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F. Other CEQA and NEPA Requirements

Section F includes discussions of various topics required by CEQA and/or NEPA, including an environmental justice analysis (Section F.1), a description of growth-inducing effects (Section F.2), and a discussion of significant irreversible and irretrievable changes (Section F.3). Section F.4 describes the significant and unavoidable impacts (Class I) identified in Sections D.2 through D.15. Section F.5 presents the relationship between short-term uses and long-term productivity of the environment with regard to the project, and Section F.6 addresses energy conservation.

F.1 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.

The approach in this EIS/EIR is to achieve compliance with the letter and spirit of the President's Executive Order by addressing the question of whether and how the impacts of the Proposed Project and alternatives (as described in Section D and Section E of this EIR/EIS) may disproportionately affect minority (sometimes referred to as people of color) populations and low-income populations. Extensive public outreach to any and all communities and residences affected by the Proposed Project and alternatives, including low-income and minority populations, is discussed in Section J (Public Participation). In addition, the EIR/EIS team has supported the BLM with its official government-to-government consultation with all ~~Native American~~ Indian tribes affected by both the proposed route and alternatives, several of which contain high-minority and/or low-income populations. Finally, all project documents have been sent to 26 library repositories, as well as CPUC and BLM offices, across Imperial and San Diego Counties, and in Los Angeles, San Francisco, and North Palm Springs for review by people without internet access (for a complete list, see Table J-2 [Repository Sites] in Section J.2.6).

This section analyzes the distributional patterns of minority populations and low-income populations on a regional basis and characterizes the distribution of such populations adjacent to the proposed and alternative segments. We then focus on the existing environmental conditions and impacts relative to these populations and analyze how project impacts affect these populations, focusing on possible disproportionate effects and potential exacerbation of existing conditions.

The objective of the analysis in this section is to achieve compliance with the letter and spirit of Executive Order 12898. The Environmental Justice analysis is based on a three-step process:

1. Perform a screening level analysis to determine the general areas in which a potential for environmental justice impacts occurs
2. Review comments collected during public scoping meetings and agency consultation for the Proposed Project to determine if other, previously unidentified areas should also be analyzed

3. Perform a detailed environmental justice impact analysis for each area identified in Steps 1 and 2, using demographic data for U.S. Census block groups¹ (or if necessary U.S. Census blocks²) to evaluate impacts of the Sunrise Powerlink Project (“SRPL” or “Proposed Project”) on surrounding neighborhoods.

Each of these steps is described further below.

F.1.1 Screening Level Analysis

The intention of an environmental justice screening analysis is to determine whether a low-income and/or minority (people of color) population exists within the potential affected area of a Proposed Project. As defined by the “Final Guidance for Incorporating Environmental Justice Concerns” contained in the Guidance Document of United State EPA’s NEPA Compliance Analysis (USEPA, 1998), minority (people of color) and low-income populations are identified where either:

- The minority or low-income population of the affected area is greater than 50 percent of the affected area’s general population; or
- The minority or low-income population percentage of the affected area is meaningfully greater (50 percent or greater per EPA Guidance Document) than the minority or low-income population percentage in the general population of the jurisdiction or other appropriate unit of geographic analysis (i.e., County or Native American Indian Reservation) where the affected area is located.

In 1997, the President’s Council on Environmental Quality issued Environmental Justice Guidance that defines minority and low-income populations as follows:

- “Minorities” are individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black not of Hispanic origin; or Hispanic (without double-counting non-white Hispanics falling into the Black/African-American, Asian/Pacific Islander, and Native American (Indian) categories)
- “Low-income populations” are identified as populations with mean annual incomes below the annual statistical poverty level.

The total minority population and low-income population for each census tract, for the purposes of this analysis, have been calculated as follows:

- Total minority population = Black/African-American + Hispanic + Asian/Pacific Islander + Native American (without double-counting non-white Hispanics falling into the Black/African-American, Asian/Pacific Islander, and Native American (Indian) categories)
- Low-income population = Total unemployed ÷ Total labor force.

All jurisdictions within one-half miles (0.5 miles) of the Proposed Project affected area and its alternatives are included in the screening analysis in this section. The “affected area” may change depending on the

¹ A census block group is a statistical subdivision of a census tract. Block groups generally contain between 300 and 3,000 people, with an optimum size of 1,500 people.

² A census block is a geographic area bounded by visible and/or invisible features shown on a map prepared by the U.S. Census Bureau. Generally, the boundary of a census block must include at least one addressable feature; that is, a street or road. A block is the smallest geographic entity for which the Census Bureau tabulates decennial census data.

types of impacts analyzed; however, using an affected area of 0.5 miles, rather than 1 or 2 miles identifies localized impacts of the project. By looking at the localized impacts rather than looking at impacts that would affect everyone residing in a region equally identifies disproportionate project specific impacts to minority and low-income populations. Impacts that affect areas outside of 0.5 miles, such as visual impacts and certain air and water quality impacts would affect the greater region and so looking at such a wide area would not identify any disproportionate impacts to minority or low-income populations. By setting the “affected area” at 0.5 miles for environmental justice, the analysis will focus on the project impacts specific to the populations within the vicinity of the project route rather than the region as a whole.

In the screening analysis, the percentages of minority and low-income populations were examined for each jurisdiction. For purposes of consistency and in compliance with U.S. BLM guidelines, U.S. Census data is used to determine minority and low-income population percentages along the entire ROW. The unit of analysis in the Environmental Justice Section of potential impact on minority populations and low-income populations is the block census tract. After an initial screening level analysis of the project area to determine low-income and minority percentage areas a jurisdictional screening level analysis is conducted. If the jurisdiction has a population of 50 percent or greater for either the low-income or minority categories, it is identified for more detailed analysis. If a jurisdiction's minority and low-income populations are 50 percent or less for any of these categories, no further environmental justice analysis was performed on the jurisdiction.

Table F-1 lists the jurisdictions within one-half mile of the Proposed Project and its alternatives, along with the low-income percentage and minority percentage of the population of each jurisdiction. The low-income percentage is the percentage of a jurisdiction's population with a median annual income below the statistical poverty threshold determined by the U.S. Census Bureau. The minority percentage is the percentage of a jurisdiction's population categorized in the 2000 U.S. Census as Black/African-American, Asian, Hawaiian/Pacific Islander, Native American (**Indian**), Hispanic/Latino (without double-counting non-white Hispanics falling into the Black/African-American, Asian/Pacific Islander, and Native American [**Indian**] categories), or two or more races.

The only jurisdiction listed in Table F-1 that has a low-income population of 50 percent or greater is Imperial County. However, **eight eleven** of the jurisdictions have minority

Table F-1. Population Characteristics of Communities along Proposed Project Alignment & Alternatives

Project Area	Jurisdiction	Low-Income Percentage	Minority Percentage
Imperial Valley Link	Imperial County	77%	51%
ABDSP Link	San Diego County	12%	33%
Central Link	Santa Ysabel Reservation	23%	91%
Inland Valley Link	San Diego County Estates, CDP	3%	7%
	Ramona CDP	13%	19%
	Barona Reservation	17%	81%
	Poway	4%	17%
Coastal Link	San Diego City	15%	40%
Future Transmission System Expansion	Pauma Reservation	41%	67%
	Pala (w/Yuima) Reservation	21%	93%
I-8 Alternative and Route D Alternative	Campo Reservation	42%	78%
	La Posta Reservation	49%	89%
	Pine Valley CDP	4%	5%
	Viejas Reservation	13%	48%
	Alpine CDP	7%	9%
BCD Alternative	Manzanita Reservation	6%	86%
LEAPS	Pechanga Reservation	30%	82%
	La Jolla Reservation	16%	88%
	Rincon Reservation	29%	72%

Source: U.S. Census Bureau. Census 2000 (<http://factfinder.census.gov>)

populations of 50 percent or greater. Consequently, the following jurisdictions have been identified under the screening level analysis for further detailed analysis in order to determine if the Proposed Project and its alternatives would result in disproportionate impacts to these populations

- Imperial County
- Santa Ysabel Reservation
- Barona Reservation
- Campo Reservation
- La Posta Reservation
- Manzanita Reservation
- Pauma Reservation
- Pala Reservation
- La Jolla Reservation
- Rincon Reservation
- Pechanga Reservation

F.1.2 Environmental Justice Analysis

F.1.2.1 Methodology

Significance Criteria for Environmental Justice Impacts

An environmental justice impact resulting from the Proposed Project or its alternatives would occur if one of the two following criteria is met, resulting in a disproportionate impact, and there is a Class I impact in Section D and Section E that directly impacts the geographic block group:

- More high-minority block groups are within one-half miles of the ROW than either medium-minority block groups or low-minority block groups
- More low-income block groups are within one-half miles of the ROW than either medium-income block groups or high-income block groups.

Either of the above mentioned conditions would constitute a disproportionate impact on these populations by the project. Identification of an area which would be disproportionately affected by the project does not by itself; however, constitute an environmental justice impact. Analysis of impacts for all disciplines is presented in Section D and Section E, Environmental Analysis, of this EIR/EIS for the Proposed Project and alternatives. Where available, mitigation measures are presented in each section to ensure that impacts associated with construction and operation of the Proposed Project or its alternatives would be less than significant. An impact that is less than significant in an area identified as having the potential for environmental justice impacts would not be considered a disproportionate environmental justice impact. A disproportionate environmental justice impact would occur; however, if a significant, unavoidable impact (Class I) were to occur in an area identified as having the potential for a high-minority or low-income population in accordance with the methodology described in this section.

Analysis Methodology

Within each of the jurisdictions identified above, areas of high-minority populations and their locations are identified as those block groups having a total minority population percentage within the highest one-third (33 percent in terms of minority percentage) of all block groups in their respective jurisdic-

tion. These groups are classified as high-minority block groups. Those block groups having a total minority population percentage within the lowest one-third (33 percent) of the block groups in their counties are classified as low-minority block groups. Those block groups having a total minority population percentage that is greater than the upper bound of minority population percentage for the low-minority block groups, but less than the lower bound for the high-minority block groups, are classified as medium-minority block groups.

Areas of low-income populations and their locations are identified in the jurisdictions as those census block groups having an annual per-capita income level that is in the lowest one-third (33 percent) of the block groups in their respective jurisdictions. These block groups are classified as low-income block groups. Those block groups having an annual per-capita income level in the highest one-third (33 percent) of the block groups in their respective counties are classified as high-income block groups. Those block groups having an annual per-capita income level that is greater than the upper bound for the low-income block groups, but less than the lower bound of the high-income block groups, are classified as medium-income block groups. Thus, all of the block groups in a county are divided into the highest one-third, a middle one-third, and the lowest one-third in terms of medium per-capita income.

F.1.2.2 Proposed Project

Of the eight jurisdictions identified for detailed environmental justice analysis above, three are within one-half miles from the Proposed Project, Imperial County, Santa Ysabel Reservation, and Barona Reservation. Three jurisdictions, Campo Reservation, La Posta Reservation and Manzanita Reservation, are located within one-half miles from the Interstate 8 Alternative and the BCD Alternative, respectively. Two jurisdictions, Pala Reservation and Pauma Reservation, are located within one-half miles from the FTSE Project.

There are nine block groups in the three jurisdictions identified for detailed environmental justice analysis for the Proposed Project that have at least some portion of their area within one-half miles (on either side) of the centerline of the Proposed Project route. The block groups in Imperial Valley Link that are within one-half mile of the Proposed Project are West Imperial CCD, El Centro CCD, Imperial CCD, Brawley CCD, and Calipatria-Westmorland CCD. The Central Link block groups that are within one-half miles of the Proposed Project lie within the Santa Ysabel Reservation. The Inland Valley Link block groups that lie within one-half miles of the Proposed Project are in the Barona Reservation. There are no block groups within the Anza-Borrego Link or the Coastal Link identified for detailed environmental justice analysis.

All of the block groups within the identified jurisdictions have been classified, with respect to minority population percentage and low-income percentage, in accordance with the criteria discussed above in Section F.1.2.1. The results of this classification are summarized for Imperial County, Santa Ysabel Reservation, and Barona Reservation in Table F-2 for the Proposed Project.

