DOCKETED	
Docket Number:	24-OPT-03
Project Title:	Soda Mountain Solar
TN #:	259903
Document Title:	Non-Confidential Appendix P Soda Mountain Solar Economic Impact Report
Description:	This document contains the Non-Confidential Appendix P Soda Mountain Solar Economic Impact Report. Revisions were made to address CEC DR MAND-1 and DR SOCIO-1 through SOCIO-10.
Filer:	Hannah Arkin
Organization:	Resolution Environmental
Submitter Role:	Applicant Consultant
Submission Date:	11/5/2024 8:33:25 AM
Docketed Date:	11/5/2024

Socioeconomic Impacts on San Bernardino County of the Proposed Soda Mountain Solar Project

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Final Report November 1, 2024

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1. EXECUTIVE SUMMARY

1.1 Summary of Findings

Soda Mountain Solar LLC is applying to construct and operate a 300-megawatt direct current photovoltaic solar energy facility in the Mojave Desert area of San Bernardino County (Project) along Interstate 15. Soda Mountain Solar LLC provided a high-level construction cost estimate for the project summarized in **Table 1**.

TABLE 1: CONSTRUCTION COST ESTIMATE

Construction Phase Direct Purchases	
Photovoltaic Modules	[redacted]
Inverters	[redacted]
Mountings (Pile & Trackers)	[redacted]
Electrical (GSU, Gen tie, BESS & BOS)	[redacted]
Subtotal 1 – Purchases	[redacted]
State and Local Taxes (Project direct during development phase only)	[redacted]
Subtotal 2 – Construction Phase – Direct Equipment Purchases (including taxes)	[redacted]
Predevelopment (Project Permitting, Planning and Engineering Services, etc.)	[redacted]
Construction Direct Labor*	[redacted]
Total Project Capital Cost	[redacted]

*Project labor cost over the construction period.
GSU: Generator Step-up Transformer; BESS: Battery Energy Storage System; BOS: Balance of Systems.

Soda Mountain Solar Investment in California

Total investment in the state during construction is estimated at over [redacted]. The state, regional, and local expenditures for the Project's construction are summarized in **Table 2.** This table assumes only the mounting fixtures and equipment would be purchased in California. This is a very conservative assumption since it does not include the purchase price of photovoltaic modules, inverters, step-up transformers, battery energy storage systems, etc. some of which may be sourced within the state.

TABLE 2: PROJECT INVESTMENT IN CALIFORNIA

Construction Phase State and Local Purchases	
Mountings (Pile & Trackers)	[redacted]
State and Local Sales Taxes (development phase only)	[redacted]
Subtotal Construction Phase – Direct Equipment Purchases (including taxes)	[redacted]
Predevelopment (Project Permitting, Planning and Engineering Services, etc.)	[redacted]
Construction Direct Labor*	[redacted]
Total Project Capital Investment in State	[redacted]

Direct and Indirect Economic Impacts

During the construction period, and operations over the planned 30-year life of the Project, it is estimated, through economic modeling, that 2,094 full-time jobs would be created. This number includes 200 workers employed directly by contractors or by Soda Mountain Solar LLC itself during construction of the Project and 960 directly employed during operations. Indirect and induced economic activity generated by the project will add another 420 and 514 workers to the

local economy during the construction period and during operations, respectively. Direct economic output, which is the sum of labor cost, contractor's profit and overhead, and management income is [redacted] and [redacted] during construction and operations, respectively. Indirect and induced output adds another [redacted] and [redacted], during construction and operations, respectively. These values, reported in **Table 3,** were derived from San Bernardino County economic data, and therefore pertain specifically to the regional economy. See section 3 Economic Impact Analysis for a further discussion of the economic modeling of the Soda Mountain Solar Project.

