

5.10 Socioeconomics

This section discusses the socioeconomic aspects of the RSEP. Section 5.10.1 describes the environment that may be affected by RSEP construction and operation. Section 5.10.2 identifies environmental impacts from power plant development, and Section 5.10.3 discusses cumulative effects. Mitigation measures are discussed in Section 5.10.4. Section 5.10.5 presents the laws, ordinances, regulations, and standards (LORS) applicable to socioeconomics. Section 5.10.6 presents the agencies involved and provides agency contacts. Section 5.10.7 presents the required permits and permitting schedule. Section 5.10.8 provides the references used to prepare this section.

5.10.1 Affected Environment

The proposed RSEP will be located in an unincorporated area of eastern Riverside County, California, that is bordered on the north by San Bernardino County, to the south by Imperial and San Diego counties, to the west by Orange County, and to the east by La Paz County, Arizona. Because of the remote nature of the site and its proximity to San Bernardino County, California, and La Paz County, Arizona, it is possible that the project's impacts will extend beyond Riverside County. As such, the region of influence is assumed to include the metropolitan statistical area (MSA) that includes Riverside and San Bernardino counties (the Riverside-San Bernardino-Ontario MSA), and La Paz County. To the extent possible, the discussion of the socioeconomic resources and impacts will be for all three counties. However, secondary economic impacts will be evaluated only for the region comprising Riverside and San Bernardino counties.

5.10.1.1 Population

As of January 1, 2009, Riverside County's population was estimated at 2,107,653 (California Department of Finance [DOF], 2009b). The City of Blythe, with an estimated January 1, 2009 population of 21,329, is the largest population center in Riverside County that is within 100 miles of the project site (DOF, 2009a). Two other population centers, Parker and Quartzsite, are located in La Paz County, Arizona.

Historical and projected population data for Riverside, San Bernardino, and La Paz counties and for the cities of Blythe and Parker are summarized in Table 5.10-1. Annual average compounded population growth rates are summarized in Table 5.10-2. During the 1990s, Riverside County's population increased at an average annual compounded rate of 2.8 percent, slightly less than La Paz County and more than San Bernardino County. For the period from 1990 to 2000, Blythe grew at an annual average rate of 9.3 percent, and Parker grew at a significantly slower rate of 0.8 percent. For the period of 2000 to 2008, population growth for Blythe was significantly less than during the 1990s, while Parker's population growth for 2000 to 2008 was approximately the same as during the 1990s. For the period 2000 to 2008, all three counties had a positive growth rate, with Riverside and San Bernardino showing higher population growth rates than La Paz County.

Tables 5.10-1 and 5.10-2 also show the historical and projected population estimates and average annual growth rates in California. During the 1990s, California's population grew at an annual rate of 1.30 percent. Based on population projections by the U.S. Census Bureau,

the state is expected to have its greatest relative population growth from 2000 to 2010. In general, the rate of population growth in the future is expected to decline after 2010.

TABLE 5.10-1
Historical and Projected Populations

Area	1990	2000	2008	2010 (p)	2020(p)	2030(p)
Blythe, California ^a	8,448	20,465	21,627	N/A	N/A	N/A
Riverside County, California ^a	1,170,413	1,545,387	2,078,601	2,239,053	2,904,848	3,507,498
San Bernardino County, California ^a	1,418,380	1,710,139	2,044,895	2,177,596	2,581,371	2,958,939
Parker, Arizona ^b	2,897	3,140	3,385	3,417	3,688	3,933
La Paz County, Arizona ^b	13,844	19,715	20,086	22,632	25,487	28,074
State of California ^a	29,758,213	33,873,086	37,883,992	39,135,676	44,135,923	49,240,891

Sources:

^aDepartment of Finance (DOF), 2009a, 2009c, and 2009d

^bUS Census Bureau (2009a) and Arizona Department of Commerce (2009a, 2009b, and 2009c)

(p) = projected

N/A = not available

TABLE 5.10-2
Historical and Projected Annual Average Compounded Population Growth Rates

Area	1990-2000 (Percent)	2000-2008 (Percent)	2000-2010 (Percent)	2010-2020 (Percent)	2020-2030 (Percent)
Blythe, California	9.3	0.7	N/A	N/A	N/A
Riverside County, California	2.8	3.8	3.8	2.6	1.9
San Bernardino County, California ^a	1.9	2.3	3.2	1.7	1.4
Parker, Arizona ^b	0.8	0.9	0.5	0.8	0.6
La Paz County, Arizona ^b	3.6	0.2	6.1	1.2	1.0
State of California	1.3	1.4	1.6	1.2	1.1

Sources:

^aDOF, 2009a, 2009c, and 2009d

^bUS Census Bureau (2009a) and Arizona Department of Commerce (2009a, 2009b, and 2009c)

Table 5.10-3 shows the distribution of racial minority and Hispanic origin population for the census block groups that include the area within a 6-mile radius of the proposed RSEP site. The racial minority and Hispanic origin data are from the 2000 U.S. Census data. Of the overall total population within the 6-mile radius, approximately 20 percent are racial

minorities, while none are of Hispanic origin.¹ Please note, however, that none of the people included in this census data actually live within 6 miles of the RSEP site. There are no permanent residences within 15 miles of the project site.

TABLE 5.10-3

Distribution of Racial/Ethnic Minority Population in Census Block Groups within a 6-mile Radius

Census Block Groups	Population	Non-Hispanic White	Minority	Percent Minority	Hispanic Origin*	Percent Hispanic Origin
Riverside County (458.04)	0	0	0	0	0	0
Riverside County (458.06)	0	0	0	0	0	0
San Bernardino County (104.09)	5	4	1	20	0	0
San Bernardino County (105.01)	0	0	0	0	0	0
TOTAL	5	4	11	20	0	0

*Source: 2000 U.S. Census data

Table 5.10-4 shows the distribution of low-income populations for the census block groups that include the area within the 6-mile radius of the proposed project site. Of the overall total population for whom poverty is determined, 26 percent are low income. Again, none of the people included in this census data actually live within 6 miles of the RSEP site because there are no permanent residences within 15 miles of the project site.

TABLE 5.10-4

Distribution of Low-income Population by Census Block Groups within a 6-mile Radius

Census Block Groups	Total Population*	Income below Poverty Level	Percent low-income
Riverside County (458.04)	117	0	0
Riverside County (458.06)	1,440	407	28.3
San Bernardino County (104.09)	40	21	52.5
San Bernardino County (105.01)	47	0	0
TOTAL	1,644	428	26.0

*Population numbers are only those for whom poverty was determined and exclude full-time college students.

Source: 2000 U.S. Census data

¹ Hispanics or Latinos are those people who classified themselves in one of the specific Spanish, Hispanic, or Latino categories listed on the Census 2000 questionnaire—"Mexican, Mexican Am., Chicano," "Puerto Rican," or "Cuban"—as well as those who indicate that they are "other Spanish/Hispanic/Latino." People who identify their origin as "other Spanish/Hispanic/Latino" may be of any race. Thus, the percent Hispanic should not be added to percentages for racial (i.e., minority) categories.

Figures 5.10-1 and 5.10-2 show the percent distribution of minority and low income populations by census block groups within a 6-mile radius of the proposed RSEP site.

5.10.1.2 Housing

As shown in Table 5.10-5, housing stock for Riverside County as of January 1, 2008, was 773,402 units. Single-family homes accounted for 559,393 units, multiple-family dwellings accounted for 127,622 units, and mobile homes accounted for 86,387 units (DOF, 2009e). Also, housing stock for the City of Blythe as of January 1, 2008, was 5,444 units. Single-family homes accounted for 3,172 units, multiple-family dwellings accounted for 1,381 units, and mobile homes accounted for 891 units (DOF, 2009e). Housing estimates for San Bernardino County; Parker, Arizona; and La Paz County, Arizona, also are provided in Table 5.10.-5.

New housing authorizations for Riverside County in 2005 totaled 34,134 units; about 88 percent were single-family units and 12 percent were multi-family units. These authorizations were valued at \$6.81 million (DOF, 2009f). The median sales price of existing single family homes in the first quarter of 2009 in Riverside-San Bernardino-Ontario MSA was \$172,500 (National Association of Realtors, 2009). Riverside County's vacancy rate has improved between 1990 and 2009 from 17 percent (DOF, 2009g) to 13 percent (DOF, 2009e). Because the vacancy rate is higher than the federal standard of 5 percent, it indicates that housing is not in short supply in the county.