Table F-2. Proposed Project – Total Number of Block Groups in Each Classification and Number of Block Groups in Each Classification within 0.5 Miles of Proposed Project for Each Jurisdiction

Jurisdiction	Block Group Classification	No. of Block Groups Jurisdiction-wide (% of Block Groups in Jurisdiction)	No. of Block Groups within 0.5 Miles of ROW (% of Block Groups within 0.5 Miles of ROW)
Imperial County	High-minority	35 (33%)	0 (0%) (0 for Alts)
	Medium-minority	35 (33%)	0 (0%) (1 for Alts)
	Low-minority	35 (33%)	5 (100%) (3 for Alts)
	Low-income	35 (33%)	0 (0%)
	Medium-income	35 (33%)	1 (20%)
	High-income	35 (33%)	4 (80%)
	Total (all) block groups	105 (100%)	5 (100%)
Santa Ysabel Reservation	High-minority	1 (50%)	1 (50%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	1 (50%)	1 (50%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)
Barona Reservation	High-minority	1 (33%)	2 (100%)
	Medium-minority	1 (33%)	0 (0%)
	Low-minority	2 (35%)	0 (0%)
	Low-income	1 (33%)	0 (0%)
	Medium-income	1 (35%)	0 (0%)
	High-income	2 (33%)	2 (100%)
	Total (all) block groups	4 (100%)	2 (100%)

Source: U.S. Census Bureau. Census 2000 (<http://factfinder.census.gov>)

Imperial Valley Link

Imperial County has a total of five census block groups that lie within one-half miles of the Proposed Project route. Figure F-1 is a map of this area with median income and percent of minorities. There are no block groups classified as a high-minority or medium within one-half miles of the ROW; all five block groups are classified as a low-minority. Within one-half miles of the Proposed Project, Imperial County has one census block group classified as medium-income, and four census block groups classified as high-income. There are no low-income block groups within Imperial County that lie within one-half miles of the Proposed Project. Because the ROW would not affect any high-minority block groups, and because the ROW would not affect low-income block groups but would affect both medium-income and high-income block groups, there would be no disproportionate impacts to high-minority and low-income populations. No environmental justice impacts would occur within Imperial County.

Santa Ysabel Reservation

The Santa Ysabel Reservation has a total of two census block groups that lie within one-half miles of the Proposed Project route. Figure F-2 is a map showing median income and percent of minorities for Santa Ysabel Reservation. Of the two block groups, one is classified as high-minority block groups and one is classified as low-minority block groups. No block groups within one half-mile of the ROW are classified as medium-minority block groups. One of the two census block groups that lie within one-half miles of the Proposed Project route one is classified as a low-income block group and the other is

Figure F-1. Environmental Justice - Imperial County Detail

[CLICK HERE TO VIEW](#)

Figure F-2. Environmental Justice - Santa Ysabel Reservation

[CLICK HERE TO VIEW](#)

classified as a high-income block group. There are no medium-income block groups within one-half miles of the Proposed Project route within the Santa Ysabel Reservation. As the number of high-minority block groups within one-half-miles of the Proposed Project is equal to the low-minority block groups and because the number of low-income block groups is equal to the number of high-income block groups within one-half miles of the Proposed Project, no disproportionate impacts to high-minority or low-income populations would occur. No environmental justice impacts would occur within the Santa Ysabel Reservation.

Barona Reservation

Barona Reservation has a total of two census block groups that lie within one-half miles of the Proposed Project. Figure F-3 is a map showing median income and percent of minorities for Barona Reservation. Both of the census block groups are classified as high-minority block groups. There are no block groups classified as medium-minority or low-minority block groups. Both census block groups are classified as a high-income block groups. There are no block groups classified as medium-income block groups or classified as low-income block groups. Because the Proposed Project would affect more high-minority block groups than medium-minority or low-minority block groups, the Proposed Project would disproportionately impact high-minority populations within the Barona Reservation, resulting in a significant environmental justice impact if there is a corresponding Class I impact in Section D.

While other impacts to the population in this area could be mitigated to less than significant, two significant and unmitigable impacts (Class I) would occur within the Barona Reservation. In Section D.3 (Visual Resources) and Section D.11 (Air Quality) significant and unmitigable impacts were identified.

Visual Resources (Section D.3) identified a significant and unmitigable impact (Impact V-23) associated with Key Viewpoint 20 on westbound San Vicente Road. New cable poles would be structurally complex and prominently visible from San Vicente Road just west of Chuck Wagon Road near the northwesterly corner of Barona Reservation. The proposed structures would also introduce substantial industrial character into the predominantly rural-appearing landscape lacking similar characteristics. Additionally, the proposed structures would cause a moderate degree of view blockage of the background hills and sky (due to skylining). The resulting visual impact would be significant (Class I). Because there are two high-minority and no medium-minority or low-minority block groups affected by Impact V-23, this would constitute a significant and unmitigable environmental justice impact (Class I) at this location.

Air Quality (Section D.11) identified a significant and unmitigable impact (AQ-1) associated with the generation of dust and exhaust emissions that would effect populations on the Barona Reservation during construction of the Proposed Project. Use of construction equipment, emissions from motor vehicles used to mobilize the workforce, and materials for construction would result in temporary air quality impacts as a result of emissions of ozone precursors (NOx) and particulate matter (PM10 and PM2.5). Additionally, construction activities, especially site preparation, excavation of trenches, and installing structure foundations, would involve travel on unpaved roads and surfaces and material handling that would create fugitive dust and other criteria pollutant emissions from equipment. Because there are two high-minority and no medium-minority or low-minority block groups affected by Impact AQ-1, this would constitute a significant and unmitigable environmental justice impact (Class I) at this location.

Figure F-3. Environmental Justice - Barona Reservation
[CLICK HERE TO VIEW](#)

F.1.2.3 230 and 500 kV Future Transmission System Expansion (FTSE)

230 kV Future Transmission System Expansion (FTSE)

SDG&E has stated that a system goal for the Sunrise Powerlink project is to bring a single 500 kV line as close to the SDG&E load center as is reasonably practicable, then use 230 kV lines to distribute the power to major 230 kV load-serving substations within the San Diego load center. The most likely connection points for the additional circuits would include Sycamore Canyon, Peñasquitos (with or without tying into Sycamore Canyon), Escondido, Mission and Los Coches Substation (assuming a 230 kV bus is added to this substation).

From a planning perspective, SDG&E would, to the extent possible, site additional lines in already-disturbed corridors using existing ROWs. As a result, at least one or two additional circuits could follow segments of the proposed Sunrise Powerlink 230 kV transmission corridor, as described in Section B.2. Figure B-12a (in Section B Project Description) illustrates the likely locations of each route described below. For a detailed description please refer to Section B.2.7.

230 kV FTSE Central East Substation to Sycamore Canyon Substation or Peñasquitos Substation Route

The 230 kV FTSE Sycamore Canyon or Peñasquitos Substations route has a total of six census block groups (two census block groups in Santa Ysabel Reservation and four census block groups in Barona Reservation) that lie within one-half miles (on either side) of the 230 kV FTSE ROW. There are 2 census block groups classified as high-minority within one-half miles (on either side) of the Sycamore Canyon or Peñasquitos Substations 230 kV FTSE route. Additionally, there is one census block group classified as medium-minority and three census block groups classified as low-minority within one-half miles (on either side) of the ROW. Within one-half miles (on either side) of the Sycamore Canyon or Peñasquitos Substations FTSE route there is one block group classified as medium-income, and two block groups classified as high-income; additionally, there are three census block groups classified as low-income. The results of this classification are summarized in Table F-3 for Santa Ysabel and Barona Reservations. However, because there is a disproportionate amount of low-income populations within the Barona Reservation, environmental justice impacts would occur along the Sycamore Canyon or Peñasquitos Substations FTSE route as there are corresponding Class I impacts in Section D. Please refer to Barona Reservation impact discussion below.

The Sycamore Canyon or Peñasquitos Substations 230 kV FTSE routes would follow the same path as the Proposed Project through the Santa Ysabel Reservation and Barona Reservation. Please refer to the discussion below for impacts to the Barona Reservation.

Los Coches Substation 230 kV FTSE Route

The Los Coches Substation 230 kV FTSE route has a total of two census block groups that lie within one-half miles (on either side) of the ROW (one in Santa Ysabel Reservation, shown on Figure F-2, and one in Barona Reservation, shown on Figure F-3). There is one census block group classified as high-minority within one-half miles (on either side) of the Los Coches Substation FTSE route. Additionally, there is one census block group classified as low-minority and no census block group classified as medium-minority within one-half miles (on either side) of the ROW. Within one-half miles (on either side) of the Los Coches Substation FTSE route there is one block group classified as low-income and there are no block groups classified as medium-income; additionally, there is one census block group classified as high-income populations. Because the Los Coches Substation FTSE route would not dispropor-

tionately affect high-minority or low-income block groups but would affect high-minority and low-minority block groups equally as well as both low-income and high-income block groups, there would be no disproportionate impacts to high-minority and low-income populations. No environmental justice impacts would occur with the Los Coches Substation FTSE.

Mission Substation 230 kV FTSE Route

The Mission Substation 230 kV FTSE route has a total of two census block groups that lie within one-half miles (on either side) of the ROW (one in Santa Ysabel Reservation, shown on Figure F-2, and one in Barona Reservation, shown on Figure F-3). There is one census block group classified as high-minority within one-half miles (on either side) of the Mission Substations FTSE route. Additionally, there is one census block group classified as low-minority and no census block group classified as medium-minority within one-half miles (on either side) of the ROW. Within one-half miles (on either side) of the Mission Substations FTSE route there is one block group classified as low-income and there are no block groups classified as medium-income; additionally, there is one census block group classified as high-income populations. The results of this classification are summarized in Table F-3 for the FTSE. Because the Mission Substation FTSE route would not disproportionately affect high-minority or low-income block groups but would affect high-minority and low-minority block groups equally as well as both low-income and high-income block groups, there would be no disproportionate impacts to high-minority and low-income populations. No environmental justice impacts would occur with the Mission Substation FTSE.

Escondido Substation 230 kV FTSE Route

Northern Route. The Northern Escondido Substation 230 kV FTSE route has a total of eight census block groups that lie within one-half miles (on either side) of the Northern Escondido Substation 230 kV FTSE Route (two in the Santa Ysabel Reservation, two in the La Jolla Reservation, three in the Rincon Reservation and one in the Pauma Reservation). There are four census block groups classified as high-minority within one-half miles (on either side) of the Northern Escondido Substations 230 kV FTSE route. Additionally, there is one census block group classified as medium-minority and three census block groups classified as low-minority within one-half miles (on either side) of the ROW. Within one-half miles (on either side) of the Northern Escondido Substations 230 kV FTSE route there are three block groups classified as low-income and one block group classified as medium-income; additionally, there are four census block groups classified as high-income populations. The results of this classification are summarized in Table F-3 for the Santa Ysabel, La Jolla, Rincon and Pauma Reservations. There is a disproportionate impact on high-minority associated with the Pauma Reservation; therefore environmental justice impacts would occur with the Escondido Substation 230 kV FTSE route through the Pauma Reservation because there are corresponding Class I impact in Section D. Please refer to Pauma Reservation impact discussion below.

Southern Route. There are no block groups within the Southern Escondido Substation 230 kV FTSE route identified for detailed environmental justice analysis.

500 kV FTSE Route

The 500 kV FTSE route has seven census block groups that lie within one-half miles (on either side) of the ROW (two in La Jolla Reservation, three in Rincon Reservation, one in Pala Reservation and one in Pauma Reservation). Figure B-12b in Section B (Project Description) shows the potential route. There are three census block groups classified as high-minority within one-half miles (on either side) of the 500 kV FTSE route. There are two census block groups classified as medium-minority and two census block groups classified as low-minority within one-half miles (on either side) of the 500 kV FTSE

ROW. Additionally, there are three census block groups classified as low-income, one census group classified as medium-income and three census block groups classified as high-income within one-half miles (on either side) of the 500 kV FTSE ROW. The results of this classification are summarized in Table F-3 for the 500 kV FTSE. However, within the Pala Reservation there is a disproportionate amount of low-income populations; therefore, environmental justice impacts would occur in the Pala Reservation along the 500 kV FTSE route if there is a Class I impact in Section D. Additionally, there is a disproportionate amount of high-minority populations within the Pauma reservation along the 500 kV FTSE route; therefore, environmental justice impacts would occur in the Pauma Reservations because there are Class I impacts identified in Section D.