TABLE 3: PROJECT ECONOMIC IMPACTS[1]

Project Phase		Jobs	Labor Cost	Output*
Construction	Direct Impact	200	[redacted]	[redacted]
	Indirect Impact	157	[redacted]	[redacted]
	Induced Impact	263	[redacted]	[redacted]
	Total	**620**	[redacted]	[redacted]
Operations**	Direct Impact	960	[redacted]	[redacted]
	Indirect Impact	314	[redacted]	[redacted]
	Induced Impact	200	[redacted]	[redacted]
	Total	**1,474**	[redacted]	[redacted]

*Output includes contractor profit and overhead and does not include state or local taxes paid by the Project.
**Project operations are expected to employ 25-40 personnel for maintenance, inspection, and regular servicing. For the purposes of this model, the number of personnel needed for operations are assumed to be 32 FTEs for the full estimated 30-year operations cycle, or 960 FTE-years.

Net Benefits to the County of San Bernardino

Sales and Use Taxes

Generally, sales tax would apply upon the purchase of goods for use in the construction and operation of the Project, sales tax could also apply to the sale of electricity. However, there are a few exemptions that may reduce or eliminate sales tax.

First, solar, wind, geothermal, biomass and certain other electric power generators currently qualify for a partial sales tax exemption on the purchase of machinery and equipment; all component parts; and equipment or devices used or required to operate, control, regulate or maintain the machinery, including computers, data-processing equipment and computer software. The partial exemption reduces the combined state and local sales and use tax rate by 3.9375 percent and is set to expire on July 1, 2030 (extended from 2022 by AB-1817 2017-18); the partial exemption applies only to the first $200 million spent annually for tangible personal property. [2]

Second, electricity delivered through "mains, lines or pipes" is exempt from sales and use tax. In general, the sale of electricity is exempt from sales tax.

[1] IMPLAN, 2023
[2] California Revenue & Taxation Code §6377.1.

TABLE 4: PROJECT SAN BERNARDINO COUNTY SALES TAX

	Low Scenario[1]			High Scenario		
Local Sales Tax	**One Time[2]**	**Annual[3]**	**Total (one-time plus 30 yrs. annual)**	**One Time[2]**	**Annual**	**Total (30 yrs.)**
County General Fund	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
County Transportation Authority Tax	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total County Sales Tax Revenue[2]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Sources: JEDI PV Model; IMPLAN 2023; Soda Mountain Solar, LLC.

[1] One-time sales tax revenues are generated prior to and during the construction period.

[2] Annual sales tax revenues derive from taxable purchases used in operating the Project and taxable household purchases by the operating personnel.

The "low scenario" in **Table 4** assumes only products purchased from establishments within the county generate sales taxes payable to the County of San Bernardino. The "high scenario" assumes local sales tax capture on PV panels and inverters if the Project establishes a point-of-sale address for collecting sales tax on PV panels and inverters.

Possessory Interest Tax

The State of California collects a possessory interest tax (state PI tax) on the grant of an interest for private benefit in tax exempt property, such as public property that is not otherwise subject to California property tax.[3] The state PI tax is like the property tax levied on owners of privately owned property and is based on the value of the possessory interest granted. In the case of federal lands, the state PI tax will only be applied to property for which the state of California has not ceded jurisdiction – i.e., property for which the federal government has exclusive jurisdiction will not be subject to the state PI tax. The state of California has not ceded jurisdiction over most federal land within its boundary, and if a lease is entered into on public land, the state PI tax is likely to apply. Many solar projects are being built on land owned by the Bureau of Land Management, which is generally subject to the state PI tax. In general, the state PI tax only applies with respect to the real property. Roads, fences, buildings, and all other property built upon the land, including a solar facility, will be assessed to the taxable owner and will be subject to the change in ownership or control rules.

In the case of the Project, the value of the possessory interest in BLM land on which the PI tax is based may be equivalent to the acreage rent and/or megawatt capacity fees paid to the BLM for ROW grants and leases,[4]. Using the Solar-PV rate per MW of [redacted] results in an annual fee of [redacted]. Increased annually by 2 percent, and at a discount rate of 3 percent, the 30-year discounted value of the lease is approximately [redacted] and the effective PI Tax at 1 percent

[3] Section 15606(c), California Government Code; Reference: Section 107, Revenue and Taxation Code. https://boe.ca.gov/proptaxes/pdf/rules/Rule20.pdf

[4] https://www.blm.gov/policy/im-2017-096

[5] Solar Energy Rent and Fee Schedule 2016-2020, IM 2017-096, Bureau of Land Management

(the statutory property tax rate in California) is therefore [redacted]. The actual assessed value of the possessory interest would be determined by the San Bernardino County Assessor.