TABLE 5.10-5
Housing Estimates by City and County

Area	Total Units	Single Family	Multi-family	Mobile Homes	Percent Vacant
Blythe, California ^a	5,444	3,172	1,381	891	16.11
Riverside County, California ^a	773,402	559,393	127,622	86,387	13.18
San Bernardino County, California ^a	2,044,895	511,902	128,636	44,871	11.63
Parker, Arizona ^b	1,157	N/A	N/A	N/A	8.0
La Paz County, Arizona ^c	15,577	N/A	N/A	N/A	42.7
State of California ^a	13,443,974	8,677,545	4,171,393	595,036	5.89

^aEstimates are as of January 1, 2008

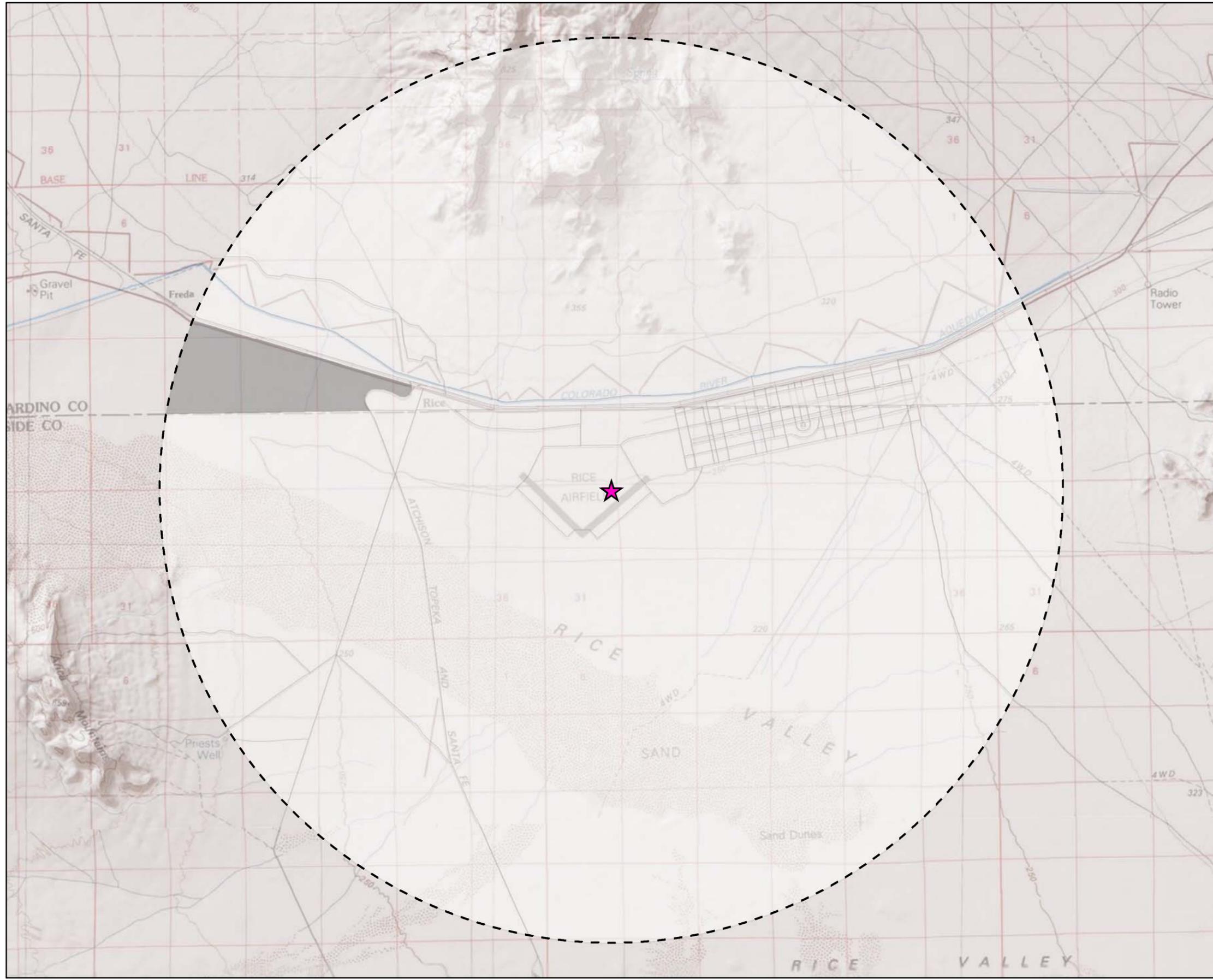
^bAvailable estimates are for the year 2000

^cEstimates are for the 3-year period from 2005 to 2007

Source: DOF, 2009e; US Census Bureau, 2009b and 2009c

5.10.1.3 Economy and Employment

Riverside County is part of the Riverside-San Bernardino-Ontario MSA. The MSA is comprised of Riverside and San Bernardino counties. Between 2000 and 2008, employment in the Riverside-San Bernardino-Ontario MSA increased by 228,600 jobs or about 22.6 percent. This 22.6 percent increase is approximately seven times higher than the overall



LEGEND

- Project Site
- Six Mile Buffer
- Percentage of Minority Population**
- No Minority
- 0 - 50% Minority

Notes:
 1. Source: American Fact Finder, Census 2000 Summary File 1 (SF 1) 100-Percent Data, U.S. Census Bureau, 2008

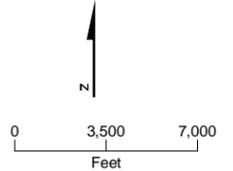
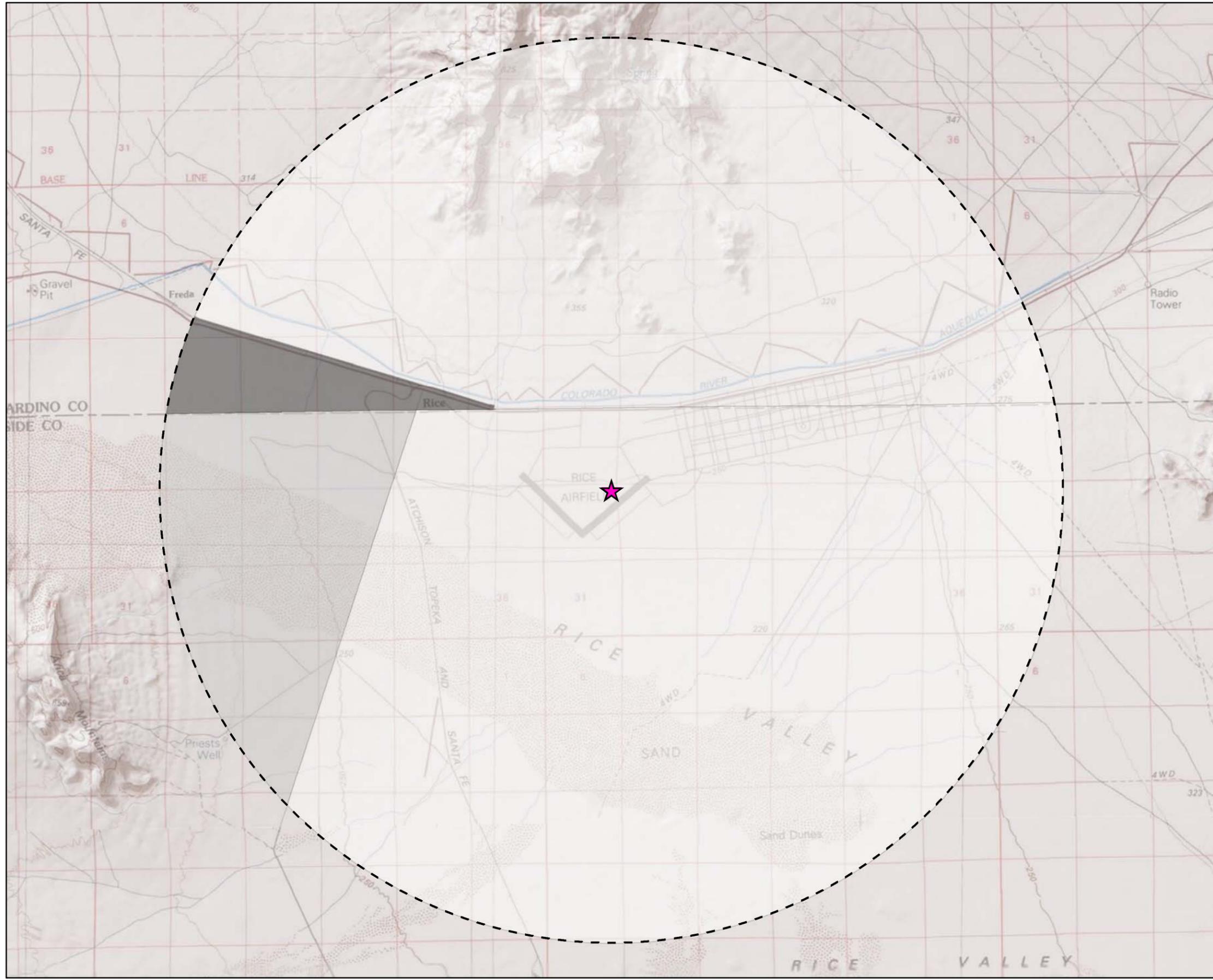