Table F-3. Future Transmission System Expansion – Total Number of Block Groups in Each Classification and Number of Block Groups in Each Classification within 0.5 Miles of FTSE Corridors for Each Jurisdiction

County	Block Group Classification	No. of Block Groups Jurisdiction-wide (% of Block Groups in Jurisdiction)	No. of Block Groups within 0.5-Miles of ROW (% of Block Groups within 0.5-Miles of ROW)
Santa Ysabel Reservation (for 230 kV FTSE)	High-minority	1 (50%)	1 (50%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	1 (50%)	1 (50%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)
Barona Reservation (for 230 kV FTSE)	High-minority	1 (25%)	1 (25%)
	Medium-minority	1 (25%)	1 (25%)
	Low-minority	2 (50%)	2 (50%)
	Low-income	2 (50%)	2 (50%)
	Medium-income	1 (25%)	1 (25%)
	High-income	1 (25%)	1 (25%)
	Total (all) block groups	4 (100%)	4 (100%)
La Jolla Reservation (for 500 kV and 230 kV FTSE)	High-minority	1 (50%)	1 (50%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	1 (50%)	1 (50%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)
Rincon Reservation (for 500 kV and 230 kV FTSE)	High-minority	1 (33%)	1 (33%)
	Medium-minority	1 (33%)	1 (33%)
	Low-minority	1 (33%)	1 (33%)
	Low-income	1 (33%)	1 (33%)
	Medium-income	1 (33%)	1 (33%)
	High-income	1 (33%)	1 (33%)
	Total (all) block groups	3 (100%)	3 (100%)
Pala Reservation (for 500 kV FTSE)	High-minority	1 (20%)	0 (0%)
	Medium-minority	2 (40%)	1 (100%)
	Low-minority	2 (40%)	0 (0%)
	Low-income	2 (40%)	1 (100%)
	Medium-income	1 (20%)	0 (0%)
	High-income	2 (40%)	0 (0%)
	Total (all) block groups	5 (100%)	1 (100%)

Table F-3. Future Transmission System Expansion – Total Number of Block Groups in Each Classification and Number of Block Groups in Each Classification within 0.5 Miles of FTSE Corridors for Each Jurisdiction

County	Block Group Classification	No. of Block Groups Jurisdiction-wide (% of Block Groups in Jurisdiction)	No. of Block Groups within 0.5-Miles of ROW (% of Block Groups within 0.5-Miles of ROW)
Pauma Reservation (for 500 kV and 230 kV FTSE)	High-minority	1 (50%)	1 (100%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	0 (0%)
	Low-income	1 (50%)	0 (0%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (100%)
	Total (all) block groups	2 (100%)	1 (100%)
Viejas Reservation (for Modified Route D)	High-minority	1 (33%)	0 (0%)
	Medium-minority	1 (33%)	1 (50%)
	Low-minority	1 (33%)	1 (50%)
	Low-income	1 (33%)	1 (50%)
	Medium-income	1 (33%)	1 (50%)
	High-income	1 (33%)	0 (0%)
	Total (all) block groups	3 (100%)	2 (100%)
Campo Reservation (for Modified Route D)	High-minority	1 (50%)	1 (50%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	1 (50%)	1 (50%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)
La Posta Reservation (for Modified Route D)	High-minority	1 (50%)	0 (0%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (100%)
	Low-income	1 (50%)	1 (100%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	0 (0%)
	Total (all) block groups	2 (100%)	1 (100%)

Source: U.S. Census Bureau. Census 2000 (<http://factfinder.census.gov>)

Barona Reservation

Barona Reservation has a total of four census block groups that lie within one-half miles of the 230 kV FTSE route. One of the census block groups is classified as high-minority block group, one census block group is classified as medium-minority and two are classified as low-minority census block groups. There are two census block groups classified as a low-income and one block group classified as medium-income and one block group classified as high-income. Because the 230 kV FTSE would affect more low-income block groups than medium-income or high-income block groups, the 230 kV FTSE route would disproportionately impact low-income populations within the Barona Reservation resulting in a significant environmental justice impact because there are corresponding Class I impact identified in Section D.

While other impacts to the population in this area could be mitigated to less than significant, two significant and unmitigable impacts (Class I) would occur within the Barona Reservation. In Section D.3 (Visual Resources) and Section D.11 (Air Quality) significant and unmitigable impacts were identified.

Visual Resources (Section D.3) identified a significant and unmitigable impact (Impact V-23) associated with Key Viewpoint 20 on westbound San Vicente Road. New cable poles would be structurally complex and prominently visible from San Vicente Road just west of Chuck Wagon Road near the north-westerly corner of Barona Reservation. The proposed structures would also introduce substantial industrial character into the predominantly rural-appearing landscape lacking similar characteristics. Additionally, the proposed structures would cause a moderate degree of view blockage of the background hills and sky (due to skylining). The resulting visual impact would be significant (Class I). Because there are two high-minority and no medium- or low-minority block groups affected by Impact V-23, this would constitute a significant and unmitigable environmental justice impact (Class I) at this location.

Air Quality (Section D.11) identified a significant and unmitigable impact (AQ-1) associated with the generation of dust and exhaust emissions that would effect populations on the Barona Reservation during construction of the Proposed Project. Use of construction equipment, emissions from motor vehicles used to mobilize the workforce, and materials for construction would result in temporary air quality impacts as a result of emissions of ozone precursors (NO_x) and particulate matter (PM₁₀ and PM_{2.5}). Additionally, construction activities, especially site preparation, excavation of trenches, and installing structure foundations, would involve travel on unpaved roads and surfaces and material handling that would create fugitive dust and other criteria pollutant emissions from equipment. Because there are two high-minority and no medium- or low-minority block groups affected by Impact AQ-1, this would constitute a significant and unmitigable environmental justice impact (Class I) at this location.

La Jolla Reservation

The La Jolla Reservation has a total of two census block groups that lie within one-half miles of the 230 and 500 kV FTSE. One is classified as high-minority and one is classified as low-minority block groups. No block groups within one half-mile of the ROWs are classified as a medium-minority block groups. One of the two census block groups that lie within one-half miles of the 230 kV and 500 kV FTSE routes is classified as a low-income block group and the other is classified as a high-income block group. There are no medium-income block groups within one-half miles of the 230 kV or 500 kV FTSE routes within the La Jolla Reservation. Because the number of high-minority block groups within one-half miles of the 230 kV and 500 kV FTSE routes is equal to the low-minority block groups and because the number of low-income block groups is equal to the number of high-income block groups within one-half miles of the 230 kV and 500 kV FTSE routes, no disproportionate impacts to high-minority or low-income populations would occur. No environmental justice impacts would occur within the La Jolla Reservation.

Rincon Reservation

Rincon Reservation has a total of three census block groups that lie within one-half miles of the 230 kV and 500 kV FTSE routes. Of the three, one is classified as high-minority, one is classified as medium-minority, and one is classified as low-minority block groups. Additionally, one of the three census block groups that lie within one-half miles of the 230 kV and 500 kV FTSE routes is classified as low-income, one is classified as medium-income and one is classified as high-income block groups. As the number of high, medium, and low-minority block groups within one-half miles of the 230 kV and 500 kV FTSE routes are equal and the number of low, medium, and high-income block groups within one-half miles of the 230 kV and 500 kV FTSE routes are equal, no disproportionate impacts to high-minority or low-income population would occur. No environmental justice impacts would occur within the Rincon Reservation.

Pauma Reservation

The Pauma Reservation has a total of one census block group that lies within one-half miles of the 230 kV and 500 kV FTSE routes. The census block group is classified as high-minority block group and high-income block group. There are no block groups classified as medium- or low-minority block groups nor are there any classified as medium-income or low-income block groups. Because the one census block within one-half miles (on either side) of the 230 kV and 500 kV FTSE routes is classified as high-minority, disproportionate impacts to high-minority populations would occur within the Pauma Reservation. However, no disproportionate impacts to low-income populations would occur within the Pauma Reservation. Due to the disproportionate impacts to high-minority populations and because there are corresponding Class I impacts identified in Section D within the Pauma Reservation environmental justice impacts would occur with the 230 kV and 500 kV FTSE routes.

While other impacts to the population in this area could be mitigated to less than significant, there are significant and unmitigable impacts (Class I) which would occur within the Pauma Reservation. In Sections D.3 (Visual Resources), D.11 (Air Quality), and D.15 (Fire and Fuel Management) significant and unmitigable impacts were identified that directly impact the Pauma Reservation.

Visual Resource (Section D.3) identified significant and unmitigable impact (V-3) associated with structure contrast, industrial character, view blockage, and skylining which would affect the populations on the Pauma Reservation during construction and operation of the FTSE. Due to the larger and taller pole sizes needed to support the weight of the newly constructed transmission lines, the new towers would be structurally more prominent with increased industrial character compared to the existing transmission lines. This would likely result in more instances of structure skylining (extending above the horizon) and cause more view blockage of the more valued landscape features. Because there are one high-minority and no medium- or low-minority block groups affected by Impact V-3, this would constitute a significant and unmitigable environmental justice impact (Class I) to the Pauma Reservation.

Air Quality (Section D.11) identified a significant and unmitigable impact (AQ-1) associated with the generation of dust and exhaust emissions that could be a nuisance and hazard to populations on the Pauma Reservation during construction of the [Proposed Project FTSE route](#). Use of construction equipment, emissions from motor vehicles used to mobilize the workforce, and materials for construction would result in temporary air quality impacts as a result of emissions of ozone precursors (NO_x) and particulate matter (PM₁₀ and PM_{2.5}). Additionally, construction activities, especially site preparation, excavation of trenches, and installing structure foundations, would involve travel on unpaved roads and surfaces and material handling that would create fugitive dust and other criteria pollutant emissions from equipment. Because there are two high-minority and no medium-minority or low-minority block groups affected by Impact AQ-1, this would constitute a significant and unmitigable environmental justice impact (Class I) at the Pauma Reservation.

Fire and Fuel Management (Section D.15) identified significant and unmitigable impacts (F-1, F-2, and F-3) associated with igniting wildfires, firefighter safety, and altering historic fire regimes would effect the populations on the Pauma Reservation during construction and operation of the FTSE route. Activities associated with the projects will ignite wildfires and create obstructions to fire suppression efforts, resulting in the harmful and damaging impacts to the transmission facilities, community health/safety, firefighter health/safety, and natural resources which are significant and unmitigable impacts. Because there are two high-minority and no medium- or low-minority block groups affected by Impacts F-1, F-2, and F-3, this would constitute a significant and unmitigable environmental justice impact (Class I) at the Pauma Reservation.

Pala Reservation

The Pala Reservation has a total of one census block group that lays within one-half miles of the 500 kV FTSE route. The census block group is classified as medium-minority block group and low-income block group. There are no block groups classified as high-minority or low-minority block groups nor are there any classified as medium-income or high-income block groups. Because the 500 kV FTSE route would affect more low-income block groups than medium- or high-income block groups and because there are corresponding Class I impacts identified in Section D, the 500 kV FTSE route would disproportionately impact low-income populations within the Pala Reservation.

While other impacts to the population in this area could be mitigated to less than significant, there are significant and unmitigable impacts (Class I) which would occur within the Pala Reservation. In Sections D.3 (Visual Resources), D.8 (Noise), D.11 (Air Quality), and D.15 (Fire and Fuel Management) significant and unmitigable impacts were identified that would directly impact the Pala Reservation.

Visual Resource (Section D.3) identified significant and unmitigable impacts (V-3FT and V-4FT) associated with structure contrast, industrial character, view blockage, and skylining would affect the populations on the Pala Reservation during construction and operation of the 500 kV FTSE route. Due to the larger, taller pole sizes needed to support the weight of the new lines. The new towers would be structurally more prominent with increased industrial character compared to the existing transmission line facilities, would likely result in more instances of structure skylining (extending above the horizon), and cause more view blockage of higher valued landscape features. Because there is one low-income and no medium- or high-income block groups affected by Impact V-3FT and Impact V-4FT, this would constitute a significant and unmitigable environmental justice impact (Class I) to the Pala Reservation.

Air Quality (Section D.11) identified a significant and unmitigable impact (AQ-1) associated with the generation of dust and exhaust emissions that could be a nuisance and hazard to populations on the Pala Reservation during construction of the 500 kV FTSE route. Use of construction equipment, emissions from motor vehicles used to mobilize the workforce, and materials for construction would result in temporary air quality impacts as a result of emissions of ozone precursors (NO_x) and particulate matter (PM₁₀ and PM_{2.5}). Additionally, construction activities, especially site preparation, excavation of trenches, and installing structure foundations, would involve travel on unpaved roads and surfaces and material handling that would create fugitive dust and other criteria pollutant emissions from equipment. Because there is one low-income block group and no high- or medium-income block groups affected by Impact AQ-1, this would constitute a significant and unmitigable environmental justice impact (Class I) at the Pala Reservation.