Active Solar Energy System Exclusion

Generally, any new construction will increase the base-year value of real property, increasing the amount of property tax due. However, California constitutional amendments effective September 2022 authorize the exclusion of an active solar energy system – i.e., a solar device that provides for the collection, storage, or distribution of solar energy. In a utility-scale system, the final stage of power generation is typically a "step up" transformer, where the output voltage is increased to meet the transmission grid voltage requirements. Thus, equipment up to, and including the final step-up transformer within the on-site substation, would be considered part of the exempt active solar energy system and subject to the new construction exclusion. Equipment after that point would not be eligible for the exclusion. It is assumed that the equipment and improvements listed in **Table 1** would qualify for the Active Solar Energy System Exclusion.

The exclusion for newly constructed active solar energy systems is only available to one of the following: (1) the owner of the system when the lien date occurs, (2) the builder of the system or (3) the first buyer of such a system. The active solar energy system exclusion is scheduled to sunset on January. 1, 2027.[6] Although the active solar system is not assessable, the possessory interest may be valued and assessed.

Table 5 shows the potential gross benefit of the Project to the County government. Any services that the County provides would be considered a "disbenefit" that effectively reduce the County's "net benefit", see the discussion in **Section 2.3.7**.

TABLE 5: TOTAL FISCAL BENEFIT TO COUNTY

	Low Scenario	High Scenario
Total County Sales Tax Revenue 30 years	[redacted]	[redacted]
Possessory Interest Tax 30-year NPV	[redacted]	[redacted]
Total	[redacted]	[redacted]

2. INTRODUCTION

Soda Mountain Solar, LLC (Developer), a California Limited Liability Company, plans to construct and operate a 300 megawatt (MW) direct current photovoltaic (PV) solar energy generating facility and battery energy storage system (BESS) (Project) to serve a portion of the electrical load

[6] https://www.boe.ca.gov/proptaxes/active-solar-energy-system.htm
Guidelines for Active Solar Energy Systems New Construction Exclusion
https://www.federalregister.gov/documents/2024/05/01/2024-08099/rights-of-way-leasing-and-operations-for-renewable-energy#:~:text=This%20final%20rule%20bases%20the,acreage%20rent%20and%20capacity%20fee.

requirements of California and other western states. The Project will be developed in San Bernardino County along the Interstate 15 (I-15) corridor, about 8 miles southwest of Baker, California. The Project is designed to have a useful life of up to 30 years, although the life span may be extended by upgrades and refurbishments.

The Project will advance the state energy policy and specifically Senate Bill (SB) 100,[7] which established a landmark policy requiring renewable energy and zero-carbon resources to supply 100 percent of electric retail sales to end-use customers in California by 2045. This report also provides the California Energy Commission (CEC) with the information needed to evaluate the Project in accordance with Sec. 25545 of the Public Resources Code.[8] This report summarizes the economic impacts on San Bernardino County in terms of the value that the Project's spending on labor and locally sourced materials/equipment would provide to the local San Bernardino County economy. This report also estimates the likely fiscal impacts the Project would have on local governments and other providers of public services, such as public safety and schools. This report does not include a benefit/cost analysis of the deployment of renewable energy and associated reductions in energy cost and emissions to California consumers.

The Developer has retained Michael Baker International to estimate the potential economic impacts of the Soda Mountain Solar Project to San Bernardino County. Michael Baker used two different models to estimate the economic impacts: the Jobs and Economic Development Impact (JEDI) Model sponsored by the National Renewable Energy Laboratory, and the Impact Analysis for Planning (IMPLAN) Model. Both models are input/output-based econometric models. IMPLAN was used to calculate the Project's economic impacts, while the JEDI model was used in estimating spending on equipment that generates sales tax revenues.