FIGURE 5.10-1
MINORITY POPULATION
DISTRIBUTION BY CENSUS BLOCKS
WITHIN SIX MILES
 RICE SOLAR ENERGY CENTER
 RIVERSIDE COUNTY, CALIFORNIA



LEGEND

- Project Site
- Six Mile Buffer
- Percentage of Low Income Population**
 - No Low Income
 - 0 - 50 Percent Low Income
 - 50 - 100 Percent Low Income

Notes:
 1. Source: American Fact Finder, Census 2000 Summary File 1 (SF 3) 100-Percent Data, U.S. Census Bureau, 2008

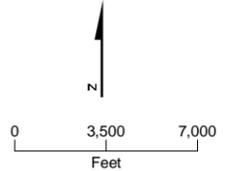


FIGURE 5.10-2
LOW INCOME POPULATION
DISTRIBUTION BY CENSUS BLOCK
GROUPS WITHIN SIX MILES
 RICE SOLAR ENERGY CENTER
 RIVERSIDE COUNTY, CALIFORNIA

increase in industry employment in California (3.28 percent) during that same period (California Employment Development Department [EDD], 2009a). As shown in Table 5.10-6, transportation, warehousing, and utilities; wholesale and retail; and services experienced the largest increases in employment. Although employment in transportation, warehousing, and utilities increased substantially between 2000 and 2008, the contribution of this sector to the Riverside-San Bernardino-Ontario MSA economy remained relatively small, between 4.6 and 5.7 percent. Employment losses were experienced in the agriculture, manufacturing, and natural resources and mining sectors.

TABLE 5.10-6
Employment Distribution in Riverside-San Bernardino-Ontario MSA, 2000 to 2008

Industry	2000		2008		2000-2008	
	Number of Employees	Employment Share (%)	Number of Employees	Employment Share (%)	Percentage Change (%)	Average Annual Compound Growth Rate (%)
Agriculture	21,700	2.1	16,200	1.3	-25.3	-3.6
Natural resources and mining	1,300	0.1	1,200	0.1	-7.7	-1.0
Construction	79,900	7.9	90,500	7.3	13.3	1.6
Manufacturing	119,700	11.9	107,000	8.6	-10.6	-1.4
Wholesale trade	38,200	3.8	55,100	4.4	44.2	4.7
Retail trade	127,000	12.6	168,000	13.6	32.3	3.6
Transportation, warehousing, and utilities	46,300	4.6	70,200	5.7	51.6	5.3
Information	14,300	1.4	14,800	1.2	3.5	0.4
Financial activities	35,700	3.5	46,300	3.7	29.7	3.3
Services	334,100	33.1	439,400	35.5	31.5	3.5
Government	192,100	19.0	230,000	18.6	19.7	2.3
Total Employment	1,010,100	100.0	1,238,700	100.0	22.6	2.6

Source: EDD, 2009a

In Arizona, between 2000 and 2004, employment in La Paz County increased by 596 jobs or about 8.3 percent. This 8.3 percent increase is slightly higher than Arizona's net increase (6.7 percent) during that same period (Arizona Department of Commerce, 2009c). As shown in Table 5.10-7, the wholesale trade, mining, and financial activities are the sectors that experienced the highest growth in employment. The only two sectors that experienced a decline in employment are information and transportation, warehousing, and utilities. However, these sectors' contribution to employment is superseded by other sectors; government, services, and retail trade are the sectors with highest contribution. Although employment in construction increased by 15.7 percent between 2001 and 2004, the contribution of this sector to the La Paz County economy increased by only 0.2 percentage points from 2.8 percent in 2001 to 3.0 percent in 2004.

TABLE 5.10-7
Employment Distribution in La Paz County, 2000 to 2004

Industry	2001 ^a		2004 ^a		2001-2004	
	Number of Employees	Employment Share (%)	Number of Employees	Employment Share (%)	Percentage Change (%)	Average Annual Compound Growth Rate (%)
Farm employment ^b	387	5.4	415	5.3	7.2	2.4
Mining	10	0.1	12	0.2	20.0	6.3
Construction	204	2.8	236	3.0	15.7	5.0
Manufacturing	295	4.1	318	4.1	7.8	2.5
Wholesale trade	113	1.6	156	2.0	38.1	11.3
Retail trade	1,286	17.9	1,349	17.3	4.9	1.6
Transportation, warehousing, and utilities	157	2.2	111	1.4	-29.3	-10.9
Information	60	0.8	53	0.7	-11.7	-4.1
Financial activities	394	5.5	435	5.6	10.4	3.4
Services	1,573	21.9	1,712	22.0	8.8	2.9
Government	2,153	30.0	2,362	30.4	9.7	3.1
Total Employment	7,182	100.0	7,778	100.0	8.3	2.7

^aSelected periods are determined by data availability at the county level for appropriate employment sectors.

^bFarm employment may vary from agricultural employment

Source: Arizona Department of Commerce, 2009c

Table 5.10-8 provides more detail on the characteristics of the regional labor force. It shows 2008 employment data for Riverside, San Bernardino, and La Paz counties, as well as for California and Arizona. Riverside County has an unemployment rate that is similar to California. La Paz County has an unemployment rate that is higher than Arizona. Data sources do not project future unemployment rates. Because of the economic downturn, more recent (2009) unemployment rates are much higher; for example, in August 2009, the unemployment rate in nearby Blythe, California, was 17.7 percent, compared with 15.0 percent countywide and 12.2 percent statewide.

TABLE 5.10-8
Labor Force, Employment and Unemployment Data, 2008

Area	Labor Force	Employment	Unemployed Labor Force	Unemployment Rate (%)
Riverside County	918,800	839,900	79,000	8.6
San Bernardino County	876,300	808,400	69,900	8.0
La Paz County	7,600	7,050	525	7.1
California	18,557,200	16,951,500	1,605,800	8.7
Arizona	3,132,700	2,960,200	172,500	5.5

Sources: EDD, 2009b; Arizona Workforce Informer, 2009

5.10.1.4 Fiscal Resources

The local agency with taxing power is Riverside County, California. Riverside County's estimated summary of expenditures and revenues are presented in Table 5.10-9. The county's general fund revenues have shown steady growth from year to year. From FY 2006 to FY 2007, revenues grew almost 12 percent. From FY 2007 to FY 2008, the revenues continued to grow almost 5 percent. The major sources of general fund revenue for the county are intergovernmental revenue (about 59 percent), followed by charges for current services (about 15 percent), and taxes (about 13 percent).

TABLE 5.10-9

Riverside County General Fund Expenditures and Revenue (\$ Thousands)

	FY 2006	FY 2007	FY 2008
Expenditures for Countywide Operations			
General government	\$123,716	\$119,365	\$145,290
Public protection	\$798,035	\$916,524	\$1,032,582
Public ways and facilities	\$3,930	\$4,505	\$4,717
Health and sanitation	\$337,139	\$341,467	\$368,753
Public assistance	\$588,928	\$644,912	\$704,404
Education	\$349	\$394	\$464
Recreation and culture	\$203	\$203	\$206
Debt service	\$33,576	\$29,751	\$26,132
Capital outlay	\$7,929	\$8,811	\$8,670
Total Expenditures	\$1,893,805	\$2,065,932	\$2,291,218
Revenues			
Taxes	\$273,493	\$301,575	\$309,295
Licenses, permits, and franchise fees	\$21,569	\$25,803	\$24,525
Fines, forfeitures, and penalties	\$62,305	\$81,148	\$90,788
Use of money and property	\$46,957	\$65,653	\$64,201
Federal aid	\$395,105	\$430,606	\$473,731
State aid	\$785,390	\$893,390	\$905,998
Other aid	\$69,042	\$81,703	\$95,808
Charges for Services	\$326,066	\$319,198	\$358,767
Other revenue	\$13,936	\$38,856	\$29,308
Total Revenues and Financing Sources	\$1,993,863	\$2,237,932	\$2,352,421

Source: Riverside County, 2009a, 2009b, and 2009c

Note: Numbers may not add up due to independent rounding.

5.10.1.5 Education

There are 23 elementary, high school, and unified school districts in Riverside County. The proposed RSEP site is within the boundaries of the Desert Center Unified School District (Kelley, 2009). The Desert Center Unified School District has one school in the district, the

Eagle Mountain School, which has classes from kindergarten to eighth grade. The school is at 1434 Kaiser Road in Desert Center, California, which is 62 miles from the proposed RSEP site. The current school enrollment is 14 students, and it has the capacity for 140 students (Capp, 2009). Students from ninth to twelfth grade attend Palo Verde High School (in the Palo Verde Unified School District) at 667 North Lovekin Boulevard in Blythe, California, approximately 40 miles from the project site. Current and historical enrollment figures for the schools are presented in Table 5.10-10. As shown, the enrollment levels for the two school districts increased in 2008-2009 compared to the previous year (2007-2008) but are still less than year 2006-2007 by 2 percent.