Fire and Fuel Management (Section D.15) identified significant and unmitigable impacts (F-1, F-2, and F-3) associated with construction and operation activities which would cause an increase in wildfire risk, increase of ignition sources of wildfires, and restricting firefighter attacks as well as reducing the safety of firefighters. The identified significant and unmitigable impacts (F-1, F-2, and F-3) would affect the populations on the Pala Reservation during construction and operation of the 500 kV FTSE route. Activities associated with the projects ~~will~~ could ignite wildfires and create obstructions to fire suppression efforts, resulting in the harmful and damaging impacts to the transmission facilities, community health/safety, firefighter health/safety, and natural resources, which are significant and unmitigable impacts. Because there is one low-income and no high- or medium-income block groups affected by Impacts F-1, F-2, and F-3, this would constitute a significant and unmitigable environmental justice impact (Class I) at the Pala Reservation.

F.1.2.4 Connected Actions

The Draft EIR/EIS also included analysis of two components of the IID 230 kV transmission system upgrades, but this is no longer considered to be a connected action, based on comments from IID. Therefore, this discussion has been deleted and is struck out in this section. Also, the Jacumba Substation analysis is now incorporated into analysis of the Sempra Rumorosa Wind Energy Project (see Section 2 of the Recirculated Draft EIR/EIS). The discussion of the Jacumba Substation below applies to the portion of that project that is within the United States.

IID Transmission System Upgrades

~~The IID has a total of three census block groups that lie within one-half miles (on either side) of the transmission system upgrade route. There are no block groups classified as a high minority or medium minority; all three block groups are classified as a low minority. Within one-half miles (on either side) of the IID project there is one block group classified as medium income, and two block groups classified as high income. There are no low income block groups within IID route that lie within one-half miles (on either side) of the IID. The results of this classification are summarized in Table F-4 for the connected actions. Because the transmission system upgrade route would not affect any high minority block groups or low income block groups but would affect both medium and high income block groups, there would be no disproportionate impacts to high minority and low income populations. No environmental justice impacts would occur with the IID.~~

Esmeralda–San Felipe Geothermal Project

There are two block groups that have some portion of its area within one-half miles (on either side) of the centerline of the Esmeralda–San Felipe Geothermal Project. The block groups in the study area have been classified, with respect to minority population percentage and low-income population percentage, in accordance with the criteria discussed above. The results of this classification are summarized in Table F-4 for the connected actions. Because the Esmeralda–San Felipe Geothermal Project would not affect any high-minority block groups or low-income block groups but would affect both medium- and high-income block groups equally there would be no disproportionate impacts to high-minority and low-income populations. No environmental justice impacts would occur with the Esmeralda–San Felipe Geothermal Project.

Stirling Solar Two Project (SES)

The SES has one block group with a portion of its area within one-half miles (on either side) of the centerline of the SES. The block group in the study area has been classified, with respect to minority population percentage and low-income population percentage, in accordance with the criteria discussed above. The results of this classification are summarized in Table F-4 for the connected actions. Because the SES would not affect any high-minority or medium-minority block groups or low-income or medium-income block groups but would affect only low-minority and high-income, there would be no disproportionate impacts to high-minority and low-income populations. No environmental justice impacts would occur with the SES.

Jacumba Substation

The Jacumba Substation has a total of two census block groups that lies within one-half miles of the Jacumba Substation route. Of the two census block groups, one is classified as medium-minority and the other is classified as low-minority block groups. There are no block groups classified as high-minority. One of

the census block groups is classified as medium-income and the other is classified as high-income within one-half miles of the Jacumba Substation. There are no block groups classified as low-income within one-half miles of the Jacumba Substation. Because the Jacumba Substation would not affect any high-minority or low-income block groups but would affect both medium-minority and low-minority as well as medium-income and high-income block groups equally, there would be no disproportionate impacts to high-minority and low-income populations. No environmental justice impacts would occur with the Jacumba Substation.

SGE La Rumorosa Wind Project SDG&E La Rumorosa Wind Energy Projects

This project would be located in Mexico, and comparable data for income and ethnicity is not available.

Table F-4. Connected Actions – Total Number of Block Groups in Each Classification and Number of Block Groups in Each Classification within 0.5 Miles of Connected Actions for Each Jurisdiction

County	Block Group Classification	No. of Block Groups Jurisdiction-wide (% of Block Groups in Jurisdiction)	No. of Block Groups within 0.5 Miles of ROW (% of Block Groups within 0.5 Miles of ROW)
Imperial County (for IID Transmission System Upgrade)	High-minority	35 (33%)	0 (0%)
	Medium-minority	35 (33%)	0 (0%)
	Low-minority	35 (33%)	3 (100%)
	Low-income	35 (33%)	0 (0%)
	Medium-income	35 (33%)	1 (33%)
	High-income	35 (33%)	2 (66%)
	Total (all) block groups	105 (100%)	3 (100%)
Imperial County (for Esmeralda–San Felipe Geothermal Project)	High-minority	35 (33%)	0 (0%)
	Medium-minority	35 (33%)	0 (0%)
	Low-minority	35 (33%)	2 (100%)
	Low-income	35 (33%)	0 (0%)
	Medium-income	35 (33%)	1 (50%)
	High-income	35 (33%)	1 (50%)
	Total (all) block groups	105 (100%)	2 (100%)
Imperial County (for SES Solar Two Project and 230 kV Transmission Line)	High-minority	35 (33%)	0 (0%)
	Medium-minority	35 (33%)	0 (0%)
	Low-minority	35 (33%)	1 (100%)
	Low-income	35 (33%)	0 (0%)
	Medium-income	35 (33%)	0 (0%)
	High-income	35 (33%)	1 (100%)
	Total (all) block groups	105 (100%)	1 (100%)
Jacumba Indian Reservation	High-minority	0 (0%)	0 (0%)
	Medium-minority	1 (50%)	1 (50%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	0 (0%)	0 (0%)
	Medium-income	1 (50%)	1 (50%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)

Source: U.S. Census Bureau. Census 2000 (<http://factfinder.census.gov>)

F.1.2.5 Alternatives

There are six block groups that have at least some portion of their area within one-half miles (on either side) of the centerline of the alternatives to the Proposed Project. All of the block groups in the study

area have been classified, with respect to minority population percentage and low-income population percentage, in accordance with the criteria discussed above. The results of this classification are summarized in Table F-5 for the alternatives. Table F-5 lists only the jurisdictions where the alternatives would be different from the Proposed Project. The analysis below considers only the environmental justice impacts of the alternative segment, and does not consider the environmental justice impacts of the project as a whole with the inclusion of the alternative segment. The summary of alternatives at the end of this section presents the environmental justice impacts of the alternatives in the context of the whole of the project route.

Table F-5. Alternatives – Total Number of Block Groups in Each Classification and Number of Block Groups in Each Classification Within 0.5 Miles of Alternatives for Each Applicable Jurisdiction

County	Block Group Classification	No. of Block Groups Jurisdiction-wide (% of Block Groups in Jurisdiction)	No. of Block Groups along the Interstate 8 Alternative (% of Block Groups along Alternative)
Campo Reservation	High-minority	1 (50%)	1 (50%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	1 (50%)	1 (50%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)
La Posta Reservation	High-minority	1 (50%)	0 (0%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (100%)
	Low-income	1 (50%)	1 (100%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	0 (0%)
	Total (all) block groups	2 (100%)	1 (100%)
Manzanita Reservation	High-minority	0 (0%)	0 (0%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (100%)	0 (0%)
	Low-income	0 (0%)	0 (0%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (100%)	0 (0%)
	Total (all) block groups	1 (100%)	(100%)
Viejas Reservation	High-minority	1 (33%)	1 (33%)
	Medium-minority	1 (33%)	1 (33%)
	Low-minority	1 (33%)	1 (33%)
	Low-income	1 (33%)	1 (33%)
	Medium-income	1 (33%)	1 (33%)
	High-income	1 (33%)	1 (33%)
	Total (all) block groups	105 (100%)	3 (100%)
Santa Ysabel Reservation (LEAPS)	High-minority	1 (50%)	1 (50%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	1 (50%)	1 (50%)

Table F-5. Alternatives – Total Number of Block Groups in Each Classification and Number of Block Groups in Each Classification Within 0.5 Miles of Alternatives for Each Applicable Jurisdiction

County	Block Group Classification	No. of Block Groups Jurisdiction-wide (% of Block Groups in Jurisdiction)	No. of Block Groups along the Interstate 8 Alternative (% of Block Groups along Alternative)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)

Table F-5. Alternatives – Total Number of Block Groups in Each Classification and Number of Block Groups in Each Classification Within 0.5 Miles of Alternatives for Each Applicable Jurisdiction

County	Block Group Classification	No. of Block Groups Jurisdiction-wide (% of Block Groups in Jurisdiction)	No. of Block Groups along the Interstate 8 Alternative (% of Block Groups along Alternative)
La Jolla Reservation (LEAPS)	High-minority	1 (50%)	1 (50%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	1 (50%)
	Low-income	1 (50%)	1 (50%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (50%)
	Total (all) block groups	2 (100%)	2 (100%)
Rincon Reservation (LEAPS)	High-minority	1 (33%)	1 (33%)
	Medium-minority	1 (33%)	1 (33%)
	Low-minority	1 (33%)	1 (33%)
	Low-income	1 (33%)	1 (33%)
	Medium-income	1 (33%)	1 (33%)
	High-income	1 (33%)	1 (33%)
	Total (all) block groups	3 (100%)	3 (100%)
Pala Reservation (LEAPS)	High-minority	1 (20%)	0 (0%)
	Medium-minority	2 (40%)	1 (100%)
	Low-minority	2 (40%)	0 (0%)
	Low-income	2 (40%)	1 (100%)
	Medium-income	1 (20%)	0 (0%)
	High-income	2 (40%)	0 (0%)
	Total (all) block groups	5 (100%)	1 (100%)
Pauma Reservation (LEAPS)	High-minority	1 (50%)	1 (100%)
	Medium-minority	0 (0%)	0 (0%)
	Low-minority	1 (50%)	0 (0%)
	Low-income	1 (50%)	0 (0%)
	Medium-income	0 (0%)	0 (0%)
	High-income	1 (50%)	1 (100%)
	Total (all) block groups	2 (100%)	1 (100%)
Pechanga Reservation (LEAPS)	High-minority	1(50%)	1(50%)
	Medium-minority	0(0%)	0(0%)
	Low-minority	1(50%)	1(50%)
	Low-income	1(50%)	1(50%)
	Medium-income	1(50%)	1(50%)
	High-income	0(0%)	0(0%)
	Total (all) block groups	2 (100%)	2 (100%)

Source: U.S. Census Bureau. Census 2000 (<http://factfinder.census.gov>)

Interstate 8 Alternative

The Interstate 8 Alternative has a total of six census block groups from three jurisdictions that lie within one-half miles of the alternative route, Campo Reservation, La Posta Reservation, and Viejas Reservation. Figure F-4 is a map of this area showing percent of minorities and median income. Two of the census block groups lie within the Campo Reservation. Of the two, one is classified as high-minority and one is classified as low-minority. There are no medium-minority block groups within one-half miles of the Interstate 8 Alternative in Campo Reservation. Because there are as many high-minority block groups as low-minority block groups, there would be no disproportionate impacts to high-minority populations. Within the Campo Reservation there is one block group classified as low-income and one block group classified as high-income that lie within one-half miles of the alternative. Because there are as many low-income block groups as high-income block groups, there would be no disproportionate impacts to low-income populations within the Campo Reservation.

There is one census block groups within the La Posta Reservation that lie within one-half miles of the Interstate 8 Alternative. This block group is classified as both low-minority and low-income. There is no high-minority, medium-minority, medium-income, or high-income block groups in the La Posta Reservation that lie within one-half miles of the alternative. However, because there is a low-income block group and no high- or medium-block groups within one-half miles of the alternative, there would be a disproportionate impact to low-income populations on the La Posta Reservation which would result in a significant environmental justice impact because there is a corresponding Class I impact in Section [DE.1](#).

While other impacts to the population on the La Posta Reservation could be mitigated to less than significant, two significant and unmitigable impacts (Class I) would occur within the La Posta Reservation. Significant and unmitigable impacts were identified in Section [DE.1.8](#) (Noise) and Section [DE.1.11](#) (Air Quality).

Noise (Section [DE.1.8](#)) identified a significant and unmitigable impact (Impact N-3) associated with permanent noise levels that would increase due to corona noise from operation of the transmission lines. The proposed 500 kV transmission line would cause a permanent noise increase due to the corona effect. Audible power line noise would be generated from corona discharge, which is usually experienced as a random crackling or hissing sound. Any increase in ambient noise of 5 dBA or more would be considered a substantial noise increase. In this way, the Interstate 8 Alternative would conflict and be inconsistent with the applicable noise standards established by San Diego County. This would constitute a significant and unmitigable environmental justice impact (Class I) to the one low-income census block population identified in La Posta Reservation.

