would be expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations would likely arise at times during construction, but with numerous hotels and motels in the area, any impacts associated with displacement of people of existing housing (Impact S-2) would be adverse, but less than significant (Class III) and mitigation measures are not required.

D.13.4 Southern Area Alternatives

D.13.4.1 PG&E Route Option 1B – Underground

This alternative is an underground option to the first 11.2 miles of the southern overhead segment of the Proposed Project along the Interstate 280 (I-280) corridor. This alternative was suggested by PG&E in its PEA as Route Option 1B and was endorsed during the scoping process by numerous agencies and individuals, including the residents of the Town of Hillsborough and the San Mateo Highlands.

Environmental Setting

The study area for this alternative is largely the same as for the Proposed Project, although it would also include the Cities of Burlingame and Millbrae in addition to passing through Hillsborough, San Bruno, and County of San Mateo lands in the southern part of the route. Labor force characteristics are drawn from the same nine-county San Francisco Bay Area region used for the Proposed Project and shown in Table D.13-5.

Six options for crossing Crystal Springs Dam were defined in the Draft EIR. In the comments on the Draft EIR, PG&E suggested consideration of an additional overhead crossing of San Mateo Creek as an option to avoid a crossing at Crystal Springs Dam. Under this alternative, approximately 2,000 feet of underground line in Skyline Boulevard would instead be replaced by approximately 1,000 feet of underground line in Crystal Springs Road and a directional bore under I-280.

Table D.13-6. Cities of Burlingame and Millbrae – Population and Growth Rates

City	1990 Population	2000 Population	Percent Increase 1990–2000
Burlingame	26,801	28,158	5.1
Millbrae	20,412	20,718	1.5

Source: US Census, 1990 and 2000.

Table D.13-7. Cities of Burlingame and Millbrae – Demographic Profiles

City	Total Population	Total Minority Population	Individuals Below Poverty Level
Burlingame	28,158	8,095 (28.8%)	1,570 (5.7%)
Millbrae	20,718	8,504 (41.0%)	693 (3.4%)

Source: US Census, 2000.

Table D.13-8. Cities of Burlingame and Millbrae – Housing Data

City	Total Units	Vacant	Vacancy Rate
Burlingame	12,869	358	2.8%
Millbrae	8,113	157	1.9%

Source: US Census, 2000.

Table D.13-9. Cities of Burlingame and Millbrae – Employment Data

City	Total Labor Force	Total Unemployed	Unemployment Rate
Burlingame	15,729	344	1.5%
Millbrae	9,827	176	1.0%

Source: US Census, 2000.

Demographic Characteristics

Table D.13-6 summarizes the population and growth rates according to the 1990 and 2000 Census for the Cities of Burlingame and Millbrae. Table D.13-1 above provides population and growth rates for the other parts of the study area.

Minority and Low-Income Populations. Table D.13-7 provides the total minority population, minority percentages, and total population of individuals below the poverty line for the Cities of Burlingame and Millbrae. Table D.13-2 above provides minority and poverty data for the State, the County of San Mateo, and other cities and towns in the study area for the year 2000.

Housing. Housing in the region includes single-family residences, apartments, condominiums, and mobile homes. Table D.13-8 presents housing data for the Cities of Burlingame and Millbrae. Table D.13-3 above provides housing information for the rest of the study area for the year 2000.

Labor Force and Unemployment. Table D.13-9 provides employment data for the Cities of Burlingame and Millbrae, while Table D.13-4 presents employment data for the other jurisdictions traversed by the alternative route. The labor force for this alternative would be drawn from the same pool as the Proposed Project. Table D.13-5 provides the number of workers in the "Construction" and "Specialty Trade Construction" categories in February 2003, for the nine counties in the San Francisco Bay Area region.

Environmental Impacts and Mitigation Measures

No people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impact associated with project-related population growth.

Due to construction of the trench necessary for this alternative and the required maintenance activities in two transmission easements instead of one, PG&E Route Option 1B would require more temporary workers for construction of the alternative and could require additional personnel to monitor and maintain the new transmission easement. ~~Assuming that t~~The level of effort to install this underground alternative, regardless of the type of crossing of Crystal Springs Dam is similar to that which would be required to install the underground portion of the Proposed Project, ~~this alternative~~and could require between 150 and 250 crew members. Few, if any, additional personnel would be necessary for operation and maintenance of a new easement.