2.1 Project Site Description

The Project will be constructed on approximately 2,670 acres of land administered by the US Department of Interior, Bureau of Land Management (BLM), California Desert District, within the jurisdiction of the Barstow Field Office in San Bernardino County. The BLM performed a separate review of the Project under the National Environmental Policy Act.

2.2 Community Setting

The unincorporated community of Baker (a US Census Designated Place, or CDP) is the nearest community of any size to the Project. Baker offers general retail services, limited housing, and perhaps a limited source of workers for the Project. Baker's population was estimated to be 553 in 2022.[9] In that year, Baker had an estimated 167 total housing units, of which 125 were occupied units. Although projected to grow to about 800 people by 2040,[10] that population does not appear to be attainable—at least within the next 15 years, given that the 2010 Census had the population at 735. The substantial population loss since the 2010 Census has been attributed to the closure

[7] The 100 Percent Clean Energy Act of 2018 (De Leon).
[8] Certification of Non-fossil-Fueled Powerplants, Energy Storage Facilities, and Related Facilities.
[9] American Community Survey, US Census Bureau for Baker Census Designated Place.
[10] Baker Service Review San Bernardino County LAFCO, July 2013.

of the Baker Community Correctional Facility in 2009 and its aftereffects on the local economy.

Baker is known as the “Gateway to Death Valley,” “Entrance to the Mojave National Preserve,” and “Home of the World’s Tallest Thermometer” (not currently operational), which stands at 134 feet to commemorate a record high temperature of 134 degrees recorded in Death Valley. Baker’s elevation is approximately 930 feet above sea level, which is lower than either the cities of Barstow or Las Vegas, due to Baker’s location at the southern end of the Death Valley geological depression. The economy is based primarily on tourism. Baker is a popular rest stop for motorists on the I-15 to and from Las Vegas. It is also the last service opportunity available for those traveling on State Route 127 north to Death Valley National Park or south into the Mojave National Preserve. The area is rural desert with mainly mobile-style housing and unpaved roads with upgraded facilities for travelers. Baker is also the start of the annual Baker to Vegas Challenge Cup Relay race.

Zzyzx, another unincorporated community, formerly “Camp Soda” and “Soda Springs,” is located about 7.5 miles from the Project. It is the former site of the Zzyzx Mineral Springs and Health Spa and now the site of the Desert Studies Center operated by California State University, San Bernardino. The site is also the location of Lake Tuendae, originally part of the spa, and now a refuge habitat of the endangered Mohave tui chub.

The Baker community is served by multiple public agencies and regional service providers, including:

- County Service Area 70, a multifunction district, serving the countywide unincorporated area; it is organized into various zones for localized service.
- Mojave Desert Resource Conservation District
- San Bernardino County Fire Protection District
- San Bernardino County Flood Control District
- Baker Valley Unified School District, which overlays the entirety of the Baker community as well as other areas surrounding the community.

Baker is served locally by the Baker Community Services District (CSD), which provides water, sewer, trash, fire protection, parks and recreation, and streetlighting services to the community.

Generally, the entire community of Baker is considered a disadvantaged unincorporated community, as defined by California Government Code Section 56033.5, which are those communities that have an annual median household income that is less than 80 percent of the statewide annual median household income. The community of Baker is composed of sparse residential development with large lots primarily designated Single Residential (14,000-square-foot lots) and Rural Living (2.5-acre lots). The areas not classified as a disadvantaged unincorporated community are vacant and/or are public lands managed by the BLM.

2.3 Regional Demographic Composition

Due to Baker's small size and population base, it is not expected that the Project will be able to recruit more than a handful of workers from within the community. Therefore, a somewhat wider region is evaluated as the most likely labor source.

Beyond the Baker CDP, the US Census Bureau has divided San Bernardino County into County Census Divisions (CCD). The three CCDs seen to be most relevant to the Project in terms of labor and other services are:

- Newberry Springs-Baker
- Barstow
- Victorville-Hesperia

The locations of these CCDs are shown on **Figure 1**.