Air Quality (Section [DE.1.11](#)) identified a significant and unmitigable impact (AQ-1) associated with the generation of dust and exhaust emissions that could be a nuisance and hazard to populations on the La Posta Reservation during construction of the Interstate 8 Alternative. Use of construction equipment, emissions from motor vehicles used to mobilize the workforce, and materials for construction would result in temporary air quality impacts as a result of emissions of ozone precursors (NO_x) and particulate matter (PM₁₀ and PM_{2.5}). Additionally, construction activities, especially site preparation, excavation of trenches, and installing structure foundations, would involve travel on unpaved roads and surfaces and material handling that would create fugitive dust and other criteria pollutant emissions from equipment. Because the only block group is low-income and no medium- or high-income block groups would be affected by Impact AQ-1, this would constitute a significant and unmitigable environmental justice impact (Class I) to the one low-income census block population identified for La Posta Reservation.

Figure F-4. Environmental Justice - Campo, La Posta, and Manzanita Reservations
[CLICK HERE TO VIEW](#)

Within the Viejas Reservation there are three census block groups that lie within one-half miles of the Interstate 8 Alternative. Of the three, one is classified as high-minority, one is classified as medium-minority and one is classified as low-minority. Because all three minority groups would be impacted equally there would be no disproportionate impact to high-minority populations on the Viejas Reservation as a result of the Interstate 8 Alternative. Likewise, of the three block groups, one is classified as low-income, one is classified as medium-income and one is classified as high-income. Because there are as many medium- and high-income block groups as low-income block groups, there would be no disproportionate impacts to low-income populations. No environmental justice impacts would occur to minority or low-income populations as a result of the Interstate 8 Alternative on the Viejas Reservation.

BCD Alternative

The BCD Alternative, the revision of this alternative and the BCD South Option Revision, would lie within one-half miles of the Manzanita Reservation. However, within the Manzanita Reservation there are no census block groups that lie within one-half miles of the BCD Alternative route. Therefore, no environmental justice impacts would occur to minority or low-income populations as a result of the BCD Alternative.

Route D Alternative

The Route D Alternative has a total of three census block groups that lie within one-half miles of the alternative route within the Viejas Reservation. Of the three block groups, one is a high-minority block groups, one is a medium-minority block groups, and one is a low-minority block groups. Likewise, of the three block groups, one is a low-income block groups, one is a medium-income block groups, and one is a high-income block groups. Because there are as many or more medium- and low-minority block groups than high-minority block groups, and because there are as many or more medium- and high-income block groups as low-income block groups, there would be no disproportionate impacts to high-minority or low-income populations. No environmental justice impacts would occur within the Route D Alternative.

Modified Route D Alternative

The Modified Route D Alternative and all route revisions along this alternative hasve a total of five census block groups from three jurisdictions that lie within one-half miles of the alternative route Viejas Reservation, Campo Reservation and La Posta Reservation. Two of the census block groups lie within the Viejas Reservation. One is classified as medium-minority and one is classified as low-minority. There are no high-minority block groups within one-half miles of the Modified Route D Alternative. Because there are no high-minority block groups and there are as many medium-minority block groups as low-minority block groups, there would be no disproportionate impacts to high-minority populations within the Viejas Reservation. The Viejas Reservation has one block group classified as low-income and one block group classified as medium-income that lie within one-half miles of the alternative. Because there are as many low-income block groups as medium-income block groups, there would be no disproportionate impacts to low-income populations within the Viejas Reservation.

Within the Campo Reservation there are two census block groups that lie within one-half miles of the Modified Route D Alternative. Of the two block groups, one is classified as high-minority and one is classified as low-minority. Because both minority groups would be impacted equally there would be no disproportionate impact to high-minority populations on the Campo Reservation as a result of the Modified Route D. Likewise, of the two block groups, one is classified as low-income and one is classified as high-income. Because there are as many low and high-income block groups, there would be no dispro-

portionate impacts to low-income populations. No environmental justice impacts would occur to minority or low-income populations as a result of the Modified Route D Alternative on the Campo Reservation.

There is one census block group within the La Posta Reservation that lies within one-half miles of the Modified Route D Alternative. This block group is classified as both low-minority and low-income. There is no high-minority, medium-minority, medium-income, or high-income block groups in the La Posta Reservation that lies within one-half miles of the alternative. However, because there is a low-income block group and no high or medium block groups within one-half miles of the alternative, there would be a disproportionate impact to low-income populations on the La Posta Reservation resulting in a significant environmental justice impact because there is a corresponding Class I impact in Section [DE.4](#).

While other impacts to the population on the La Posta Reservation could be mitigated to less than significant, two significant and unmitigable impacts (Class I) would occur within the La Posta Reservation. Significant and unmitigable impacts were identified in Section [DE.4.8](#) (Noise) and Section [DE.4.11](#) (Air Quality). Please see above Section F.1.2.5 (Alternatives) discussion on Interstate 8 Alternative which addresses the two significant and unmitigable (Class I) impacts to La Posta Reservation.

LEAPS Alternative

The LEAPS Alternative has a total of 11 census block groups from six jurisdictions that lie within one-half miles of the alternative route Santa Ysabel Reservation, La Jolla Reservation, Pauma Reservation, Pala Reservation, and Penchanga Reservation. Figure F-5 is a map showing distribution of minorities and median income in the Pauma and Yuima and Pala reservations. Two of the census block groups lie within the Santa Ysabel Reservation. Two census block groups lie within the La Jolla Reservation; three census block groups lie within the Rincon Reservation, one in the Pauma Reservation and one in the Pala Reservation and there are two census block groups that lie within the Penchanga Reservation.

Both the Santa Ysabel and the La Jolla Reservations have one high-minority and one low-minority census block groups that lie within one-half miles of the LEAPS Alternative. Additionally, both reservations have one low-income and one high-income block groups that lie within one-half miles of the LEAPS Alternative. There are no medium-minority or medium-income block groups within either the Santa Ysabel or the La Jolla Reservations. Because both minority groups would be impacted equally there would be no disproportionate impact to high-minority populations on the Santa Ysabel or La Jolla Reservations as a result of the LEAPS Alternative. Likewise, because there are as many low- and high-income block groups, there would be no disproportionate impacts to low-income populations. No environmental justice impacts would occur to minority or low-income populations as a result of the LEAPS Alternative on the Santa Ysabel Reservation or the La Jolla Reservation.

Within the Rincon Reservation there are three census block groups that lie within one-half miles of the LEAPS Alternative. Of the three block groups, one is classified as high-minority, one is classified as medium-minority and one is classified as low-minority. Because all minority groups would be impacted equally there would be no disproportionate impacts to high-minority populations on the Rincon Reservation as a result of the LEAPS Alternative. Likewise, of the three block groups, one is classified as low-income, one is classified as medium-income and one is classified as high-income. Because there are as many low-, medium- and high-income block groups, there would be no disproportionate impacts to low-income populations. No environmental justice impacts would occur to minority or low-income populations as a result of the LEAPS Alternative on the Rincon Reservation.

Figure F-5. Environmental Justice - Pauma and Yuima and Pala Reservations

[CLICK HERE TO VIEW](#)

There is one census block group within the Pala Reservation that lies within one-half miles of the LEAPS Alternative. This block group is classified as medium-minority and low-income. There is no high-minority, low-minority, medium-income, or high-income block groups in the Pala Reservation that lies within one-half miles of the LEAPS alternative. However, because there is a low-income block group and no high- or medium-income block groups within one-half miles of the LEAPS Alternative, there would be a disproportionate impact to low-income populations on the Pala Reservation resulting in a significant environmental justice impact because there is a corresponding Class I impact in Section D. In addition to the above impact discussion for the Pala Reservation the following resources will be impacted:

Geology, Mineral Resources, and Soils (Section E.7.2.13) identified two significant and unmitigable impacts (G-4 and G-7) associated with the project structures potential to be damaged by seismically induced groundshaking and/or ground failure exposing people or structure to substantial adverse effects as well as the project exposing people or structures to potential substantial adverse effects as a result of seismically induced liquefaction, landslides and debris flows. The identified significant and unmitigable impacts (G-4 and G-7) would affect the populations on the Pala Reservation during construction and operation of the LEAPS Alternative. Activities associated with the project would likely cross the active Wildomar Fault. Crossing an active fault, excavation/facility or extensive adjacent shear zone would be considered a significant, unavoidable impact. Additionally, effects of an active fault may include damage to project infrastructure or construction-related equipment, or injury or loss of life of construction crews. The potential impact to the project infrastructure and construction equipment could not be fully mitigated. Because the only block group is low-income and no medium- or high-income block groups would be affected by Impacts G-4 and G-7 this would constitute a significant and unmitigable environmental justice impact (Class I) to the one low-income census block population identified for Pala Reservation.

Hydrology and Water Resources (Section E.7.2.12) identified four significant and unmitigable impacts (H-9, H-11, H-12, and H-15) associated with the LEAPS project. Excavation for reservoir construction and the placement of a seepage collection system could destabilize localized artesian groundwater. This would impact the water source (groundwater) of approximately 600 residences downstream. Because these water sources have not been quantified they are conservatively estimated to be significant and not mitigable. The construction of the LEAPS reservoir would preclude 135-acre-foot (1%) of captured water from flowing downstream into the San Juan Creek Watershed. This impact is considered significant and no mitigation is available. Additionally, groundwater may need to be pumped out of the powerhouse cavity and could potentially be redirected to Lake Elsinore at the surface (FERC, 2007). Though unlikely, impacts to groundwater would be significant and not mitigable should they occur. Lastly, the Decker Canyon upper reservoir would be classified as having a high downstream hazard potential. In accordance with the Federal Guidelines for Dam Safety – Hazard Potential Classification Systems for Dams (October 1998), dams assigned the high hazard potential are those for which failure or misoperation would probably cause loss of human life. This impact would not be mitigable. Because the only block group is low-income and no medium-income or high-income block groups would be affected by Impacts H-9, H-11, H-12, and H-15, this would constitute a significant and unmitigable environmental justice impact (Class I) to the one low-income census block population identified for Pala Reservation.

There is one census block group within the Pauma Reservation that lies within one-half miles of the LEAPS Alternative. This block group is classified as high-minority and high-income. There is no medium-minority, low-minority, medium-income, or low-income block groups in the Pauma Reservation that lies within one-half miles of the LEAPS alternative. However, because there is a high-minority block group and no low-minority or medium-minority block groups within one-half miles of the LEAPS Alternative, there would be a disproportionate impact to low-income populations on the Pauma

Reservation resulting in a significant environmental justice impact because there is a corresponding Class I impact in Section D. Please see the above impact discussion for the Pauma Reservation.

Within the Pechanga Reservation, there are two census block groups that lie within one-half miles of the LEAPS Alternative. Of the two block groups, one is classified as high-minority and one is classified as low-minority. There are no medium-minority block groups within one-half miles of the LEAPS Alternative. Because the high-minority and low-minority groups would be impacted equally, there would be no disproportionate impacts to high-minority populations on the Pechanga Reservation as a result of the LEAPS Alternative. Likewise, of the two block groups, one is classified as low-income and one is classified as medium-income. Because there are as many low-income block groups as medium-income block groups, there would be no disproportionate impacts to low-income populations. No environmental justice impacts would occur to high-minority or low-income populations as a result of the LEAPS Alternative on the Pechanga Reservation.

Alternatives Summary

The remainder of the Proposed Project's alternatives does not have jurisdictions identified for detailed environmental justice analysis.

As described above for the Proposed Project, there is one jurisdiction along the Proposed Project route where significant and unmitigable (Class I) environmental justice impacts would occur, the Barona Reservation. In the analysis of the alternatives that differed from the Proposed Project, there is one jurisdiction where significant and unmitigable (Class I) environmental justice impacts would occur, the La Posta Reservation associated with the Interstate 8 Alternative and Modified Route D Alternative.

F.2 Growth-Inducing Effects

Section 15126.2(d) of the CEQA Guidelines requires that an EIR discuss the ways in which a Proposed Project may foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The Council on Environmental Quality (CEQ) NEPA Regulations also requires that an EIS discuss the growth-inducing impacts of a project. (40 C.F.R. § 1508.8(b) ["Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."].) The discussion must additionally address how a Proposed Project may remove obstacles to growth, or encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth impacts could also occur if a project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies. The impact analysis within this EIR/EIS includes 230 kV and 500 kV future transmission system expansion and five connected actions/indirect effects as part of the overall project. However, future transmission lines would be constructed in response to anticipated and planned growth; they would not induce growth.