TABLE 5.10-10
Current and Projected Enrollment by Grade

Grade Level	Desert Center Unified			Palo Verde Unified		
	Eagle Mountain Elementary			Palo Verde High		
	2006-07 Enrollment	2007-08 Enrollment	2008-09 Enrollment	2006-07 Enrollment	2007-08 Enrollment	2008-09 Enrollment
Kindergarten	0	2	0	0	0	0
First	3	0	2	0	0	0
Second	1	0	0	0	0	0
Third	3	2	0	0	0	0
Fourth	3	2	3	0	0	0
Fifth	2	3	2	0	0	0
Sixth	3	2	3	0	0	0
Seventh	3	2	2	0	0	0
Eighth	1	3	2	0	0	0
Ninth	0	0	0	277	260	269
Tenth	0	0	0	280	264	251
Eleventh	0	0	0	218	226	234
Twelfth	0	0	0	177	182	182
Total	19	16	14	952	932	936

Source: Kelley, 2009; California Department of Education, 2009

5.10.1.6 Public Services and Facilities

This section describes public services in the project area.

5.10.1.6.1 Law Enforcement

The proposed RSEP site is under the jurisdiction of the Riverside County Sheriff's Department, which is headquartered at 4095 Lemon Street in Riverside. The Sheriff's Department serves several small cities and the unincorporated areas in Riverside County. The nearest station to the project location, the Colorado River Station located at 260 North Spring in Blythe, is approximately 41 miles from the project site. Response to an emergency

from the proposed project site would originate out of the Colorado River Station. There are typically two deputies on duty at this station. The response time to an emergency from the project site would be about 20 minutes if the deputies are at the station or about 45 minutes if the deputies are at another location (Vigue, 2009).

The California Highway Patrol (CHP) is the primary law enforcement agency for state highways and roads. Services include law enforcement, traffic control, accident investigation, and the management of hazardous material spill incidents. The nearest CHP office is located at 430 S. Broadway in Blythe, approximately 42 miles from the project site.

5.10.1.6.2 Fire Protection

The project site is in the Riverside County Fire Department jurisdiction; however, the closest fire stations are located in La Paz County, Arizona, and San Bernardino County, California. There is a mutual aid agreement with these counties upon request and availability and it does not include first response; therefore, response from neighboring counties is not guaranteed (Fox, 2009). The first responding fire station is Lake Tamarisk Fire Station (#49) located on 43880 Lake Tamarisk, Desert Center, California 92239. The response time for the first responder is 30 minutes with one engine and three paramedic-trained personnel. Based on the nature of the emergency situation, Blythe Fire Station (#43) and Blythe Air Base Fire Station (#45) can be mobilized, but with a longer response time ranging from 45 to 60 minutes. Also, air ambulance services from Mercy Air Ambulance based in Banning, California, can be mobilized with a response time of 45 minutes. A second option, depending on availability, is PHI Air Medical, which is based Lake Havasu City, Arizona, and has a response time of 30 minutes. If needed, Riverside County can mobilize 10 fire engines to the project location from surrounding fire stations (one in Mecca, one in Ripley, one in Coachella Valley, and four in Indio). The average response time for these stations is estimated to be 1.5 hours (Fox, 2009).

5.10.1.6.3 Emergency Response

The Hazardous Materials Management Division (HMMD) of the Riverside County Department of Environmental Health is the Certified Unified Program Agency (CUPA) in Riverside County. The response to emergency releases of hazardous material is originated from the District Environmental Services Indio Office at 47-950 Arabia St. Suite A, Indio, California. The office has five CUPA-trained personnel. The estimated response time to the project site is approximately 1.5 hours from the Indio office. The second office to respond is the Palm Desert Environmental Resources Management Office at 38-686 El Cerrito Road, Palm Desert, California. This office has five personnel, and the estimated response time is 2.5 hours (Ballen, 2009). Based on the emergency level, other stations may be dispatched. Also, there is mutual aid agreement with San Bernardino County to provide assistance upon request (Ballen, 2009).

5.10.1.6.4 Hospitals

For emergency services, trauma patients are transported to Desert Regional Medical Center at 1150 N Indian Canyon Drive, Palm Springs, California, which is 127 miles from the project location. In the case of burn injuries, patients are transported to Arrowhead Regional Medical Center in San Bernardino County at 400 N. Pepper Avenue, Colton, California, which is 180 miles from the project location (Fox, 2009). The two hospitals are designated as Level II trauma centers, and patients can be transported by air ambulance (Fox, 2009). The

Desert Regional Medical Center has 367 licensed beds (Desert Regional Medical Center, 2009) and Arrowhead Regional Medical Center has 373 licensed beds (Arrowhead Regional Medical Center, 2009).

One additional hospital, the La Paz Regional Hospital, is located approximately 23 miles from the project site at 1200 W. Mohave Road in Parker, Arizona. The hospital has an emergency room but not a trauma center.

5.10.1.7 Utilities

5.10.1.7.1 Electricity and Gas

The RSEP will be interconnected to the existing 161/230-kilovolt (kV) Western Area Power Administration Parker-Blythe transmission line, via a new 10-mile-long generator tie-line. The line is built to 230-kV standards and operated at 161 kV. The RSEP generator tie-line will be constructed to the same standards.

There is no natural gas use proposed for this project.

5.10.1.7.2 Water and Wastewater

The project's water supply will come from two onsite wells. The water will be treated and used for process water, which includes steam-cycle makeup, mirror washing and other needs. One well will be primary and the other will be secondary. The water supply is described in detail in Section 5.15, Water Resources. Water from the two wells will provide all site water needs. Water consumption is estimated not to exceed 180 acre-feet per year. For potable water needs, a small potable water treatment unit will be used.

Wastewater will be discharged to onsite evaporation ponds (up to a total of 15 acres, approximately 5 acres each). This includes reject from the treatment operation and oil water separator discharge.

5.10.1.7.3 Sewer

The project includes an onsite leach field. Two permanent leach fields will be constructed, one in the power block area and another for the administration building area at the north end of the heliostat field.

5.10.2 Environmental Analysis

5.10.2.1 Potential Environmental Impacts

Local environmental impacts were determined by comparing project demands during construction and operation with the socioeconomic resources of the Region of Influence. A proposed solar electric generating system could affect employment, population, housing, public services and utilities, and schools. Impacts could be local or regional, although most impacts would tend to be more regional than local as there are no socioeconomic resources within a 6-mile radius of the project area. Although it is anticipated that the project will not have any significant adverse impacts on the socioeconomic environment, it is expected to result in some socioeconomic benefits to the area.

5.10.2.2 Significance Criteria

The criteria used to determine the significance of project-related socioeconomic impacts are from in the California Environmental Quality Act Checklist. Project-related impacts are determined to be significant if they:

- Induce substantial growth or concentration of population
- Displace a large number of people or existing housing
- Result in substantial adverse environmental impacts associated with the provision of utility services
- Result in substantial adverse physical impacts associated with the provision of public services

Other impacts may be significant if they cause substantial change in community interaction patterns, social organization, social structures, or social institutions; substantial conflict with community attitudes, values, or perceptions; or substantial inequities in the distribution of project cost and benefit.

5.10.2.3 Construction Impacts

Construction is anticipated to take place in one phase, from the first quarter 2011 through the third quarter 2013. Mobilization and site clearing and grubbing will occur in the first 3 months. Actual construction will take place over approximately 30 months. Plant testing is planned to commence in the fourth quarter of 2013 with commercial operation commencing by the end of 2013.

5.10.2.3.1 Construction Workforce

It is anticipated that about 80 percent of the construction workforce will be drawn from the Riverside-San Bernardino-Ontario MSA, California, while the remaining 20 percent will be drawn from La Paz County, Arizona. The primary trades in demand will include pipefitters, electricians, construction managers, ironworkers, laborers, pre-assembly, carpenters, and unskilled labor. Table 5.10-11 provides estimates of construction personnel requirements for the RSEP. Total personnel requirements during construction of the project facility and generator tie-line will be approximately 8,406 person-months, or 701 person-years. Construction personnel requirements will peak at approximately 438 workers in month 12 of the construction period.

Available skilled labor in Riverside-San Bernardino-Ontario MSA was evaluated by surveying the Building Trades Council (Table 5.10-12) and contacting EDD (Table 5.10-13). Both sources show that the workforce in the MSA will be adequate to fulfill the assumed portion (80 percent) of the construction labor requirements for the RSEP. Therefore, construction of the project will not place an undue burden on the local workforce in the MSA and will not result in any significant impacts on the construction workforce.

As shown in Tables 5.10-6 and 5.10-7, the construction workforce has been growing at average annual rate of 1.6 percent per year in the MSA and 5.0 percent per year in La Paz County. Therefore, the RSEP would not result in a significant construction impact.