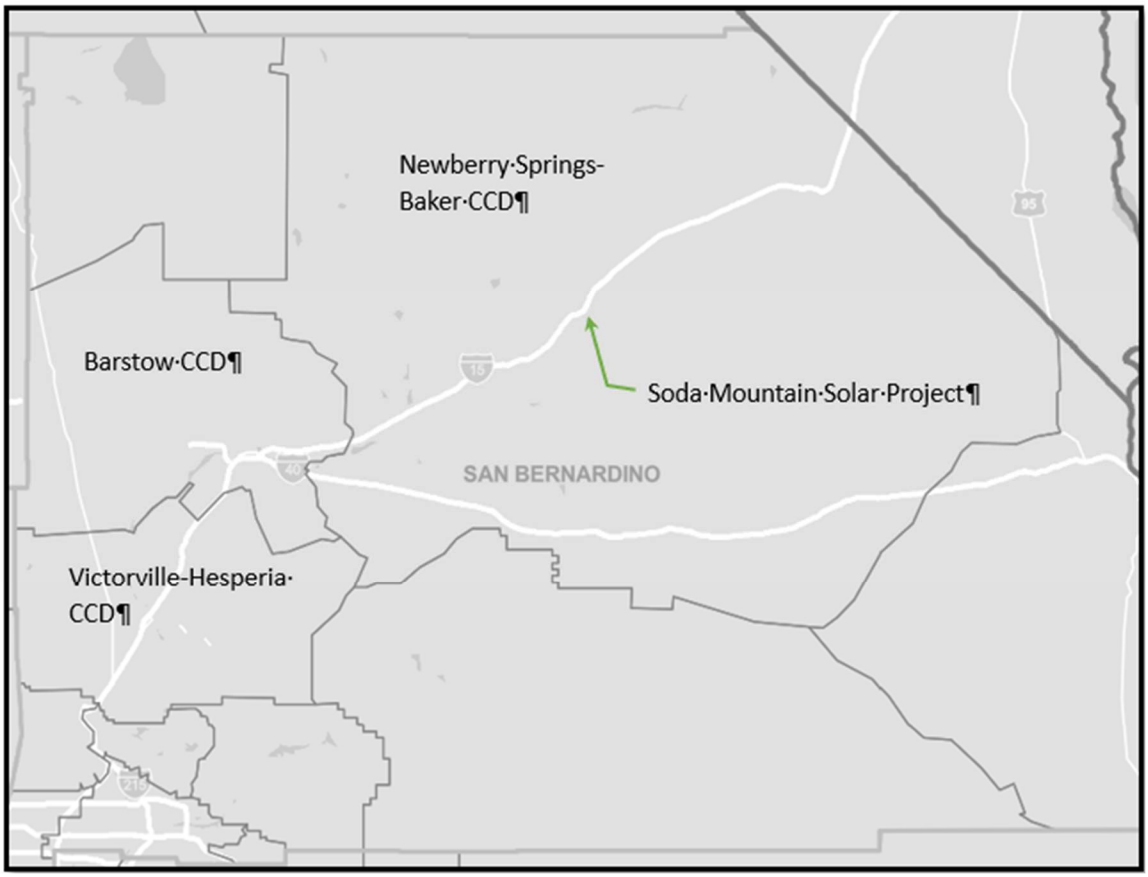

FIGURE 1: PROJECT SITE AND SAN BERNARDINO COUNTY CCDS

2.4 County Census Division Profiles

The US Census American Community Survey (ACS) provides population, housing, and employment profile data for the CCDs, as summarized in **Table 6**.

The profiles indicate that there is strong likelihood that the Project could meet its labor needs by

drawing from the Barstow and/or Victorville-Hesperia CCDs. This area has over 15,600 workers in the construction industry and has a rate of workforce unemployment that is higher than the State of California. These two regions also have nearly 10,000 vacant housing units, with a vacancy rate of 6.7 percent. Assuming a starting route in the City of Victorville, the commute distance to the Project Site is about 82 miles, a not-unusual distance for construction workers in Southern California.