The Proposed Project would employ up to 800 skilled or semi-skilled construction personnel (Table B-43, Construction Labor), with a maximum of 125 personnel working within any one link at any one time. It is assumed that the construction of the alternatives would employ a similar number of construction personnel because the alternatives would be constructed under similar time constraints. Additionally, the alternatives would replace similar length of transmission systems as that of the Proposed Project.

Assuming all of the 800 construction workers would require housing, they would only occupy 0.16 percent of the combined vacant housing (not including hotels) in Imperial and San Diego Counties. According to the 2000 U.S. Census report there is approximately 10 percent vacancy rate in Imperial County and a 5 percent vacancy rate in San Diego County. As such, the 0.16 percent of housing required should all 800 personnel relocate to the Project area would not substantially increase the demand for new housing. However, the required labor force would be drawn primarily from the local population and would not be relocating. The 2000 U.S. Census report shows approximately 43 percent employment rate for both Imperial and San Diego Counties. Imperial County has 5 percent of the employed workforce in construction whereas San Diego County has 7 percent of the employed workforce in construction. Consequently, few, if any, workers are expected to relocate permanently during project construction because there is a sufficient workforce to draw upon within Imperial and San Diego Counties. As such, demand to local housing would not exceed the supply of local housing or temporary housing facilities. Although there are portions of the alternative routes that have low populations, large local construction workforces are available throughout the alternative alignments because of larger population centers in San Diego County and the El Centro area in Imperial County. Therefore, construction of additional housing would not occur as a result of construction along the Proposed Project route or the alternative routes.

Local highways provide good access to the Proposed Project and the alternative alignments throughout the San Diego and Imperial County region. The longest commute for construction workers is approximately 115 miles (less than a 2-hour drive) between downtown San Diego and El Centro. Therefore, few, if any, workers are expected to relocate to the area permanently for construction as their commute will be no more than 2 hours and construction will be temporary. Additionally, after construction, only 20 workers are required for operation of the project. Because of the size of workers required for the operation of the project would be significantly less than 1 percent of the employed population of Imperial and San Diego Counties they will not contribute to an increase in the population of the area. The project would not adversely impact the local labor force. No growth inducing impacts would occur along the alternative routes at any point.

F.2.1 Growth Caused by Direct and Indirect Employment

As indicated in Section B, Project Description (Table B-42, Construction Labor Force), and the maximum estimated number of individuals required for construction labor would not exceed 800 (anticipated between August 2008 through June 2009). It is anticipated that multiple contractors would be working concurrently on the separate links of SRPL in order to meet the projected in-service date of spring 2010. Because at some stages of the project, multiple locations would be under construction simultaneously, a maximum estimated average daily workforce is assumed for the entire Proposed Project.

The maximum daily workforce for any one link during peak construction months would be 125 personnel. The operation and maintenance maximum work force is expected to be 20 permanent employees. If SDG&E does not use its own crews, any new personnel for operation and maintenance would be drawn from local populations, which could benefit local employment. Assuming SDG&E uses its own construction workers they would be drawn from local populations, as well. Because there are few, if any, workers that are expected to relocate permanently during construction, the project would not result in new demand to local public services or facilities serving the Proposed Project route. Although there are portions of the project route that have low populations, large local construction workforces are available throughout the project route because of larger population centers in San Diego County and the El Centro area in Imperial County. The project would not adversely impact the local labor force. As no population, housing or utility impacts would occur along the Proposed Project route at any point, change in local employment and/or labor is not discussed on a link-by-link basis.

Section D.14, Socioeconomics, provides a detailed assessment of the existing labor force within the Proposed Project area. Due to the location of SRPL, and the size of the labor force within the Imperial and San Diego Counties, it is assumed that the labor force required for construction would come from within the two-county area. At the peak of construction-related activities, the Proposed Project would require an estimated 0.64 percent of the total two-county construction workforce (125,129 persons), the majority of which would be expected to commute to and from the Proposed Project's work sites (generally a maximum commute of two hours based on a commute from the City of San Diego to the City of El Centro). Therefore, no growth in residential housing or services would occur as a result of increased employment. Over the long-term, the Proposed Project would have no direct impact on population growth, as no long-term increase in employment is expected to result from Proposed Project operations.

The FTSE is expected to have similar construction personnel needs as the Proposed Project. As with the Proposed Project, it is assumed that the labor force required for construction would come from within the two-county area. Connected actions of the SRPL would require a smaller workforce than the SRPL; however, it is expected that the labor force will come from the two-county area as well. The following is construction expectations for the Sterling Solar Two Project and IID Transmission Systems Upgrade-Connected Actions.

The maximum construction-related jobs expected for the Solar Energy Systems (SES) Solar Two is 400 to 500 construction personnel during the 6 to 12 peak month period. The balance of construction work is expected to require 300 to 400 construction personnel for the remaining five years construction period. Construction is expected to commence during the fourth quarter of 2008 and continue for five or six years.

The IID Transmission Systems Upgrade construction is expected to be similar to the Central East Substation with the exception of the San Felipe Substation which would be 20 acres smaller. Please refer to Section B.4.2 for detailed information.

F.2.2 Growth Related to Provision of Additional Electric Power

For a full description of the Proposed Projects objectives please refer to Section A.2.1 (SDG&E's Project Objectives). The following lists primary purposes of the Proposed Project related to environmental justice:

- Provide a transmission facilities with a voltage level and transfer capability that (a) allows for prudent system expandability to meet both anticipated short-term (2010) and long-term (2015 and beyond) load growth through a total San Diego area import capability of at least 4,200 MW (all lines in service) and 3,500 MW (under G-1/N-1 contingency conditions) and (b) supports regional expansion of the electric grid.
- Avoid, to the extent feasible, the taking and relocation of homes, businesses or industries, in the siting of the transmission line, substation and associated facilities.
- Minimize the need for new or expanded transmission line ROW in urban or suburban areas of the SDG&E service territory already traversed by multiple high voltage transmission facilities and, to the extent feasible, assist in implementing local land use goals.

As such, the Proposed Project is not intended to supply power related to growth for any particular development, either directly or indirectly and would not result in direct growth-inducing impacts. However, the Proposed Project would facilitate growth indirectly by removing obstacles to population growth through the additional increased capacity of electric power that it would make available. As discussed in Section A.2 (Purpose and Need for the Proposed Project), the Proposed Project would bring energy resources to

San Diego County from Imperial County by providing access to remote areas with the potential for significant development of renewable energy sources, improve electric reliability within the San Diego area by providing additional transmission during peak loading and from the region's growing economy, and lastly, reduce congestion and power supply costs of delivering electricity to ratepayers (SDG&E, 2006a; PEA, 2007 [Supplemental Testimony]).

The CAISO's interconnection queue lists generation facilities that would like access to California's transmission system. There are currently thousands of megawatts of wind and solar facilities in the Imperial Valley, Mexico, and eastern San Diego County listed in the queue, and there is not adequate transmission capacity for these projects to be constructed. This information, and the identification of connected actions (see Section B.6) shows that other projects would be constructed as a result of the construction of the Sunrise Powerlink. While the development of renewable energy sources has the benefit of reducing the use of older and more polluting conventional generation facilities, the renewable facilities could not be constructed without adequate transmission. So while the SRPL may not induce urban growth, it would encourage the developed of renewable projects in the Imperial Valley, Mexico, and eastern San Diego County.

Socioeconomics Section D.14.2 (Environmental Setting for the Proposed Project) provides a description of the existing populations within the Proposed Project area. Growth in the Proposed Project areas is expected to occur with or without implementation of the Proposed Project. With implementation of the Proposed Project, SDG&E is responding to anticipated future load growth in a timely manner. An assessment of the significant cumulative impacts of the Proposed Project is provided in Section G of this EIR/EIS (Cumulative Scenario and Impacts).

F.3 Significant Irreversible Changes and Irretrievable Commitments of Resources

F.3.1 Significant Irreversible Changes and Irretrievable Commitments of Resources – Proposed Project

Pursuant to Section 15126.2 (c) of the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) must address significant irreversible environmental changes and irretrievable commitments of resources that would be caused by a Proposed Project. These changes include uses of nonrenewable resources during construction and operation, long-term or permanent access to previously inaccessible areas, and irreversible damages that may result from project-related accidents.

Implementation of the Proposed Project would result in the consumption of energy as it relates to the fuel needed for construction-related activities. Fuel would be needed for construction vehicles, construction equipment, construction operations, and helicopter use. Additionally, construction would require the manufacture of new materials, some of which would not be recyclable at the end of the Proposed Project's lifetime, and the energy required for the production of these materials, which would also result in an irretrievable commitment of natural resources. The anticipated equipment, vehicles, and materials required for construction of the Proposed Project are detailed in Section B.5 (Construction Procedures and Activities). Maintenance and operations and inspection of the Proposed Project would not change appreciably from SDG&E's existing activities in project area, and thus would not cause a substantial increase in the consumption or use of nonrenewable resources.

Implementation of the Proposed Project would additionally require temporary and permanent loss of vegetation and habitat that could potentially support sensitive wildlife species due to construction activities. There would be approximately ~~654.5–656.48~~ acres of permanent loss to ~~native~~-vegetation plus approximately ~~169–1,677.19~~ acres of additional temporary loss to ~~native~~-vegetation. However, implementation of the Applicant Proposed Measures (APMs) and mitigation measures for biological resources recommended in this EIR/EIS (see Section D.2) would ensure that project-induced loss of vegetation and habitat would be less than significant because SDG&E would designate approximately ~~1,504–1,538.54787.44~~ acres to off-site mitigation and approximately ~~134–1,245.89~~ additional acres to on-site restoration for impacts to sensitive vegetation.

The majority of access required for construction and operation of the Proposed Project would utilize existing ROWs; however, approximately 347.24 acres of land would be disturbed for proposed access roads and between 570 and 950 acres of additional land would be disturbed for proposed new ROWs and additional ROW width. There would also be approximately five acres per link used as staging areas; however, the staging areas would primarily be located on previously disturbed areas. All access roads that are no longer needed at the completion of construction of the SRPL would be permanently closed (BIO-APM-17) to limit new or improved accessibility into the area. Therefore, new public access to previously inaccessible areas would be negligible.

During the Proposed Project's operational phase, the transport of electrical power generated from nonrenewable resources (e.g., natural gas) would continue.

Construction and operation of the Proposed Project would require the use of a limited amount of hazardous materials such as fuel, lubricants and cleaning solvents. Additionally, during project construction and operation preexisting soil or groundwater contamination could be encountered. All hazardous materials would be stored, handled, and used in accordance with established SDG&E Best Management Practices (BMPs) and applicable federal, State, and local regulations, including a construction-phase Storm Water Pollution Prevention Plan (SWPPP) and operational-phase Hazmat Business Plan and Storm Water Management Plan. Appropriate implementation of these plans and practices, as well as the mitigation measures recommended in Section D.10 (Public Health and Safety), would reduce the potential for environmental accidents associated with the Proposed Project to less than significant levels.

F.3.2 Significant Irreversible Changes and Irretrievable Commitments of Resources – Alternatives

As stated above, significant irreversible environmental changes and irretrievable commitments of resources that would be caused by an alternative include uses of nonrenewable resources during construction and operation, long-term or permanent access to previously inaccessible areas, and irreversible damages that may result from project-related accidents. Similar to the Proposed Project, the alternative alignments would result in the consumption of energy as it relates to the fuel needed for construction-related activities. Fuel would be needed for construction vehicles, construction equipment, construction operations, and helicopter use. Additionally, construction would require the manufacture of new materials, some of which would not be recyclable at the end of the projects lifetime, and the energy required for the production of these materials, which would also result in an irretrievable commitment of natural resources. The anticipated equipment, vehicles, and materials required for construction of the alternative alignments would be similar to the Proposed Project and are detailed in Section B.5 (Construction Procedures and Activities). Maintenance and operations and inspection of the alternative alignments would not change appreciably from SDG&E's existing activities in project areas, and thus would not cause a substantial increase in the consumption or use of nonrenewable resources.

During the Alternative's operational phase, the transport of electrical power generated from nonrenewable resources (e.g., natural gas) would continue.

Vegetation and habitat loss that could potentially support sensitive wildlife species would be unavoidable with the implementation of the alternative alignments. However, implementation of the Applicant Proposed Measures (APMs) and mitigation measures for biological resources recommended for the Proposed Project in this EIR/EIS (see Section D.2) would ensure that project-induced loss of vegetation and habitat would be less than significant because SDG&E would designate off-site mitigation and on-site restoration to replace any loss of vegetation and/or habitat.