TABLE 5.10-11
RSEP Construction Personnel by Discipline

Job Category	Month and Number of Personnel																														Total			
	Compliance Plant Prep			Construction																								Commissioning						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
CRAFT																																		
Boilermakers														6	8	8	8	8	8	8	8	11	11	8	8	6	6	6				110		
Carpenters				2	2	20	22	28	30	40	50	50	50	40	30	25	25	25	20	15	15	15	10	10	10	10	6	4	4	4		562		
Electricians			2	2	4	20	36	36	48	48	56	56	56	56	56	56	56	56	56	56	48	48	36	36	36	24	24	24	20	16		1,012		
Insulators																						8	8	8	16	16	16	4	4	2		82		
Ironworkers						8	20	24	26	26	32	32	32	26	30	25	25	20	20	20	20	20	20	18	18	18	12	12	6	6		516		
Laborers	2	2	2	6	10	20	20	26	26	40	44	52	54	54	54	54	54	54	54	54	48	48	48	32	32	32	20	16	16	16		990		
Cement masons				1	1	1	4	4	4	4	4	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	0		97		
Millwrights							3	3	3	16	16	16	16	16	16	16	16	16	16	16	16	14	14	12	12	10	10	8	6	6	6		283	
Operating engineers	2	2	2	10	22	22	22	36	40	40	36	36	30	30	30	30	24	24	24	20	20	20	20	20	20	20	15	15	15	12		659		
Painters																										5	8	8	8	4	2	2		37
Pipefitters						45	60	60	80	80	80	80	80	80	80	80	80	70	70	60	60	50	50	40	40	40	40	40	40	15		1500		
Teamsters	2	2	2	4	6	4	4	4	15	15	15	15	15	26	26	26	26	26	26	26	30	28	28	28	28	24	24	24	20	16		535		
Heliostat assembly craft	0	0		0	0	0	0	15	30	45	45	45	45	45	45	45	45	45	45	45	45	45	0	0	0	0	0	0	0	0	0		585	
Total Craft	6	6	6	25	43	124	175	236	290	354	370	388	384	385	379	369	363	348	343	324	315	266	244	221	228	212	183	151	135	95		6,968		

TABLE 5.10-11
RSEP Construction Personnel by Discipline

Job Category	Month and Number of Personnel																														Total
	Compliance Plant Prep					Construction															Commissioning										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
STAFF																															
Construction staff	2	4	8	10	24	36	36	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	32	32	32	1,016
Construction management staff (SolarReserve)	1	2	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	141
Subcontractors	0	0	0	3	6	6	6	6	6	4	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	80	
Technical advisor	0	0	0	0	0	0	0	0	0	0	2	4	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	86	
Staff Total	3	6	11	18	35	47	47	51	51	49	48	50	52	51	51	51	51	53	53	53	45	45	45	1,323							
GENERATOR TIE-LINE																															
Laborer	4	4	4	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
Operator	8	9	4	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
Teamster	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Electrician	7	11	11	11	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	
Generator Tie-line Total	20	25	20	20	15	15	0	0	0	0	0	0	0	0	0	115															
Total Construction Staff	29	37	37	63	93	186	222	287	341	403	418	438	436	436	430	420	414	399	394	375	366	317	295	272	281	265	236	196	180	140	8,406

TABLE 5.10-12
Labor Union Contacts

Labor Union	Contact	Phone Number
San Bernardino, Riverside Building Trades Council	William Perez	(951) 684-1040

TABLE 5.10-13
Available Labor by Skill in Riverside-San Bernardino-Ontario MSA, 2006 to 2016

Occupational Title	Annual Averages		Absolute Change	Percentage Change	Average Annual Compounded Growth Rate (%)
	2006	2016 (Projected)			
Millwrights	160	190	30	18.8	1.7
Carpenters	28,850	32,390	3,540	12.3	1.2
Cement masons and concrete finishers	4,110	4,690	580	14.1	1.3
Painters, construction and maintenance	7,950	9,210	1,260	15.8	1.5
Sheet metal workers	1,470	1,660	190	12.9	1.2
Electricians	6,740	7,600	860	12.8	1.2
Welders, cutters, solderers, and brazers	3,960	4,640	680	17.2	1.6
Industrial truck and tractor operators	10,540	11,440	900	8.5	0.8
Operating engineers and other construction equipment operators	4,790	5,460	670	14.0	1.3
Helpers, construction trades	4,850	5,410	560	11.5	1.1
Construction laborers	27,930	32,080	4,150	14.9	1.4
Plumbers, pipefitters, and steamfitters	4,630	5,330	700	15.1	1.4
Administrative services managers	1,630	1,890	260	16.0	1.5
Mechanical engineers	1,090	1,200	110	10.1	1.0
Electrical engineers	450	520	70	15.6	1.5
Engineering technicians	3,920	4,680	760	19.4	1.8
Plant and system operators	2,030	2,380	350	17.2	1.6

Source: EDD, 2009c

According to the Arizona Department of Commerce, La Paz County is not part of any Arizona MSAs requiring occupational projections data. At the time of preparation of this Application for Certification, occupational projections data for La Paz County were not available (van Sickle, 2009).

5.10.2.3.2 Population Impacts

Most workers are expected to commute to the RSEP site from communities in eastern Riverside County, California; San Bernardino County, California; or La Paz County, Arizona. Therefore, project construction will not contribute to an increase in the population of the area.

5.10.2.3.3 Housing Impacts

Most of the construction workforce will have to commute to the project site daily or stay in the proposed worker residential camp located within the RSEP site boundary because accommodations near the project site are limited. Blythe, California, is located approximately 35 miles southeast of the project site, and Parker, Arizona, is located approximately 35 miles east of the project site. Twentynine Palms, California, is 75 miles west of the site. All three locations could provide limited accommodations. There are about 242 hotels/motels with 22,664 rooms in Riverside County (Smith Travel Research, 2009) to accommodate workers who may choose to commute to the project site on a workweek basis. The average daily room rate is \$106. Hotel occupancy rates for the period July 2008 through June 2009 averaged about 47 percent (Smith Travel Research, 2009).

5.10.2.3.4 Impacts on the Local Economy and Employment

The total cost of the RSEP is estimated at \$750 to \$850 million (in 2009 dollars). The estimated value of materials and supplies that will be purchased locally during construction is \$241.5 million. Of this amount, \$193.2 million (80 percent) would be spent in the Riverside-San Bernardino-Ontario MSA, while the remaining \$48.3 million (20 percent) would be spent in La Paz County, Arizona.

The RSEP will provide about \$102 million (in 2009 dollars) in construction payroll, at an average salary of \$70 per hour (including benefits). The anticipated payroll for employees, as well as the purchase of materials and supplies during the construction period, will have a slight but temporary beneficial impact on the economies of the MSA and La Paz County. Assuming that 80 percent of the construction workforce will reside in the MSA, it is expected that approximately \$81.6 million will stay in the MSA. The remaining \$20.4 million (or 20 percent) would be spent in La Paz County, Arizona. These additional funds will cause a temporary beneficial impact by creating the potential for other employment opportunities for local workers in other service areas, such as transportation and retail.

Indirect and Induced Economic Impacts from Construction

Construction activity associated with the RSEP would result in secondary economic impacts (indirect and induced impacts) in the MSA and La Paz County. Secondary employment effects would include indirect and induced employment because of the purchase of goods and services by firms involved with construction, and induced employment because of construction workers spending their income in the county. In addition to these secondary employment impacts, there are indirect and induced income effects arising from construction.

For the current analysis, only the secondary economic impacts within the MSA (i.e., Riverside and San Bernardino counties) were estimated. Indirect and induced impacts were estimated using an IMPLAN Input-Output model of the MSA. The estimated RSEP indirect and induced employment within the MSA would be 954 and 352 jobs, respectively. These additional jobs result from the \$77.28 million in local construction expenditures and approximately \$22.85 million in spending by local construction workers.² The \$22.85 million

² The \$77.28 million is the annual portion of the total local construction expenditures (\$193.2 million) that is assumed to remain in the MSA. Annual portion of total expenditures = \$241.5 x (30 months/12 months) = \$96.6 million. Since 80 percent of the construction expenditures are assumed to be from the MSA, the annual construction expenditures within the MSA = \$96.6 x 0.80 = \$77.28 million

represents the disposable portion of the annual construction payroll (assumed to be 70 percent of \$32.64 million³). Assuming an average direct construction employment of 280, the employment multiplier associated with the construction of the RSEP is approximately 5.7 (i.e., $[280 + 954 + 352]/280$). This project construction employment multiplier is based on a Type SAM model.

Indirect and induced income impacts were estimated at \$38.04 million and \$14.15 million respectively. Assuming a total annual local construction expenditure (payroll, materials, and supplies) of \$100.13 million (\$22.85 million in payroll + \$77.28 million in materials and supplies), the project construction income multiplier based on a Type SAM model is approximately 1.5 (i.e., $[\$100.13 \text{ million} + \$38.04 \text{ million} + \$14.15 \text{ million}]/\$100.13$).

Indirect and induced impacts were not estimated for La Paz County.