More detailed data on population, housing, and employment in Baker, Barstow, the communities within the Victorville-Hesperia CCD, and San Bernardino County are shown in **Appendix A, Tables A-1 through A-4**. In addition to the cities of Victorville and Hesperia, the Victorville-Hesperia CCD includes the city of Adelanto, the town of Apple Valley, and the unincorporated communities of Lake Arrowhead, Mountain View Acres, Oak Hills, Phelan, Pinon Hills, Spring Valley Lake, and Wrightwood. The three CCDs are all within the San Bernardino County region known as the North Desert District.

TABLE 6: COUNTY CENSUS DIVISION PROFILES—POPULATION, HOUSING, AND EMPLOYMENT

	Newberry Springs-Baker	Barstow	Victorville-Hesperia
POPULATION			
Total population	11,084	43,451	412,533
Population 16 and over	9,214	31,837	306,465
HOUSING			
Housing units	4,058	1,7013	131,197
Total households	3,468	15,368	122,932
Vacant units	590	1,645	8,265
Vacancy rate	0.15	0.10	0.06
EMPLOYMENT			
Civilian labor force	3,088	17,460	169,661
Civilian employed population 16 years and over	2,524	15,828	152,637
Civilian unemployment rate	0.18	0.09	0.10
Industry of Employment			
Agriculture, forestry, fishing and hunting, and mining	24	245	1,302
Construction	143	871	14,734
Manufacturing	147	773	10,992
Wholesale trade	5	211	4,535
Retail trade	339	2,067	20,383
Transportation and warehousing, and utilities	186	1,771	19,745
Information	6	115	1,903
Finance and insurance, and real estate and rental and leasing	34	247	4,900
Professional, scientific, and management, and administrative and waste management services	242	1,550	12,439
Educational services, and health care and social assistance	456	2,864	31,345
Arts, entertainment, and recreation, and accommodation and food services	438	1,808	12,917
Other services, except public administration	160	1,263	8,680
Public administration	344	2,043	8,762

Source: American Community Survey 2022 5-year Estimates, Table DP03: Selected Economic Characteristics.

3. SOCIOECONOMIC IMPACTS OF THE PROJECT

3.1 Local and Regional Demographic Data

Demographic data for the region was obtained from the US Census Bureau ACS program. Population and housing data for San Bernardino County and the North Desert District's cities are provided in **Table 7.** More detailed housing data on the cities and unincorporated communities of the region are in **Appendix A, Table A-3**.

TABLE 7: POPULATION AND HOUSING DATA

City	San Bernardino County	Barstow	Victorville	Adelanto	Apple Valley	Hesperia
Population	2,180,563	25,235	134,417	37,960	75,603	99,878
Housing Units	731,899	9,620	38,928	9,601	27,181	30,344
Occupied Units	667,836	8,790	37,024	9,185	25,928	29,144
Vacant Units	64,063	830	1,904	416	1,253	1,200
Vacancy Rate	8.75%	8.63%	4.89%	4.33%	4.61%	3.95%

Source: US Census American Community Survey 2022 5-year Estimates, Table DP05: Demographic and Housing Estimates.

3.2 Project Labor Demand and Labor Supply

The construction of a PV solar energy generation and support facilities relies on a mix of skilled and unskilled labor. **Table 8** list the Project's occupations, average annual employment (full-time equivalent) and peak number of workers on site during the construction period and average annual FTE during operation of the Project. Much of the construction and installation of PV solar and support facilities are completed by electricians and general construction workers.

However, iron workers, concrete finishers and specialty construction equipment operators must be employed to handle the more complex and specialized tasks in the construction process.

Additionally, civil engineers, surveyors, health and safety specialists, administrative and construction managers are employed to ensure the quality of construction and installation and worker safety. Each of these occupations are required in certain quantities at certain times during the construction timeline. The construction-worker curve for the 18-month period exhibits a skewed bell-shaped distribution, with labor peaking just before the middle of the construction timeline. As specific tasks of a phase are completed, the same workers may shift to the next phase of the Project. The same workers may also shift across Project tasks within a phase; for instance, construction laborers may move from excavation to pile driving to concrete pouring as Project development moves through each task. **Figure 3** shows the worker distribution by month.