The majority of access required for construction and operation of the Alternative routes would utilize already-disturbed corridors using existing ROWs whenever feasible. However, approximately 14-foot-wide straight sections of road and 16 to 20-foot-wide sections at corners would be required to facilitate safe movement of equipment and vehicles. In areas where access roads or spur roads are not available or do not meet the required safety width, access roads will be widened or constructed as needed. There would also be approximately five acres per alternative used as staging areas; however, the staging areas would primarily be located on previously disturbed areas. All access roads that are no longer needed at the completion of construction of the Alternative routes would be permanently closed (BIO-APM-17) to limit new or improved accessibility into the area. Therefore, new public access to previously inaccessible areas would be negligible.

Parallel to the Proposed Project, Construction and operation of the alternative alignments would require the use of a limited amount of hazardous materials such as fuel, lubricants and cleaning solvents. Additionally, during project construction and operation preexisting soil or groundwater contamination could be encountered. All hazardous materials would be stored, handled, and used in accordance with established SDG&E Best Management Practices (BMPs) and applicable federal, State, and local regulations, including a construction-phase Storm Water Pollution Prevention Plan (SWPPP) and operational-phase Hazmat Business Plan and Storm Water Management Plan. Appropriate implementation of these plans and practices, as well as the mitigation measures recommended in Section D.10 (Public Health and Safety), would reduce the potential for environmental accidents associated with the alternative alignments to less than significant levels.

F.4 Significant Environmental Effects which Cannot be Avoided if the Proposed Project is Implemented

The environmental impacts of the Proposed Project are described in the environmental analysis sections in Section D. Impacts that are significant and cannot be reduced to less than significant levels through the application of feasible mitigation measures have been characterized as Class I impacts. All significant and unavoidable Class I impacts resulting from the Proposed Project are summarized below. Complete descriptions of these impacts are presented in Section D.

Biological Resources

The project could result in temporary disturbance and/or permanent loss to sensitive vegetation communities, special status species, and jurisdictional areas. Significant and unavoidable Class I impacts to biological resources would occur when construction activities result in the following:

- temporary and permanent losses of native vegetation (sensitive vegetation, vegetation management, and type conversion)
- direct or indirect loss of listed or sensitive plants or a direct loss of habitat for listed or sensitive plants
- direct or indirect loss of listed or sensitive wildlife or a direct loss of habitat for listed or sensitive wildlife (sensitive species)
- direct or indirect loss of flat-tailed horned lizard, Peninsular bighorn sheep, quino checkerspot butterfly, Stephens' kangaroo rat, barefoot banded gecko or direct loss of habitat
- direct or indirect loss of golden eagle or direct loss of habitat (for nests within 4,000 feet)
- presence of transmission lines result in collision for listed species
- maintenance activities result in disturbance or mortality of Peninsular bighorn sheep

Visual Resources

Significant and unavoidable Class I impacts would occur to visual resources at the following Key Viewpoints:

- Key Viewpoint 3 on BLM Road 326 north of Superstition Hills (Impact V-5),
- Key Viewpoint 4 on SR78/86, north of Superstition Hills (Impact V-6),
- Key Viewpoint 5 on eastbound Old Kane Springs Road (Impact V-8),
- Key Viewpoint 6 on the westbound SR78 at The Narrows (Impact V-9),
- Key Viewpoint 7 on northbound Mine Wash Road (Impact V-10),
- Key Viewpoint 8 at Kenyon Overlook (Impact V-11),
- Key Viewpoint 9 at Station 6 on the Cactus Loop Trail out of Tamarisk Grove Campground (Impact V-12),
- Key Viewpoint 10 in the Yaqui Well Primitive Camping Area (Impact V-13),
- Key Viewpoint 11 on westbound SR78 (Impact V-14),
- Key Viewpoint 12 on Grapevine Canyon Road within ABDSP (Impact V-15),
- Key Viewpoint 13 on Grapevine Canyon Road, just west of ABDSP (Impact V-16),
- Key Viewpoint 14 on southbound SR79 (Impact V-17),
- Key Viewpoint 15 on westbound Mesa Grande Road (Impact V-18),
- Key Viewpoint 16 at the Inaja Monument Park Overlook (Impact V-19),
- Key Viewpoint 17 on westbound SR78 (Impact V-20),
- Key Viewpoint 18 on BIA Road 51 (Impact V-21, Central East Substation),
- Key Viewpoint 19 on northbound San Felipe Road (Impact V-22),
- Key Viewpoint 20 on westbound San Vicente Road (Impact V-23)
- Key Viewpoint 21 on southbound SR67 (Impact V-24)

Visual resource impacts would result from new towers increasing visual contrast, skylining, and blocking views of 4WD recreationists as well as on other BLM access roads, be visible to travelers on SR78 (State-designated Scenic Highway within ABDSP) as well as on other roadways, view blockage of the background landforms and the sky. These portions of the Proposed Project would be built in an area that does not presently contain structures of similar scale and character. The moderate-to-high

visual change due to increased structure contrast, industrial character, view blockage, and skylining would not be consistent with Interim BLM VRM Class III management objective, and consequently would be significant and unavoidable.

While the previously mentioned Key Viewpoints visual impacts cannot be mitigated to a level that would be less than significant, APMs VR-1 through VR-6 and Mitigation Measures (see Section D.3, Visual Resources) are proposed to provide an opportunity to revise the project design to reduce the level of impact. However, at this point, even with mitigation, the impact would still be significant.

Wilderness and Recreation

A significant and unmitigable impact to wilderness and recreation resources would occur on large portions of BLM and State property within the Imperial Valley Link. Within the Imperial Valley Link there are several ORV areas, such as Ocotillo Wells SVRA, Plaster City, and Arroyo Salado ORV Open Areas. Additionally, hikers and campers on the Juan Bautista de Anza Trail (near MP 49) would be impacted visually and by the corona noise of the SRPL.

There would be significant and unmitigable impacts to the entire ABDSP Proposed Project's route. The ABDSP is visited by recreational users for a wide variety of activities including camping, hiking, scenic driving, wildlife observation, and desert aerial and 4x4 tours. Recreational opportunities in the desert are especially valued for their solitude and natural setting, which characterizes the majority of the Park. A 500 kV transmission line through ABDSP creates a constant buzzing or crackling noise (corona noise) from the conductors which would be a significant contrast to the current desert quiet experienced by visitors to ABDSP, especially campers at Tamarisk Grove Campground, Yaqui Wells Primitive Camp and hikers in Grapevine Canyon.

Additional areas impacted by corona noise from a proposed 500 kV segment would be natural areas between ABDSP and the proposed Central East Substation, San Felipe Hills WSA, PCT, San Dieguito River Park and the Santa Ysabel Open Space Preserve, thus a significant and unmitigable impact would occur.

Construction activities would temporarily reduce access and visitation to recreation or wilderness areas that the Proposed Project crosses. The location of construction equipment may temporarily preclude access to recreation areas, especially in the vicinity of SR78 (i.e., Tamarisk Grove Campground, Yaqui Wells Primitive Camp Area, desert tours, Cactus Loop Trail, Yaqui Well Nature Trail, Bill Kenyon Overlook, Vallecito Mountain Wilderness Area, and Pinyon Ridge Wilderness Area). Due to the presence of the Proposed Project, the character of this portion of ABDSP would be permanently changed from an open space with minimal development to one that includes large industrial structures, a significant and unmitigable impact.

The proposed SRPL Project would require a 50-foot expansion of SDG&E's existing easement throughout ABDSP with a larger portion of the ROW located within wilderness areas. The additional ROW width through Grapevine Canyon would require the use of approximately 50.2 acres of State Wilderness within the Pinyon Ridge Wilderness Area (48.1 acres) and Grapevine Mountain Wilderness Area (1.3 acres) (see Table D.5-4 and Appendix 11B for detailed maps). Proposed SRPL ROW would not be located within Vallecito Mountains Wilderness Area; however, portions of three temporary pull sites for stringing the 500 kV conductors would be located within the Wilderness Area, resulting in 0.8 acres of impact to wilderness. The loss of land in wilderness areas would be a significant and unmitigable impact.

In this area of the Proposed Project (Central East Substation), a new double-circuit 230 kV transmission line would be constructed overhead and parallel to an existing 69 kV transmission line through five open space preserves: Mt. Gower, Barnett Ranch, Boulder Oaks, San Vicente Highlands, and Sycamore Canyon Open Space Preserves. Impacts to recreation resulting from siting new transmission towers or access roads in or near these resources would result in significant and unmitigable impacts.

Agricultural Resources

The minimum acreage required for a parcel of Prime Farmland to be entered into a Williamson Act contract is 10 acres. Consequently, this amount is used as a threshold of significance for determining the significance agricultural impacts. The Proposed Project would result in the permanent conversion of 89.3 acres of DOC Farmland, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance (Impact AG-2) within all of the Proposed Project Links, resulting in significant and unmitigable impacts to agricultural resources. Additionally, greater than 10 acres of Active Agricultural Operations and Williamson Act contract lands would be converted to non-agricultural use as a result of the entire Proposed Project (Impacts AG-3 and AG-4, respectively). No feasible mitigation exists to reduce this impact to less than significant levels. There are no other areas near the proposed route to which the Proposed Project could be relocated because development on land to the north and west is prohibited by the DOD and land to the south and east is also subject to Williamson Act contracts, and could generate similar or greater impacts to Williamson Act lands. Thus, given that similar or greater impacts to Williamson Act lands would occur if lines were moved south or east, that lines cannot be moved north or west (due to DOD restrictions), and the fact that greater than 10 acres of Williamson Act land would be converted, impacts to Williamson Act contract lands as a result of the Proposed Project would be considered significant and unmitigable

Cultural Resources

Construction of the Proposed Project would potentially result in direct impacts to significant cultural resources (including archaeological sites, historic standing structures, and Traditional Cultural Properties) through ground-disturbing activities such as vegetation removal, grading, trenching, boring, and excavation for new tower locations and transmission lines, access roads, pull sites, and substations. Indirect impacts to significant cultural resources may result from adverse effects to the setting and feeling of historic built environment resources, from which the towers, transmission lines, and/or substations may be seen. Other indirect impacts to cultural resources include vandalism and unlawful or unauthorized collection of artifacts, which may result from increased access to remote areas traversed by the Proposed Project.

Any adverse effect to human remains is considered a significant Class I impact. The impacts would be considered significant (Class I), in accordance with 36 CFR 800 which considers impacts to human remains an unmitigable adverse effect. Construction of the Proposed Project, regardless of which link, has the potential to uncover human remains. Construction of the Proposed Project would have a significant adverse impact when resulting from the potential to discover human remains ~~are discovered~~.

The potential for impacts to unknown significant subsurface archaeological resources is considered high due to the number of known archaeological sites and the extent of ground-disturbing activities along the entirety of the Proposed Project. Even with mitigation sites containing human remains would remain significant.

The Sacred Lands File search conducted for the PEA noted that lands sacred to ~~Native Americans~~ Indians are present in the vicinity of the Proposed Project area, in an undisclosed location. In some cases impacts to TCPs would remain significant, even after mitigation.

The sensitive landscape of Traditional Cultural Properties would be bisected by several miles of transmission lines and towers which cannot be relocated or screened from view. Impacts in these sensitive areas would be significant and unmitigable due to the sensitivity and local importance of its Native American Indian resources.

Noise

Construction noise would temporarily substantially increase ambient noise levels in the vicinity of the proposed transmission line, along the project route, and along all transport access routes. Locations of construction noise would include the project route and access routes, structure sites, pull sites, staging and maintenance areas, fly yards, and substation sites. The off-site noise would include commuting workers and trucks and helicopters moving material to and from the work sites. Concurrent construction activity would be necessary with multiple crews at separate locations. Significant noise impacts would occur at many locations, and Mitigation Measure N-1a, in combination with the notification required by Mitigation Measure L-1a, would reduce the impacts to the extent feasible, but the substantial noise increase from construction would continue to be significant and unavoidable (Class I).

Permanent noise levels along the ROW would increase due to corona noise from operation of the Proposed Project transmission lines (Impact N-3), resulting in significant and unavoidable Class I impacts in the Imperial Valley, Anza-Borrego, Central, Inland Valley and Coastal Links. The potential for noise from corona discharge is greatest with high voltage lines during wet weather or near inconsistencies or cuts in the metal surface of the line itself; therefore, the segments that have 500 kV transmission lines and are not in dry arid regions have the most potential for audible corona noise. Nonetheless, there are few options for mitigating this noise source. Implementation of mitigation measure N-3a (Respond to complaints of corona noise) would reduce noise levels from damaged equipment; however, transmission line noise increase would remain and create an infrequent but significant and unavoidable impact.