5.10.2.3.5 Fiscal Impacts

The RSEP's capital cost is estimated to be \$750 to \$850 million (in 2009 dollars). The estimated value of materials and supplies that will be purchased locally during construction is \$241.5 million. Of this amount, \$193.2 million (80 percent) would be spent in the MSA while the remaining \$48.3 million (20 percent) would be spent in La Paz County, Arizona. The effect on fiscal resources during construction will be from sales taxes realized on equipment and materials purchased in the county and from sales taxes from expenditures. The sales tax rate in both counties in the MSA (Riverside and San Bernardino) is 8.75 percent (as of July 1, 2009). Of this, 7.25 percent goes to the state; one percent goes to the place of sale (local); and 0.5 percent goes to the Riverside County Transportation Commission (or the San Bernardino County Transportation Authority in the case of San Bernardino County) (California State Board of Equalization [BOE], 2009). The total local sales tax expected to be generated in the MSA during the 30-month construction period is \$16,905,000 (i.e., 8.75 percent of local sales). The sales tax in La Paz County is 6.60 percent (Arizona Department of Revenue, 2009). The total local sales tax expected to be generated in La Paz County during the 30-month construction period is \$3,187,800.

5.10.2.3.6 Summary of Economic Impacts from Construction

Table 5.10-14 provides a summary of the key factors used to assess potential construction impacts.

TABLE 5.10-14

Summary of Total Economic Impacts from RSEP Construction

Item	Amount
Capital cost	\$750 to \$850 million
Local materials and supply purchases	\$241.5 million
Total construction payroll	\$102 million
Total construction workforce	8,406

Note: All estimates are in 2009 dollars.

³ Annual local portion of construction payroll = \$102 million * (30 months/12 months) x 80% = \$32.64 million. The disposable portion of the annual local construction payroll = \$32.64 million x 70% = \$22.85 million.

Tables 5.10-15 and 5.10-16 summarize the economic impacts from construction on the MSA and La Paz County, respectively.

TABLE 5.10-15
Summary of Economic Impacts from RSEP Construction on MSA

Item	Amount
Local materials and supply purchases	\$193.2 million
Annual average local materials and supply purchases	\$77.28 million
Local construction payroll	\$81.6 million
Annual average local construction payroll	\$32.64 million
Annual average local construction payroll (Disposable)	\$22.85 million
Indirect employment	954
Induced employment	352
Average monthly direct construction employment	280
Construction employment multiplier	5.7
Indirect income	\$38.04 million
Induced income	\$14.15 million
Construction income multiplier	1.5
Total sales taxes	\$16.9 million
Annual sales taxes	\$6.8 million

Note: All estimates are in 2009 dollars.

TABLE 5.10-16
Summary of Economic Impacts from RSEP Construction on La Paz County

Item	Amount (in million \$)
Local materials and supply purchases	\$48.3
Annual average local construction expenditures	\$19.3
Total construction payroll	\$20.4
Construction payroll (Disposable)	\$14.3
Annual average local construction payroll (Disposable)	\$5.7
Total sales taxes	\$3.2
Annual sales taxes	\$1.0

Note: All estimates are in 2009 dollars.

5.10.2.3.7 Impacts on Education

The schools in the Desert Center Unified and Palo Verde Unified school districts are not considered at capacity (Capp, 2009). If there are additional students, the school district will enroll them as required by law, but there are no planned expansions or new construction.

Construction of the RSEP will not cause significant population changes to Riverside, San Bernardino, or La Paz counties. Most employees will commute to the site from areas within the two California counties, as opposed to relocating to the area. As a result, RSEP construction will not cause any significant increase in demand for school services.

5.10.2.3.8 Impacts on Public Services and Facilities

The construction phases of the project may have minor impacts on police, fire, or hazardous materials handling resources. The Riverside County Sheriff's Department indicated that impacts during the construction phase of the project would be minimal (Vigue, 2009). The Riverside County Fire Department does not anticipate any significant impacts during the construction phase of the project (Fox, 2009). Copies of the records of conversation with the departments are included in Appendix 5.10A. RSEP construction is not expected to create significant adverse impacts on medical resources in the area because minor injuries could be treated at the La Paz Regional Hospital in La Paz County, Arizona.

5.10.2.3.9 Impacts on Utilities

RSEP construction will not place significant adverse demands on local water, sanitary sewer, or electricity. The RSEP will not connect with any public utilities because of its remote location. Water will be supplied from onsite wells.

5.10.2.4 Operational Impacts

This section looks at potential impacts on the local economy as a result of operating the RSEP.

5.10.2.4.1 RSEP Operational Workforce

The RSEP is expected to employ up to 47 full-time employees. Table 5.10-17 identifies the anticipated job classifications for the operations and maintenance workforce. Facility employees will be drawn from the local workforce in the MSA and La Paz County, as well as from RSE's existing staff. Consequently, only a slight increase in population is anticipated as a result of this project. There will be no significant impact on local employment.

TABLE 5.10-17
RSEP Plant Operation Workforce

Department	Personnel	Shift
Operations	(20) Plant Operating Personnel (1) Plant Chemist	Standard 8-hour days, 4 operators per shift (5 crews of 4)
Heliostat Washing	(8) Heliostat Servicemen	Standard 8-hour days
Maintenance	(4) Mechanical Technicians (4) Electrical/I&C Technicians (4) Laborers (Semi-Skilled)	4x10 hour shifts or 5x8 hour shifts

TABLE 5.10-17
RSEP Plant Operation Workforce

Department	Personnel	Shift
Administration	(6) Total	4x10 hour shifts or 5x8 hour shifts
	(1) Plant General Manager	
	(1) Operations Superintendent	
	(1) Plant Engineer	
	(1) Maintenance Manager	
	(1) Maintenance Planner	
	(1) Administrative Assistant	

5.10.2.4.2 Population Impacts

It is anticipated that most of the operational and maintenance workforce will be drawn from the City of Blythe in Riverside County or parts of the surrounding rural areas in La Paz County. Assuming that all 47 of the workers reside in Riverside County, the expected increase in population would be very negligible (0.002 percent). Similar negligible increases would occur if all 47 workers were to reside in Blythe (0.21 percent) or Parker (1.4%). As such, the project is not likely to result in population impacts.

5.10.2.4.3 Housing Impacts

Because of the small number of operations and maintenance staff, significant impacts on housing are not anticipated. Based on the housing vacancy data (Table 5.10-5), there are approximately 101,930 available housing units in Riverside County and about 880 housing units in Blythe. Additionally, there are about 6,600 housing units available in La Paz County. Thus, employees who need to relocate could choose to live in Riverside County or La Paz County. However, the additional demand for housing would not be significant.

5.10.2.4.4 Impacts on the Local Economy and Employment

Operation of the RSEP will generate a small but permanent beneficial impact by creating employment opportunities for local workers through local expenditures for materials, such as office supplies and services. The RSEP will provide approximately \$3.7 million (in 2009 dollars) in operational payroll, at an average salary of approximately \$77,800 per year (including benefits) for the assumed 47 full-time employees. There will be an annual operations and maintenance budget of approximately \$400,000 (in 2009 dollars), all of which is assumed to be spent within Riverside County. These additional jobs and spending will generate other employment opportunities and spending in the MSA and La Paz County. However, the addition of these full-time jobs would not significantly reduce unemployment rates.

Indirect and Induced Economic Impacts from Operation

Operation of the RSEP would result in indirect and induced economic impacts in the MSA and/or La Paz counties depending on the point of sale. These indirect and induced impacts represent permanent increases in the region's economic variables. The indirect and induced

impacts would result from annual expenditures for payroll and on operations and maintenance (O&M). For purposes of this analysis, all O&M expenditures were assumed to occur in Riverside County. Thus, an IMPLAN Input-Output model of Riverside County was used to estimate the indirect and induced economic impacts of the project.

The estimated RSEP indirect and induced employment within Riverside County would be 1 and 16 permanent jobs, respectively. These additional 17 jobs result from the \$4.1 million (\$3.7 million in payroll, and \$400,000 in O&M) in annual operational budget. The operational phase employment multiplier is estimated at 1.4 (i.e., $[47 + 1 + 16]/47$) and is based on a Type SAM multiplier.

Indirect and induced income impacts are estimated at \$66,310 and \$616,200, respectively. The income multiplier associated with the operational phase of the project is approximately 1.2 (i.e., $[\$4,056,600 + \$66,310 + \$616,200]/\$3,900,000$) and is based on a Type SAM model.

5.10.2.4.5 Fiscal Impacts

The annual O&M budget is expected to be approximately \$400,000 (in 2009 dollars), all of which is assumed would be spent locally within Riverside and San Bernardino counties. As stated earlier, RSEP will bring about \$3.7 million per year in operational payroll to the region.

During operations, additional sales tax revenues will be obtained by either Riverside or San Bernardino counties, or both. Based on the assumed local O&M expenditures of \$400,000 and the sales tax rate in both counties of 8.75 percent, the estimated sales taxes will be approximately \$35,000. The overall anticipated increase in sales tax revenue will be beneficial but will not be significant because it would constitute only a small percent of total revenues of either county.