As described above in Section D.13.3.3, 230/60 kV Overhead Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with adequate temporary housing in the area, impacts would be less than significant. Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and mitigation measures are not required.

Comparison to Proposed Route Segment

While PG&E Route Option 1B would utilize more temporary labor than the proposed route segment, in the larger context of the San Francisco Bay Area construction and specialist trade construction labor force, there would be little difference between this alternative and proposed route segment. Similarly, maintenance of a second transmission easement could require additional permanent personnel, compared to no need for additional personnel associated with the Proposed Project, but it is unlikely that this would require any new permanent employees, which in the context of the Bay Area's labor force is a negligible difference. Therefore, there is little difference between the Proposed Project and this alternative.

D.13.4.2 Partial Underground Alternative

Environmental Setting

Section D.13.1 describes the study area and environmental setting for this alternative as well as for the Proposed Project.

Environmental Impacts and Mitigation Measures

This alternative would be approximately 1 mile longer than the Proposed Project segment and would require additional construction due to trenching for the underground portions in the southern parts of this route. Assuming that the level of effort to install this underground alternative is similar to that which would be required to install the underground portion of the Proposed Project, this alternative could require between 150 and 250 crew members. While additional crew members would be necessary for construction of the route, as the Partial Underground alternative follows an existing easement alignment, no new personnel would be necessary to operate or maintain the route.

As with PG&E Route Option, no population growth would occur, no new housing would be needed for this alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Need for temporary accommodations could occur during construction, but any impacts would be less than significant. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

The Partial Underground Alternative would utilize more temporary labor than the applicable portion of the Proposed Project. In the larger context of the San Francisco Bay Area construction and specialist trade construction labor force; however, there would be little difference between the alternative and proposed route segment.

D.13.5 Northern Area Alternatives

D.13.5.1 West of Skyline Transition Station Alternative

This alternative transition station would be located west of Skyline Boulevard, across the street and southeast of the proposed transition station location at the intersection of Skyline Boulevard and San Bruno Avenue. This transition station could be used with three possible underground transmission line routes: the Proposed Project route along San Bruno Avenue, along Sneath Lane to the BART right-of-way (ROW), or along Westborough Boulevard to the BART ROW.

Environmental Setting of the Alternative Transition Station

The West of Skyline Transition Station would be located on SFPUC Peninsula Watershed Lands, but the socioeconomic impacts of the project with this transition station would affect the entire study area as described in Section D.13.1, including the Cities of Brisbane, Daly City, San Bruno, and South San Francisco, the Towns of Hillsborough and Colma, and the County of San Mateo. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures for the Alternative Transition Station

As construction of the West of Skyline Transition Station would be similar in size and nature to the proposed transition station, the environmental impacts associated with its construction would be the same as those associated with construction impacts of the Proposed Project. Construction of the transition station would take only a few months and would require less than 50 workers. No new permanent personnel would be necessary to maintain or operate the station.

The Applicant is expected to utilize the local Bay Area labor force, which would be more than adequate to supply workers for the project. Impacts on labor demand (Impact S-1) would be adverse, but less than significant (Class III) and mitigation measures are not required.

With the available labor force in the Bay Area region, few, if any, workers would be expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations would likely arise at times during construction, but with numerous hotels and motels in the area, any impacts associated with displacement of people of existing housing (Impact S-2) would be adverse, but less than significant (Class III) and mitigation measures are not required.

Comparison to Proposed Transition Station

Socioeconomic impacts of the West of Skyline Transition Station would be no different from any impacts resulting from construction or operation of the proposed transition station.

West of Skyline Transition Station with Proposed Underground Route

This alternative would run from a transition station west of Skyline Boulevard and travel north underground on Skyline Boulevard for 0.1 miles, turning east at San Bruno Avenue to join the Proposed Project route.

Environmental Setting

The proposed underground route extending from the West of Skyline Transition Station would cross through San Bruno. As with the West of Skyline Transition Station, however, the socioeconomic effects of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

This alternative would be slightly longer than the proposed route segment, requiring additional construction due to extended trenching for the route, and as such would require more temporary workers for construction.