Inspection and maintenance including insulator washing and access road repair would involve occasional helicopter, truck, or earthmoving equipment activity along the ROW. Because maintenance activities would involve occasionally increased noise at levels similar to transmission line construction, helicopters and other equipment within 200 feet of sensitive receptors would periodically cause a substantial increase in noise over conditions occurring without the Proposed Project resulting in a significant and unavoidable impact (Class I).

Air Quality

A significant and unavoidable Class I impact to air quality would occur as a result of construction generating dust and exhaust emissions in excess of the SCAB thresholds within the ICAPCD and SDAPCD (Impact AQ-1). The Proposed Project's NO_x, PM₁₀, and PM_{2.5} emissions, even after implementation of APMs and mitigation measures, would remain above the ICAPCD and SDAPCD daily significance threshold values.

Additionally, greenhouse gas (GHG) emissions that occur as a result of project-related construction activities and operation, maintenance, and inspection activities. These emissions would be partially offset by the small indirect net decrease in carbon dioxide (CO₂) emissions from power plants during line operation. Over the life of the Proposed Project, high GHG emissions during the years of construction would

be followed by much lower GHG emissions during the years of activity necessary to support transmission line operation. As power plant operation shifts to accommodate the new transmission line and renewable resources replace conventional power plants, indirect GHG reductions are forecasted to occur. But because total construction GHG emissions exceed the GHG reductions achieved due to avoided power plant emissions over ~~40-12~~ years of transmission line operation, the Proposed Project would cause an overall net increase in GHG emissions and a significant climate change impact.

Also, electrical equipment associated with the new transmission system would result in the potential escape of sulfur hexafluoride (SF₆), a potent GHG, and because the proposed transmission system equipment would cause a net increase in SF₆ emissions, this impact would be significant and unavoidable.

Socioeconomics, Public Services and Utilities

If construction of the proposed route were to cause a change in revenue to the ABFI Visitors' Center then the purchase of future inholdings and other ABFI-funded programs would be affected. Although Park revenues would not affect the Park's distribution for the following year, the recreational impacts from project construction would result in a potentially significant impacts to businesses related to the tourism industry and at the ABFI Visitors' Center. A complete overlap of the Proposed Project construction schedule and tourist season for ABDSP would cause a reduction in visitation and access to recreation and wilderness areas, resulting in a significant and unmitigable impact to Wilderness and Recreation (see Impact WR-1 above and in Section D.5). Likewise, this impact would result in significant and unmitigable impacts to businesses related to the tourism industry and at the ABFI Visitors' Center (Class I).

Fire and Fuels Management

Damaging consequences wildfires include either direct or indirect adverse impacts as they relate to the transmission line itself, the local community's health/safety, firefighter health/safety, and the public trust natural resources of the State. Within all six firesheds, 30 percent of wildfire ignition sources were due to construction-related activities. This substantial rate of initial fire suppression failure would be due to high construction activity levels during the peak of fire season. The use of heavy equipment and the presence of personnel would increase the wildfire ignition potential in the project construction areas compared with existing conditions. Therefore, an increase in construction activities will increase the potential for construction-related wildfire ignitions within these firesheds.

The presence of the overhead transmission line would create an ongoing source of potential wildfire ignitions for the life of the project. The increased ignition risk associated with the presence of wood poles within 100 feet of the Proposed Project route is considered a significant impact. Due to the potential for unavoidable ignitions related to the presence of the overhead transmission line to occur during extreme fire weather, the presence of the project would significantly increase the likelihood of a catastrophic wildfire.

Within the Ranchita Fireshed there are two specific areas where the Proposed Project would restrict wildfire containment to a very high degree. Both of the 1.5 mile-long conflict areas are located in high fire risk areas with heavy fuels and historical fire containment boundaries.

The creation of wildfire containment conflict areas by the Proposed Project in the San Felipe Fireshed is considered a significant impact. The risk of ignitions and the risk of damage from a project-related ignition cannot be reduced to a less than significant level.

Within the Santa Ysabel Fireshed the dense nature of the vegetation on the western side of SR78 to Lake Sutherland and into the Cleveland National Forest will make fire suppression difficult under moderate fire weather conditions. It is unlikely that a containment effort would be successful in this area with the introduction of the Proposed Project.

The Burn Probability Model for the Ramona Fireshed (See Figure D.15-27) indicates that along the length of the Proposed Project, a total of 3% of the border zone area has a high to very high probability of fire escapes and wildfire recurrence. The risk of an ignition erupting into a catastrophic event in the Ramona fireshed is still unacceptably high, and fire impacts would remain significant in this fireshed.

Wildfire risk is extremely high in the Poway Fireshed, where a small remaining interface WUI with very high population density adjacent to fuel-laden wildlands creates the condition for large fires to easily ignite and spread, using first wildland vegetation and then homes as fuels as occurred during the 2003 Cedar Fire.

The northeast section of the corridor in the Peñasquitos Fireshed is ranked as having a moderate to very high probability of burning. This area is located where the corridor runs along the densely vegetated, north side of Los Peñasquitos Canyon Preserve.

F.5 Relationship Between Short-Term Uses and Long-Term Productivity of the Environment

The Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) Regulations (40 Code of Federal Regulations [CFR] Part 1500 et seq.) require that an Environmental Impact Statement (EIS) discuss issues related to environmental sustainability. In general, this EIS discussion is not included as environmental effects for which either significance is defined, or mitigation is recommended. However, the discussion, as it relates to environmental consequences, must be included in the EIS, including consideration of “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity” (42 United States Code [USC] Section 4332[C] [iv]).

The Proposed Project would result in short-term impacts due to construction-related activities, including: construction of single-circuit 500 kV and 230 kV transmission lines, construction of double-circuit 230 kV transmission line, removal of lattice, H-frame, and steel pole towers, modifications to the existing Imperial Valley Substation, Sycamore Canyon Substation and Peñasquitos Substation, reconductoring, and addition of shunt capacitor and transformers as well as access and spur roads and temporary pulling and splicing sites. The Proposed Project’s construction-related activities are detailed in Section B.3.

Short-term adverse impacts to biological resources, visual resources, land use, wilderness and recreation, agriculture, cultural resources, noise, transportation and traffic, public health and safety, air quality, water resources, geology, mineral resources and soils, and socioeconomics would occur during Proposed Project construction. The Executive Summary summarizes the impacts the SRPL will have on each of the 14 resources. Mitigation measures to reduce these impacts to a level of less than significant (Class II) are detailed in each resource/issue-specific analysis contained within Section D and listed in the Impact Summary Tables in each section.

During Proposed Project construction, local spending by contractors on personnel, materials, equipment, lodging, food, entertainment, and other miscellaneous purchases would occur. The economic effect of this spending would be considered a beneficial short-term impact on local businesses.

Over the operational lifetime of the Proposed Project, long-term adverse impacts associated with biological resources, visual resources, land use, wilderness and recreation, agriculture, cultural resources, noise, transportation and traffic, public health and safety, air quality, water resources, geology, mineral resources and soils, and socioeconomics would occur. These long-term impacts are summarized the Executive Summary of this EIR/EIS and are analyzed in each issue area in Section D.

F.6 Energy Conservation

Pursuant to Appendix F: Energy Conservation of the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) must address potential energy impacts of Proposed Projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

SDG&E proposes to construct a new 91-mile, 500 kV electric transmission line from Imperial Valley Substation (in Imperial County, near the City of El Centro) to a new Central East Substation (in central San Diego County, southwest of the intersection of County Highways S22 and S2) and a new 59-mile 230 kV line that includes both overhead and underground segments from the new Central East Substation to SDG&E's existing Peñasquitos Substation (in the City of San Diego). Section B details each of the segments of the Proposed Project.

SDG&E states that it developed the Sunrise Powerlink Project for three major reasons (1) to bring renewable energy resources to San Diego County from Imperial County by providing access to remote areas with the potential for significant development of renewable energy sources; (2) to improve electric reliability within the San Diego area by providing additional transmission during peak loading and for the region's growing economy; (3) and to reduce congestion and power supply costs of delivering electricity to ratepayers (SDG&E, 2006a).

Having taken into consideration the eight objectives set forth by SDG&E (see Section A.2.1), the CPUC and BLM identified the following three basic project objectives:

- Basic Project Objective 1: to maintain reliability in the delivery of power to the San Diego region.
- Basic Project Objective 2: to reduce the cost of energy in the region.
- Basic Project Objective 3: to accommodate the delivery of renewable energy to meet State and federal renewable energy goals from geothermal and solar resources in the Imperial Valley and wind and other sources in San Diego County.

As detailed in Section A (Introduction), import capability into the San Diego area is often fully subscribed. When the SWPL was built in 1983, the peak demand in the SDG&E service area was 2,069 MW. In 2005, the SDG&E service area recorded a peak demand of 4,058 MW. On July 22, 2006, SDG&E's service area recorded a new all time peak of 4,502 MW (SDG&E, 2006a). Today, SDG&E's ability to reliably import is defined by two transmission import boundaries or constraints: the SDG&E simultaneous import limit (SIL) and non-simultaneous import limit (NSIL). The Sunrise Powerlink Project would greatly expand the import capability for SDG&E.

Among the alternatives considered in this EIR, an Energy Efficiency Alternative was considered as a means of achieving the Project Objectives, Purpose and Need (Appendix 1, Energy Efficiency Alternative). CPUC has been actively promoting conservation for over 30 years, with an intensified effort since the California power crisis in late 2000. The effort in 2001 to expand the state's energy efficiency

programs was seen as an emergency measure to reduce supply shortages and was not meant to be a long-term solution. However, the programs instituted during this period contributed to significant energy savings in California and were extended. The CPUC adopted new energy efficiency goals for 2006 and beyond and SDG&E has incorporated these efficiency goals in its long-term procurement plan as well as in the PEA for the Sunrise Powerlink Project. However, achieving incremental savings beyond the baseline level is speculative. Energy efficiency alone is not a technically feasible alternative to the Proposed Project to meet load growth.

As stated above in Section F.3, Significant Irreversible Changes and Irretrievable Commitments of Resources Section, implementation of the Proposed Project or any of the alternatives would result in the consumption of energy as it relates to the fuel needed for construction-related activities. Fuel would be needed for construction vehicles, construction equipment, construction operations, and helicopter use. Additionally, construction would require the manufacture of new materials, some of which would not be recyclable at the end of the Proposed Project's lifetime, and the energy required for the production of these materials, which would also result in an irretrievable commitment of natural resources. The anticipated equipment, vehicles, and materials required for construction of the Proposed Project are detailed in Section B.5 (Construction Procedures and Activities). Maintenance and operations and inspection of the Proposed Project would not change appreciably from SDG&E's existing activities in project area, and thus would not cause a substantial increase in the consumption or use of nonrenewable resources.

SDG&E has proposed to improve energy efficiency throughout the construction phase of the Proposed Project through AQ-APM-4 and AQ-APM-5 (Section D.11). The APMs address the minimization of vehicle use through an effective carpool program, and the minimization of unnecessary construction vehicle and idling time. Such measures would be increase the energy efficiency of the project while lowering air emissions. Further information on emissions can be found in Section D.11, and a comparison of emissions, including greenhouse gas emissions can be found in Appendix 10.

As discussed in Section F.2, the Proposed Project is not intended to supply power related to growth for any particular development, either directly or indirectly and would not result in direct growth-inducing impacts. It would, however, facilitate growth indirectly by removing obstacles to population growth through the additional increased capacity of electric power that it would make available. However, Socio-economics Section D.14.2 (Environmental Setting for the Proposed Project) provides a description of the existing populations within the Proposed Project area. Growth in the Proposed Project areas is expected to occur with or without implementation of the Proposed Project. It would be speculative to conclude that the Proposed Project would therefore increase energy consumption above what growth itself would do.

Energy conservation measures are included in the EIR as components of the SDG&E Project. SDG&E would voluntarily implement measures to reduce wasteful, inefficient, and unnecessary consumption of energy. No increases in inefficiencies or unnecessary energy consumption are expected to occur as a direct or indirect consequence of the project. Therefore, no mitigation measures above those already present in this EIR would be necessary.

F.7 References

- SDG&E (San Diego Gas & Electric Company). 2006a PEA (Preliminary Environmental Assessment). <http://www.sdge.com/sunrisepowerlink/CPUC.shtml>. August.
- U.S. Census Bureau. Census 2000 (<http://factfinder.census.gov>)
- USEPA. 1998. Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis. April.