The RSEP is expected to bring increased property tax revenue to Riverside County. The BOE has determined that solar facilities will be locally assessed regardless of the size (Reisinger, 2009). Thus, Riverside County will be responsible for assessing the RSEP's property value. Riverside County is developing a methodology to assess property values on renewable energy projects (Hanna, 2009). The Leno Bill (Assembly Bill 1451) passed in 2008 is expected to provide certain exemptions for solar power-generating facilities such as the RSEP. However, the Leno Bill is expected to expire in Fiscal Year 2015-16, which the county must consider when developing the methodology for assessing the property value. For Fiscal Year 2010, the property tax rate for the project site is 1.04507 percent (Hanna, 2009). All taxes collected are general levy taxes and as such go into the County General Fund (Howath, 2009). It is anticipated that the additional property tax revenues generated by the RSEP project would have a beneficial impact on the county.

5.10.2.4.6 Impacts on Education

Given the small permanent workforce, operation of the RSEP is not expected to create any significant adverse impacts on the local school system. Assuming an average family size of 3.059 persons per household for Riverside County (DOF, 2009e) would imply the addition of approximately 50 children to the local schools. This would constitute approximately 5 percent increase in school enrollment for the two schools close to the project.

The Desert Center Unified School District is classified as a “basic aid” or “excess revenue” district, which means its funding comes from property taxes and state revenue funds, not from developer fees (Capp, 2009). The California Legislature sets revenue limits for each school district. If property taxes exceed the revenue limit, then the district is allowed to keep the extra money. In case of a shortage because of property tax fluctuations, the state meets the difference through categorical funding (Capp, 2009; California Education Data Partnership, 2009).

5.10.2.4.7 Impacts on Public Services and Facilities

Project operation will not result in significant demands being made on public services or facilities. The Riverside County Sheriff’s Department has not expressed any concerns about a need for increased services during plant operations (Vigue, 2009). Fire protection for the plant will be supplied by a connection to a fire water storage tank. The Riverside County Fire Department does not anticipate any impacts on its services during plant operations (Fox, 2009). Records of the conversations with the departments are included in Appendix 5.10A. RSEP operation would not create significant adverse impacts on medical resources in the area because of the safety record of power plants and the small operations staff.

5.10.2.4.8 Impacts on Utilities

Operation of the RSEP facility will have no significant impacts on sanitary sewer because leach fields will be used, nor on electric services because the plant’s requirements are small. Natural gas service will not be required.

5.10.2.4.9 Environmental Justice

President Clinton’s Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations” was signed on February 11, 1994. The purpose of the Executive Order is to identify and address whether adverse human health or environmental effects are likely to fall disproportionately on minority and/or low-income members of the community.

The federal guidelines set forth a three-step screening process:

1. Identify which impacts of the project are high and adverse
2. Determine if minority or low-income populations exist within the high and adverse impact zones
3. Examine the spatial distribution of high and adverse impact areas to determine if these impacts are likely to fall disproportionately on the minority and/or low-income population

According to the guidelines established by the U.S. Environmental Protection Agency (EPA) to assist federal agencies in developing strategies to address this circumstance, a minority and/or low-income population exists if the minority and/or low-income population percentage of the affected area is 50 percent or more of the area’s general population. The guidance suggests using two or three standard deviations above the mean as a quantitative measure of disparate effects.

A screening-level analysis of environmental justice is presented in Appendix 5.10B. According to that analysis, this project does not create high and adverse impacts. Therefore, there are no environmental impacts that are likely to fall disproportionately on minority and/or low-income members of the community. Additionally, there are no sensitive or other receptors within 6 miles of the project (the nearest receptor is approximately 15 miles from the RSEP site).

5.10.3 Cumulative Effects

Because most construction and operations personnel will reside primarily in Riverside County, California, and live within commuting distance, no adverse effect on local schools or housing is anticipated. Because there are no projects that are currently under development within 15 miles of the RSEP (see Section 5.6, Land Use) that could potentially have an adverse cumulative socioeconomic effect, adverse cumulative impacts are unlikely. For additional information about cumulative effects, see Section 5.6, Land Use.

5.10.4 Mitigation Measures

RSE will provide onsite security and work with local law enforcement to address the need for any additional support during the construction phase.

5.10.5 Laws, Ordinances, Regulations, and Standards

A summary of the LORS, including the project's conformance to them, is presented in Table 5.10-18.

5.10.5.1 Federal LORS

Civil Rights Act of 1964, Public Law 88-352, 78 Stat. 241 (codified as amended in various sections of 42 U.S.C.) Title VI of the Civil Rights Act prohibits discrimination on the basis of race, color, or national origin by all federal agencies or activities receiving federal financial assistance. The project will not discriminate in hiring construction or operations workforce.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires EPA and other federal agencies to identify and address whether adverse human health or environmental effects are likely to fall disproportionately on minority and/or low-income members of the community (EPA, 1996). This applies only to federal agencies, not agencies receiving federal funds.

5.10.5.2 State LORS

Government Code Sections 65996 and 65997 provide the exclusive methods of considering and mitigating impacts on school facilities that might occur as a result of the development of real property.

Education Code Section 17620, listed in Government Code Section 7906 as an approved mitigation method, allows school districts to levy a fee or other requirement against any construction within the boundaries of the school district for the purpose of funding construction of school facilities.

TABLE 5.10-18
Laws, Ordinances, Regulations, and Standards Applicable to Socioeconomics

LORS	Requirements/ Applicability	Administering Agency	AFC Section Explaining Conformance
Federal			
Civil Rights Act of 1964	Prohibits discrimination on the basis of race, color, or national origin.	Applies to all federal agencies and agencies receiving federal funds.	Section 5.10.5
Executive Order 12898	Avoid disproportionate impacts on minority and low-income members of the community.	Applies only to federal agencies. Does not apply to agencies receiving federal funds.	Section 5.10.2.4.10
State			
Government Code Section 7906	Establishes that the "Basic Aid" status allows school district to levy property taxes and receive state aid, and no development fees are collected.	Desert Center Unified School District receives a minimum amount of state aid, called "basic aid" equal to \$120 per ADA or \$2,400 per district to mitigate potential school impacts.	Section 5.10.2.4.7
Education Code Section 47635	Allows school districts to get funding from property taxes and state aid not from developer fees to mitigate impacts on school facilities.	Desert Center Unified School District receives funding in lieu of property taxes equal to the lesser of 1) the average amount of property taxes per unit of ADA and 2) statewide average general purpose funding per unit of ADA received by school districts to mitigate potential school impacts.	Section 5.10.2.4.7
Local			
Riverside County General Plan, Land Use Element	Promotes and markets the development of a variety of stable employment and business uses that provide a diversity of employment opportunities.	Encourages industry to locate in the county to create jobs.	Section 5.10.5.3.1

5.10.5.3 Local LORS

Riverside County General Plan's (2003) Land Use Element has countywide policies that call for a balanced and diverse local economy that spans a variety of industries and that provides stable employment (Riverside County Transportation and Land Management Agency, 2009a).

The Desert Center Area plan (which includes the proposed project site) provides designated land uses. The Rural Desert designation allows renewable energy uses including solar, geothermal and wind energy uses, as well as associated uses required to develop and operate these renewable energy sources (Riverside County Transportation and Land Management Agency, 2009b).

5.10.6 Agencies and Agency Contacts

Table 5.10-19 provides a list of agencies and contact persons of potentially responsible agencies. Records of conversations with these agencies are provided in Appendix 5.10A.

TABLE 5.10-19
Agency Contacts for Socioeconomics

Issue	Agency	Contact
Property valuation	BOE	Dick Reisinger Leader Electric Generation Facility Group BOE (916) 324-2803
Availability of labor	San Bernardino, Riverside Building Trades Council	William Perez Executive Secretary 1074 East La Cadena Dr. #8 Riverside, CA 92501 (951) 684-1040 btcbill@sbcglobal.net
Potential enrollment impacts, school impact fees	Desert Center Unified School District	June Capp Senior Accountant Clerk 1434 Kaiser Rd. Desert Center, California 92239 (760) 392-4217 jcapp@aol.com
Emergency response time, hospitals with an emergency room	Riverside County Fire Department-Fire Protection Planning	Tony Fox, Captain Fire Protection 77933 Las Montanas Road, Suite 201 Palm Desert, CA 92211 (760) 863-8886 Tony.fox@fire.ca.gov
Available resources, potential impacts on resources and average response times	Riverside County Sheriff's Department	Rodney Vigue, Captain Colorado River Station 260 N Spring Blythe, CA 92225 (760) 921-7900 rvigue@riversidesheriff.org
Emergency response time to hazardous material emergency releases	Riverside County Community Health Agency, Department of Environmental Health, HMMD	Brad Ballen, Senior Specialist Hazardous Materials Management 47-950 Arabia St. Suite A, Indio, CA 92415 (760) 863-8976 Bballen@co.riverside.ca.us

5.10.7 Permits and Permit Schedule

Permits dealing with the effects on public services are addressed as part of the building permit process. For example, school development fees are typically collected when RSE pays building permit fees to the county. No permits are required to comply with LORS addressing the socioeconomic impacts of the project.