As described above in Section D.13.3.4, 230 kV Underground Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. Although more workers would be required for construction of this alternative, it is expected that they would be drawn from the San Francisco Bay Area labor force. No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

As such, no population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

This alternative would utilize slightly more temporary labor than the Proposed Project segment, but in the larger context of the San Francisco Bay Area construction and specialist trade construction labor force, there would be little difference between this alternative and the proposed route segment.

West of Skyline Transition Station with Sneath Lane Underground Route

This alternative would run from a transition station west of Skyline Boulevard and would travel north underground on Skyline Boulevard for 0.6 miles, turning east onto Sneath Lane to join the Proposed Project route in the BART ROW.

Environmental Setting

The Sneath Lane underground route extending from the West of Skyline Transition Station would cross through San Bruno. As with the West of Skyline Transition Station, however, the socioeconomic effects of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

As described for the West of Skyline Transition Station with Proposed Underground Route, this alternative would be slightly longer than the Proposed Project segment. The alternative would require additional construction due to more trenching for the route, and would require more temporary workers for construction.

As described above in Section D.13.3.4, 230 kV Underground Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. Although more workers would be required for construction of this alternative, it is expected that they would be drawn from the San Francisco Bay Area labor force. No new housing would be required for this alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be adverse, but less than significant (Class III) and no mitigation measures are required.

No population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures are required.

Comparison to Proposed Route Segment

This alternative would utilize slightly more temporary labor than the Proposed Project segment, but in the larger context of the San Francisco Bay Area construction and specialist trade construction labor force, there would be little difference between this alternative and the Proposed Project segment.

West of Skyline Transition Station with Westborough Boulevard Underground

This alternative would run from a transition station west of Skyline Boulevard and would travel north underground on Skyline Boulevard for 2.1 miles, turning east onto Westborough Boulevard to join the Proposed Project route in the BART ROW.

Environmental Setting

Although the Westborough Boulevard Underground route would extend from the West of Skyline Transition Station and cross through San Bruno and South San Francisco, the socioeconomic effects of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

As described for the two previous West of Skyline Transition Station underground routes, this alternative would be slightly longer than the Proposed Project segment, adding an additional 2.1 miles of trenching to the project. The alternative would require additional construction due to more trenching for the route, and would require more temporary workers for construction.

As described above in Section D.13.3.4, 230 kV Underground Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. Although more workers would be required for construction of this alternative, it is expected that they would be drawn from the San Francisco Bay Area labor force.

No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

No population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

This alternative would utilize slightly more temporary labor than the proposed route segment, but in the larger context of the San Francisco Bay Area construction and specialist trade construction labor force, there would be little difference between this alternative and the proposed route segment.

D.13.5.2 Sneath Lane Transition Station Alternative

The Sneath Lane Transition Station requires that the new overhead 60/230 kV line would extend north-northwest along Skyline Boulevard for 0.6 additional miles past San Bruno Avenue to near the Sneath Lane Substation. A transition station would be installed adjacent to the existing substation and an underground route to the Martin Substation would originate from this point. Like the West of Skyline transition station, the Sneath Lane Transition Station could be used with three possible underground transmission line routes: the Proposed Project route along San Bruno Avenue, along Sneath Lane to the BART ROW, or along Westborough Boulevard to the BART ROW.

Environmental Setting of the Transition Station Alternative

The Sneath Lane Transition Station would be located in San Bruno, but the socioeconomic effects of the project with this transition station alternative would affect the entire study area as described in Section D.13.1, including the Cities of Brisbane, Daly City, San Bruno, and South San Francisco, the Towns of Hillsborough and Colma, and the County of San Mateo. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

Construction of the Sneath Lane Transition Station would be similar in size and nature to the proposed transition station. The environmental impacts associated with its construction would be the same as those associated with construction impacts of the Proposed Project. Construction of the transition station would take only a few months and would require less than 50 workers. No new permanent personnel would be necessary to maintain or operate the station.

The Applicant is expected to utilize the local Bay Area labor force, which would be more than adequate to supply workers for the project. Impacts on labor demand (Impact S-1) would be adverse, but less than significant (Class III) and mitigation measures are not required.