TABLE 8: PROJECT EMPLOYMENT BY TRADE

Occupation	Project Construction Annual Average	Project Peak	Operations Annual Average
Electricians	63	93	15
Construction Equipment Operators	26	37	
Paving Operators	2	5	
Iron Workers	34	49	
Construction Laborers	34	49	6
Surveyors	4	7	
Craft Supervision	8	11	3
Construction/Operations Management	7	9	3
Administrative Assistant	1	2	2
Power Line Installers	6	12	
Civil Engineers	1	1	
Concrete Finishers	6	10	
Construction Inspector/Engineers	4	7	3
Health and Safety Specialists	4	7	
Total Project Workers	**200**	**299**	**32**

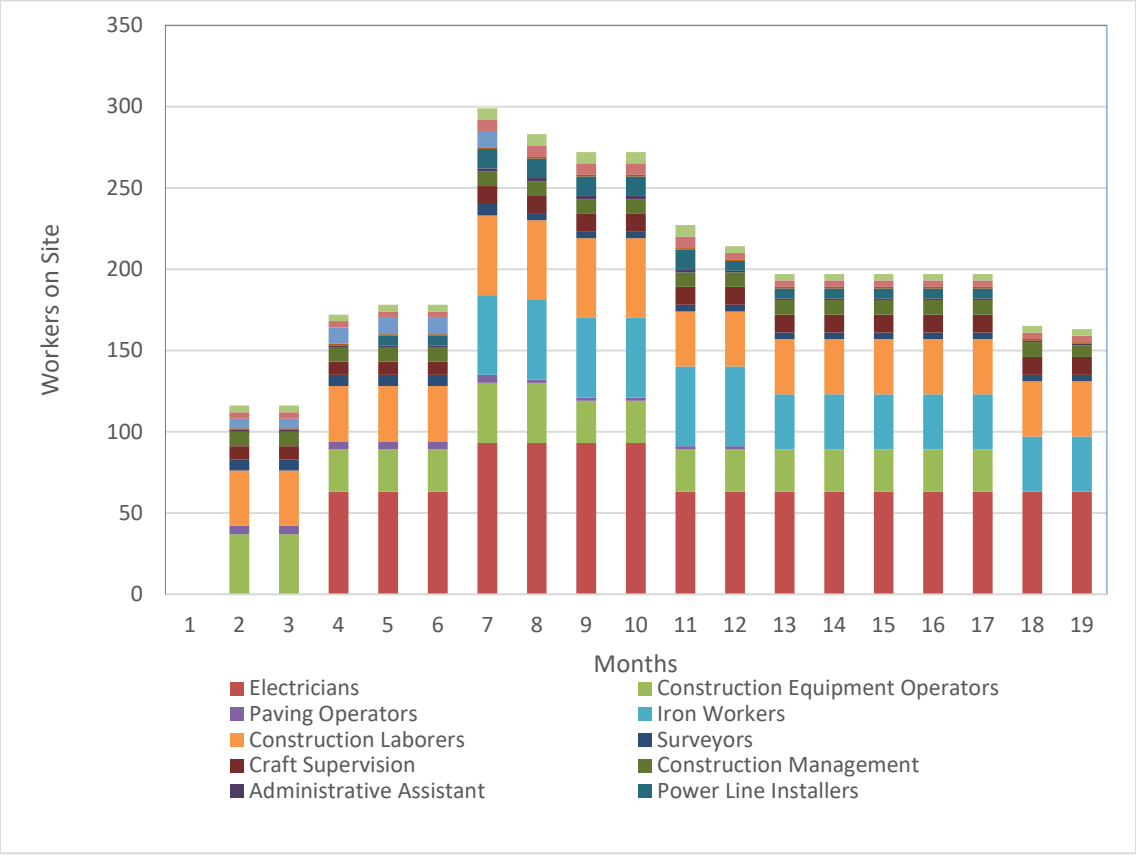

FIGURE 2: PROJECT MONTHLY WORKER DISTRIBUTION

The US Census, also through the ACS, provides estimates of labor force composition employment and unemployment; these estimates are summarized for the county and the region's cities in **Table 9**. Detailed unemployment rates for these cities and communities, including rates by ethnicity, are presented in **Appendix A, Table A-4**.