5.10.8 References

Arizona Department of Commerce. 2009a. *Arizona Population Projections, 2008 Commerce Population Estimates, Population Estimates for Arizona, Counties and Incorporated Places Ranked by Population Size – 2008*. The Center for Economic Advancement.

<http://www.azcommerce.com/econinfo/demographics/Population%20Estimates.html>. Accessed June 30.

Arizona Department of Commerce. 2009b. *Arizona Population Projections, 2006-2055 Commerce Population Projections*. The Center for Economic Advancement.

<http://www.azcommerce.com/EconInfo/Demographics/Population+Projections.htm> Accessed June 29.

Arizona Department of Commerce. 2009c. *Arizona State and County Base Studies- Data Sets*. The Center for Economic Advancement.

<http://www.azcommerce.com/Research/Arizona+State+and+County+Base+Studies+-+Data+Sets.htm>. Accessed June 29.

Arizona Department of Revenue. 2009. *Transaction Privilege and Other Tax Rate Tables, Table 1* [Online]. <http://www.azdor.gov/TpT/tptrates/2009/Jun1.pdf>. Accessed August 5.

Arizona Workforce Informer. 2009. *Current Employment Statistics/NAICS, 2001-2009 Nonfarm Job Data*. <http://www.workforce.az.gov/?PAGEID=67&SUBID=142>. Accessed August 2.

Arrowhead Regional Medical Center. 2009. Arrowhead Regional Medical Center website. <https://www.arrowheadmedcenter.org/>. Accessed August 6.

Ballen, B. 2009. Personal communication between Ashraf Shaqadan of CH2M HILL and Brad Ballen, Senior Specialist, Hazardous Materials Management, Riverside County Hazardous Material Division. August 7.

Board of Equalization (BOE). 2009. *California City and County Sales and Use Tax Rates Publication 71*. <http://www.boe.ca.gov/sutax/pam71.htm>. Accessed August 6.

California Department of Education. 2009. *Data and statistics on enrollment and staffing*. <http://data1.cde.ca.gov/dataquest>. Accessed August 3.

California Department of Finance (DOF), 2009a. *E-1 population Estimates for Cities, Counties and the State with Annual Percent Change – January 1, 2008 and 2009*.

<http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2008-09/>. Accessed June 29.

California Department of Finance (DOF), 2009b. *E-4 Population Estimates for Cities, Counties, and the State, 2001-2009 with 2000 Benchmark*.

<http://www.dof.ca.gov/research/demographic/reports/>. Accessed June 29.

California Department of Finance (DOF). 2009c. Demographic Information, Reports and Research Papers. *Revised Historical County Population Estimates, 1991 – 2000, with 1990 and 2000 Census counts.*

<http://www.dof.ca.gov/html/demograp/reportspapers/Estimates/E4/E4-91-00/E-4text2.php>. Accessed August 3.

California Department of Finance (DOF). 2009d. *Population Projections for California and Its Counties 2000-2050.*

<http://www.dof.ca.gov/research/demographic/reports/projections/p-1/>. Accessed June 29.

California Department of Finance (DOF), 2009e. *E-5 Population and Housing Estimates for Cities, Counties and the State, 2001-2008, with 2000 Benchmark.*

http://www.dof.ca.gov/research/demographic/reports/estimates/e-5_2001-06/. Accessed June 29.

California Department of Finance (DOF). 2009f. *Financial and Economic data; California Statistical Abstract, released January 2007 – Construction, Table I-5 Residential Construction Authorized by Permits, Units and Valuation, California and Counties.*

http://www.dof.ca.gov/html/fs_data/stat-abs/sec_I.htm. Accessed August 3.

California Department of Finance (DOF). 2009g. *E-8 Historical Population and Housing Estimates for Cities, Counties and the State, 1990-2000.*

<http://www.dof.ca.gov/research/demographic/reports/estimates/e-8/>. Accessed August 3.

California Education Data Partnership. 2009. A Guide to the California School Financing System. <http://www.ed-data.k12.ca.us/articles/article.asp?title=Guide%20to%20California%20School%20Finance%20System>. Accessed August 6.

California Employment Development Department (EDD). 2009a. *Employment by Industry Data.* <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=4&SubID=166>. Accessed August 3.

California Employment Development Department (EDD). 2009b. *Labor Force and Unemployment Data.* <http://www.labormarketinfo.edd.ca.gov/?PAGEID=164>. Accessed August 3.

California Employment Development Department (EDD). 2009c. *Occupational Projections.* <http://www.labormarketinfo.edd.ca.gov/?PAGEID=145>. Accessed August 3.

Capp, J. 2009. Personal communication between Ashraf Shaqadan of CH2MHILL and June Capp, Senior Accountant Clerk of Desert Center Unified School District. August 4.

Desert Regional Medical Center. 2009. Desert Regional Medical Center website.

<http://www.desertmedctr.com/en-us/ourServices/us/ourServices/medicalServices/Pages/default.aspx>. Accessed August 6.

Fox, T. 2009. Personal communication between Ashraf Shaqadan of CH2M HILL and Captain Tony Fox, Fire Protection, Riverside County Fire Department. August 7.

- Hanna, S. 2009. Personal communication between Fatuma Yusuf of CH2M HILL and Scott Hanna, Appraiser, Riverside County Assessor's Office. September 9.
- Howath, L. 2009. Personal communication between Fatuma Yusuf of CH2M HILL and Lynne Howath, Supervising Accounting Technician, Riverside County Auditor-Controller's Office. September 19.
- Kelley, M., 2009. Personal communication between Ashraf Shaqadan of CH2MHILL and Mary Kay Kelley, Riverside County Office of Education, Administrator Secretary. August 4.
- National Association of Realtors (NAR). 2009. *Metropolitan Area Existing-Home Prices and State Existing-Home Sales*. <http://www.realtor.org/Research.nsf/Pages/MetroPrice>. Accessed August 5.
- Perez, W. 2009. Personal communication between Ashraf Shaqadan of CH2MHILL and William Perez, Business Manager, Building Trades Council. August 5.
- Reisinger, D. 2009. Personal communication between Fatuma Yusuf of CH2MHILL and Dick Reisinger, Leader, Electric Generation Facility Group, California Board of Equalization. September 8.
- Riverside County. 2009a. *County of Riverside-Auditor Controller's Office, Comprehensive Annual Financial Report, 2006*. http://www.auditorcontroller.org/opencms/topics_interest/CAFR.html. Accessed August 2.
- Riverside County. 2009b. *County of Riverside-Auditor Controller's Office, Comprehensive Annual Financial Report, 2007*. Internet Site: http://www.auditorcontroller.org/opencms/topics_interest/CAFR.html. Accessed on August 2.
- Riverside County, 2009c. *County of Riverside-Auditor Controller's Office, Comprehensive Annual Financial Report, 2008*. http://www.auditorcontroller.org/opencms/topics_interest/CAFR.html. Accessed August 2.
- Riverside County Transportation and Land Management Agency. 2009a. *General Plan, Land Use Element*. http://www.rctlma.org/genplan/general_plan_2008/general_plan_2008.aspx. Accessed August 4.
- Riverside County Transportation and Land Management Agency. 2009b. *Area Plans Volume 2, Desert Center Area Plan, Land Use Plan*. http://www.rctlma.org/genplan/general_plan_2008/area_plan_vol_2/Desert_Center_Area_Plan_2008.pdf. Accessed August 4.
- Smith Travel Research. 2009. Custom Trend Report. Internet site: http://www.strglobal.com/Products/Persona_Detail.aspx?personaId=8. Accessed May 6.
- U.S. Census Bureau. 2009a. *American Fact Finder - Population Finder*. <http://factfinder.census.gov/>. Accessed June 29.

U.S. Census Bureau. 2009b. American Fact Finder – Parker Town, Arizona, Housing Physical Characteristics. <http://factfinder.census.gov/> . Accessed June 29.

U.S. Census Bureau. 2009c. American Fact Finder – La Paz County Arizona, Selected Housing Characteristics: 2005-2007, American Community Survey (ACS). <http://factfinder.census.gov/> . Accessed June 29.

U.S. Environmental Protection Agency (EPA). 1996. Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analyses, July 12, 1996.

Van Sickle, R. 2009. Personal communication between Ashraf Shaqadan of CH2M HILL and Rick van Sickle, Research Administration Division, Arizona Department of Commerce. August 5.

Vigue, R. 2009. Personal communication between Ashraf Shaqadan of CH2M HILL and Rodney Vigue, Captain, Riverside County Sheriff’s Department. September 4.