With the available labor force in the Bay Area region, few, if any, workers would be expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations would likely arise at times during construction, but with numerous hotels and motels in the area, any impacts associated with displacement of people of existing housing (Impact S-2) would be adverse, but less than significant (Class III) and mitigation measures are not required.

Comparison to Proposed Transition Station

Socioeconomic impacts of the Sneath Lane Transition Station would be no different from any impacts resulting from construction or operation of the proposed transition station.

Sneath Lane Transition Station with Proposed Underground Route

The line from a transition station adjacent to the Sneath Lane Substation would travel south underground on Skyline Boulevard for 0.5 miles, turning east at San Bruno Avenue to join the Proposed Project route.

Environmental Setting

The Proposed Underground route extending from the Sneath Lane Transition Station would cross through San Bruno, but the socioeconomic impacts of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

As described for the West of Skyline Transition Station with Sneath Lane Underground Route, this alternative would be slightly longer than the Proposed Project segment, as the route would include an additional distance along Skyline Boulevard between Sneath Lane and San Bruno Avenue. The alternative would require additional construction due to more trenching for the route, and would require more temporary workers for construction.

As described above in Section D.13.3.4, 230 kV Underground Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. Although more workers would be required for construction of this alternative, it is expected that they would be drawn from the San Francisco Bay Area labor force. No new housing would be required for this alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be adverse, but less than significant (Class III) and no mitigation measures are required.

No population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures are required.

Comparison to Proposed Route Segment

Socioeconomic impacts of the Sneath Lane transition station with Proposed Underground Route would be no different from any impacts resulting from construction or operation of the Proposed Project underground route segment.

Sneath Lane Transition Station with Sneath Lane Underground Route

The line from a transition station adjacent to the Sneath Lane Substation would travel east underground along Sneath Lane to join the Proposed Project route at the BART ROW.

Environmental Setting

The Sneath Lane Underground route extending from the Sneath Lane Transition Station would cross through San Bruno, but the socioeconomic effects of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

This alternative would be roughly the same length as the proposed route segment. As described above in Section D.13.3.4, 230 kV Underground Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

As such, no population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

As discussed for the West Skyline Transition Station with Sneath Lane Underground Route, socioeconomic impacts of this alternative would be no different from any impacts resulting from construction or operation of the Proposed Project underground route segment.

Sneath Lane Transition Station with Westborough Boulevard Underground

The line from a transition station adjacent to the Sneath Lane Substation would travel north underground on Skyline Boulevard for 1.6 miles, turning east onto Westborough Boulevard to join the Proposed Project route in the BART ROW.

Environmental Setting

Although the Westborough Boulevard Underground route would extend from the Sneath Lane Transition Station and cross through the Cities of San Bruno and South San Francisco, the socioeconomic impacts of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

This alternative would be slightly longer than the Proposed Project segment, adding an additional 1.6 miles of trenching to the project. The alternative would require additional construction due to more trenching for the route, and would require more temporary workers for construction.

As described above in Section D.13.3.4, 230 kV Underground Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. Although more workers would be required for construction of this alternative, it is expected that they would be drawn from the San Francisco Bay Area labor force.

No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

No population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

This alternative would utilize slightly more temporary labor than the Proposed Project segment, but in the larger context of the San Francisco Bay Area construction and specialist trade construction labor force, there would be little difference between this alternative and the Proposed Project segment.

D.13.5.3 Glenview Drive Transition Tower Alternative

This alternative transition tower would be would be located south of the proposed transition station between Glenview Drive and Skyline Boulevard west of the existing City of San Bruno water tank. The tower would be located on the roadway divider between Glenview Drive and Skyline Boulevard on land owned by Caltrans. Transmission lines from the transition tower would traverse north along Glenview Drive to the Proposed Project route along San Bruno Avenue; north on Glenview Drive to San Bruno Avenue then north on Skyline Boulevard to follow Sneath Lane to the BART ROW; or continue north along Skyline Boulevard to Westborough Boulevard, where it would run east to the BART ROW.

Environmental Setting of the Alternative Transition Tower

The socioeconomic impacts of the project with this transition tower would affect the entire study area as described in Section D.13.1, including the Cities of Brisbane, Daly City, San Bruno, and South San Francisco, the Towns of Hillsborough and Colma, and the County of San Mateo. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures for the Alternative Transition Tower

Construction of the Glenview Drive Transition Tower would be similar in size and nature to the proposed transition station, so environmental impacts associated with its construction would be the same as those associated with the Proposed Project. Construction of the new transition station would take only a few months and would require less than 50 workers. No new permanent personnel would be necessary to maintain or operate the station.

The Applicant is expected to utilize the local Bay Area labor force, which would be more than adequate to supply workers for the project. Impacts on labor demand (Impact S-1) would be adverse, but less than significant (Class III) and mitigation measures are not required.

With the available labor force in the Bay Area region, few, if any, workers would be expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations would likely arise at times during construction, but with numerous hotels and motels in the area, any impacts associated with displacement of people of existing housing (Impact S-2) would be adverse, but less than significant (Class III) and mitigation measures are not required.

Comparison to Proposed Transition Station

Socioeconomic impacts of the Glenview Drive Transition Tower would be no different from any impacts resulting from construction or operation of the proposed transition station.

Impacts associated with the Glenview Drive Transition Tower Alternative along with any of the Underground Route Alternatives would be similar to those discussed under the West of Skyline Transition Station Alternative (Section D.13.5.1).

D.13.5.4 Trousdale Drive Transition Tower Alternatives

The two Trousdale Drive Transition Tower Alternatives locations would be near Tower 11/71 for the Proposed Project's transition to Route Option 1B, and west of this tower about 0.5 miles for the Partial Underground Alternative's transition to Route Option 1B. Both sites would be on SFPUC Watershed Lands, mile west of the southwestern end of Trousdale Drive. From Trousdale Drive, the lines would cross under I-280 and follow PG&E Route Option 1B east on Trousdale Drive and north on El Camino Real to join back up with the Proposed Project or an alternative.

Environmental Setting of the Alternative Transition Towers

The Trousdale Drive Transition Towers would both be located on SFPUC Peninsula Watershed Lands, but the socioeconomic impacts of the project with these transition towers would affect the entire study area as described in Section D.13.1 and Section D.13.4.1, including the Cities of Burlingame, Millbrae, Brisbane, Daly City, San Bruno, and South San Francisco, the Towns of Hillsborough and Colma, and the County of San Mateo. Tables D.13-1 through D.13-6 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures for the Alternative Transition Towers

Construction of either of the Trousdale Drive Transition Towers would be similar in size and nature to the proposed transition station, so environmental impacts associated with its construction would be the same as those associated with the Proposed Project. Construction of the new transition towers would take only a few months and would require less than 50 workers. No new permanent personnel would be necessary to maintain or operate the stations.

The Applicant is expected to utilize the local Bay Area labor force, which would be more than adequate to supply workers for the project. Impacts on labor demand (Impact S-1) would be adverse, but less than significant (Class III) and mitigation measures are not required.

With the available labor force in the Bay Area region, few, if any, workers would be expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations would likely arise at times during construction, but with numerous hotels and motels in the area, any impacts associated with displacement of people of existing housing (Impact S-2) would be adverse, but less than significant (Class III) and mitigation measures are not required.

Comparison to Proposed Transition Station

Socioeconomic impacts of the Trousdale Drive Transition Tower Alternatives would be no different from any impacts resulting from construction or operation of the proposed transition station.

D.13.5.5 Golf Course Drive Transition Station Alternative

The Golf Course Drive Transition Station would allow implementation of two scenarios. First, the Route Option 1B alternative in which the 230 kV line would be installed underground in Cañada Road and Skyline Boulevard could transition to overhead at this location. From there, it would connect with the Partial Underground Alternative or the Proposed Project, continuing north to one of the four transition station options near San Bruno Avenue. This would eliminate the use of the portion of Route Option 1B route north of Hayne Road (including Trousdale Drive and El Camino Real).

The second option for the use of the Golf Course Drive Transition Station would be to allow an underground crossing of the 230 kV line below the I-280 in the Partial Underground Alternative. In the original definition of the Partial Underground Alternative, both the 60 and 230 kV lines would be underground from the transition tower north of San Mateo Creek (Tower 7/39) to another transition tower south of Carolands Substation (Tower 8/50). A 60/230 kV transition tower at the 8/50 location would create a significant visual impact, as defined in Section D.3.4.2. However, the Golf Course Drive Transition Station would allow the 230 kV line to turn west when the line reaches Hayne Road and cross below the I-280 freeway, so there would be a need only for a single-circuit 60 kV transition tower at the 8/50 location so the visual impact would be substantially reduced. The 60 kV line would then enter Carolands Substation and cross the I-280 freeway overhead from Tower 8/50 to the west.

Environmental Setting of the Alternative Transition Station

The Golf Course Drive Transition Station would be located on SFPUC Peninsula Watershed Lands in unincorporated San Mateo County, but the socioeconomic impacts of the project with this transition station would affect the entire study area as described in Section D.13.1 and Section D.13.4.1, including the Cities of Burlingame, Millbrae, Brisbane, Daly City, San Bruno, and South San Francisco, the Towns of Hillsborough and Colma, and the County of San Mateo. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures for the Alternative Transition Station

Construction of the Golf Course Drive Transition Station would be similar in size and nature to the proposed transition station, so environmental impacts associated with its construction would be the same as those associated with the Proposed Project. Construction of the new transition station would take only a few months and would require less than 50 workers. No new permanent personnel would be necessary to maintain or operate the station.

The Applicant is expected to utilize the local Bay Area labor force, which would be more than adequate to supply workers for the project. Impacts on labor demand (Impact S-1) would be adverse, but less than significant (Class III) and mitigation measures are not required.

With the available labor force in the Bay Area region, few, if any, workers would be expected to relocate to the area, no new housing would be needed for the project, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations would likely arise at times during construction, but with numerous hotels and motels in the area, any impacts associated with displacement of people of existing housing (Impact S-2) would be adverse, but less than significant (Class III) and mitigation measures are not required.

Summary of Impacts

Socioeconomic impacts of the Golf Course Drive Transition Station would be less than significant, similar to those resulting from construction or operation of the proposed transition station.

D.13.5.6 Cherry Avenue Alternative

This alternative route would diverge from the Proposed Project route at the intersection of San Bruno Avenue and Cherry Avenue. It would follow Cherry Avenue for 0.5 miles to the north to Sneath Lane, where it would turn east to El Camino Real or Huntington Avenue near the BART ROW.

Environmental Setting

The Cherry Avenue Alternative route is entirely within the City of San Bruno, but the socioeconomic effects of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

This alternative would be roughly the same length as the proposed route segment. As described above in Section D.13.3.4, 230 kV Underground Transmission Line, the Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

As such, no population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

Socioeconomic impacts of the Cherry Avenue Alternative route would be no different from any impacts resulting from construction or operation of the Proposed Project underground route segment.

D.13.5.7 PG&E's Route Option 4B – East Market Street

This alternative would diverge from the Proposed Project route by continuing north on Hillside (where the Proposed Project turns east onto Hoffman). The route would follow Hillside for 0.4 miles, and then turn northeast into East Market Street, where it would rejoin the Proposed Project route at Orange Street. This alternative is a total of approximately 0.6 miles and would replace 0.8 miles of the Proposed Project route.

Environmental Setting

PG&E's Route Option 4B – East Market Street route would cross through the Town of Colma, but the socio-economic effects of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

As PG&E's Route Option 4B would be slightly shorter than the Proposed Project route, impacts would be similar, but slightly less. The difference of 0.2 miles in construction distance would likely be a negligible difference in the amount of construction labor necessary for the project. The Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

As such, no population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

Differences in the socioeconomic impacts of PG&E's Route Option 4B – East Market Street alternative would be minimal compared with any impacts resulting from construction or operation of the Proposed Project underground route segment.

D.13.5.8 Junipero Serra Alternative

This alternative would diverge from either of the Westborough Boulevard route alternatives at the intersection of Junipero Serra and Westborough Boulevard. The route would follow Junipero Serra underground for 1.8 miles. The route would turn east into Serramonte Boulevard, for approximately one mile to Hillside, where it would rejoin the Proposed Project route. This alternative would replace a similar distance of the Proposed Project.

Environmental Setting

The Junipero Serra Alternative would cross through the Cities of South San Francisco and Colma, but the socioeconomic effects of the project would affect the entire study area as described in Section D.13.1. Tables D.13-1 through D.13-5 provide population, housing, income, demographic, and labor statistics for the study area.

Environmental Impacts and Mitigation Measures

This alternative would be roughly the same length as the proposed route segment. The Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

As such, no population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

Socioeconomic impacts of the Junipero Serra Boulevard Alternative route would be no different from any impacts resulting from construction or operation of the Proposed Project underground route segment.

D.13.5.9 Modified Existing 230 kV Underground ROW

This alternative is an underground alternative to the northern underground segment of the Proposed Project between the intersection of Millbrae Avenue and El Camino Real and the intersection of Guadalupe Canyon Parkway and Bayshore Boulevard. This alternative would use a portion of the existing underground 230 kV transmission line through the Cities of Millbrae, San Bruno, and Brisbane, and would incorporate a new route segment through South San Francisco and adjacent cities. For the majority of this alternative's alignment, the route would be significantly different from the proposed underground route.

Route Options A through F. Based on comments received on the Draft EIR, six optional segments for the Modified Existing 230 kV Alternative route have been identified to reduce traffic and business disruption impacts.

Environmental Setting

The study area for this alternative is largely the same as for the Proposed Project, passing through San Bruno, South San Francisco, and Brisbane. Refer to Section D.13.1 for data for the cities along this alternative route.

Environmental Impacts and Mitigation Measures

Overall, ~~T~~this alternative would be substantially shorter than the proposed underground route segment. Route Options A through F would individually shorten or lengthen the total length of this alternative, and so would alter the amount of work required and thus the labor required, although these alterations would not be significant. The Applicant is expected to utilize the local Bay Area labor force to the greatest extent possible. No new housing would be required needed for the alternative, no housing would be displaced, and no new competition for existing housing would be likely to occur. Some need for temporary accommodations could arise, but with hotels and motels in the area, any impacts would be less than significant.

As such, no population growth would occur, no people or housing would be displaced, no additional competition for existing housing would result from the project, and no new regional growth would be expected as a direct or indirect result of the project. There would be no impacts associated with population growth and Impacts S-1 (induced labor demand) and S-2 (displacement of people or existing housing) would be adverse, but less than significant (Class III) and no mitigation measures would be required.

Comparison to Proposed Route Segment

While this alternative, with any of the six route options, would be substantially shorter than the underground segment of the Proposed Project, socioeconomic impacts of the Modified Existing 230 kV Underground ROW alternative would not differ from the impacts resulting from construction or operation of the Proposed Project underground route segment.

D.13.6 Environmental Impacts of the No Project Alternative

Under the No Project Alternative, it is assumed that certain other transmission and substation upgrades would be made, and that the CCSF would install the four turbine generators it has been given. These projects would require construction, potentially adding to the area's workforce for short periods of time. However, the No Project Alternative, described in Section C.6, would result in no population growth. As discussed under Cumulative Impacts, population growth in the area is expected to continue with or without the project, but the No Project Alternative's contribution to this would be less than significant (Class III). Impacts to labor and housing as a result of the No Project Alternative would also be less than significant (Class III).

D.13.7 Property Values

During the public review process for the Jefferson-Martin 230 kV Transmission Project Draft EIR, 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. It should be noted that this section does not consider property values in the context of CEQA and the determination of environmental impact, because: (1) there is no consistent evidence that industrial facilities negatively impact property values; and (2) there are no defined or adopted CEQA standards for analysis of industrial project impacts on property values. As such, the information in this section is provided for the benefit of the public and decisionmakers.

D.13.7.1 Applicable Policies, Standards, and Regulations

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 a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn 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 chain of 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 an additional 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 determining that the effect is significant.

(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.

D.13.7.2 Technical Studies

The State of California Energy Commission (CEC), in their recent review (between 2000 and 2003) and licensing of several power plant projects, have experienced a high level of similar public concern associated with the siting of power plants and any associated impacts on property values. As a result, CEC Staff, in preparation of their Staff Assessments (CEQA-equivalent process) evaluating power plant projects, have conducted thorough research of the literature on proximity impacts analysis for property values and have cited the Kinnard-Dickey paper, *A Primer on Proximity Impact Research: Residential Property Values Near High-Voltage Transmission Lines,* as a comprehensive study on this topic. Previous studies cited in the Kinnard-Dickey paper show that three procedures are used 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 in control areas, which are not located in the proximity of transmission or distribution lines. The three procedures cited in the Kinnard-Dickey paper include:

1. **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;

2. **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

3. **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.

Studies cited in the Kinnard-Dickey paper show that three possible effects to the market value of residential properties have been claimed:

1. **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;

2. **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

3. **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. Issues that must be addressed to ensure accurate proximity impact analysis for 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.

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.

In addition to a literature search on proximity analysis impacts, the CEC staff reviewed the *Analysis of Property Value Impacts of the Crockett Cogeneration Project*, submitted by the Applicant for the Crockett Cogeneration Project. The Crockett analysis cites several studies that examine the impacts on property values of very large industrial facilities. Such facilities include nuclear power plants, industrial waste incinerators, and landfills. As stated in the Crockett analysis, one or more of three methods were used to study impacts of property values:

- Hedonic pricing,
- Contingent valuation, or
- Regression analysis of market sales data.

Hedonic pricing techniques analyze how the attributes of a good affect its price, and have been used in several of the studies to estimate the losses in sale price of homes due to possible exposure to technological or natural risks. The findings of previous studies in the Crockett analysis "yield an equivocal conclusion. Under some conditions facilities result in negative economic impacts and under other conditions they do not. Thus, even for very large facilities that are extreme in terms of their potential health, safety, and aesthetic impacts, there is no clear association with diminished economic impacts. Indeed, economic impacts are not clearly and reliably observed even for nuclear power generation facilities near residential properties" (Analysis of Property Value Impacts of the Crockett Cogeneration Project, Appendix X, Crockett Cogeneration Project, 1992).

Further, the Crockett analysis states that "there are many factors involved in purchasing a new home: affordability; age; size; schools; location; and so on, and it has simply not been demonstrated that a view obstruction would be a major factor in a property value decline" (Analysis of Property Value Impacts of the Crockett Cogeneration Project, Appendix X, Crockett Cogeneration Project, 1992).

The Kinnard-Dickey paper and the Crockett analysis cite several examples of proximity impact analyses, methodologies used to measure impacts, and types of possible proximity impacts on residential property values. Further, both studies conclude that differing, sometimes conflicting, findings have emerged from market studies. Despite the fact that many technical and conceptual issues remain untested and unresolved, the Kinnard-Dickey paper supports the use of the MRA in the Hedonic Pricing Model format, when a large data set of appropriately screened property sales are used.

D.13.7.3 Environmental Impacts

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.

Concerned local property owners have not identified a specific physical attribute (as required by CEQA) of the proposed project that could cause homeowners to suffer an economic loss due to a decline of full market value for the property. Rather, generalized statements of concern regarding the industrial nature of the project contributing to diminished property values have been presented.

While it is possible that property owners near the project site may have the perception that their homes will diminish in value because of the project, the actual loss of property value and potential effects can only be tested through data from home sales. 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. This type of data collection and study is beyond the scope of an environmental impact report, and is therefore, infeasible for the proposed project.

While it can be ascertained that particular environmental and physical changes can affect property values within an immediate distance of the proposed project, at this time, a definitive assessment of any potential impacts to nearby property values is not possible. 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.

As cited in Section D.13.7.1 (above) and CEQA Guidelines Section 15131, economic or social effects of a project *per se* are not considered as significant effects on the environment. However, such issues can be considered by the CPUC in its General Proceeding. Although there is evidence that transmission lines have affected property values in some cases, the effects are generally smaller than anticipated. Impacts on property values result from visual impacts, or concerns health and safety (such as EMF). These issues and potential impacts are analyzed extensively in the Draft EIR, Section D.3 (Visual Resources) and Section D.8 (Public Health and Safety). Where proposed project impacts are less than significant or have been mitigated to less than significant levels, then any associated property value impacts are unlikely to be significant.

D.13.8 Mitigation Monitoring, Compliance, and Reporting

Neither the Proposed Project nor any alternatives would result in impacts requiring mitigation. No mitigation monitoring table is required.