TABLE 9: LABOR DATA AND UNEMPLOYMENT RATES

City	San Bernardino County	Barstow	Victorville	Adelanto	Apple Valley	Hesperia
Civilian Labor Force	1,054,590	9,889	54,398	14,491	32,058	43,055
Employed	988,653	8,985	48,460	12,839	29,999	39,468
Labor Force Unemployed	65,937	904	5,938	1,652	2,059	3,587
Unemployment Rate	6.3%	9.1%	10.9%	11.4%	6.4%	8.3%

Source: US Census American Community Survey 2022 5-year Estimates, Table DP03: Selected Economic Characteristics.

3.3 Public Services for the Project

3.3.1 Water Supply

Water for construction and operations will be obtained from a private well in Newberry Springs about 50 miles from the Project. It is estimated that 17 water transport truck trips per day would be required during the construction phase to deliver water to aboveground water tanks. Five temporary water tanks of 100,000 gallons each would be brought on-site to store water used for dust control, soil compaction, on-site concrete production, fire suppression, and sanitary needs.

3.3.2 Law Enforcement

The Baker CSD plays a supporting role in the provision of law enforcement in the area. The San Bernardino County Sheriff operates out of the Baker substation, which is a satellite substation to the Barstow Station, located approximately 57 miles south of the Project Site on I-15. Assignment to the Baker substation is what is known as a "resident post." Deputies assigned to Baker live there in county housing and not only provide law enforcement services but are involved members of the community upon which the citizens rely. Deputies assigned to the Baker substation would be the first responders to the Project Site, with an estimated 15-minute response time.

3.3.3 Fire and Emergency Services

The San Bernardino County Fire Protection District (SBCFPD) operates Station 53 in the Baker CSD and the North County fire protection service zone. Station 53 is approximately 9 miles from the Project site with a 10- to 15-minute response time. SBCFPD Station 46 in Harvard and the Newberry Springs Volunteer Fire Department both have 30- to 35-minute response times. They are approximately 30 and 33 miles from the Project site, respectively. The BLM also has a variety of fire resources and apparatus that can respond to emerging incidents; the closest station is

approximately 50 miles from the Project Site in Barstow, California.[11]

The primary function of Station 53 is to provide service along the I-15 transportation corridor. Construction of the current station was funded by the County General Fund for $3.2 million in 2006 (the station opened in 2008). Since 2008, the SBCFPD and the County General Fund have provided funding for the station.

Although the SBCFPD areas do not coincide, Station 53 is within the boundaries of the Baker CSD, and the SBCFPD and CSD have an agreement whereby the SBCFPD responds to all calls within the CSD. Daily staffing at Station 53 consists of two personnel: a full-time captain and one limited term firefighter. Firefighting equipment at Station 53 includes one ICS Type 1 structure engine (E53), one ICS Type 4 Brush Patrol unit with 4-wheel drive (BP53), and one 4-wheel drive utility vehicle (UT53). Station 53 is a key fire protection and EMS asset supporting the I-15 corridor between Afton Canyon Road (about 17 miles southwest of the Project site) and the Nevada state line (about 58 miles to the northeast). Station 53 crews also respond to a large portion of the Mojave Desert National Preserve south of Baker.[12]

Incident statistics show emergency medical calls represent 68% of total incidents within the CSD's boundaries. It may be expected that the Project would generate a higher percentage of EMS calls (relative to total incidents) due to workplace hazards.

3.3.4 Wildfire Response

After calls for emergency medical service, the risk of wildfire might pose the next level of call volume, although the Project is not in a California Public Utility Commission-designated High Fire Threat District or in an area designated as having elevated or extreme fire threat from utility-associated fires. In addition, fuel types within the Project site and vicinity generally support low to moderate fire behavior, and fuels are discontinuous due to roads and other non-burnable substrates. Additionally, recent fire history (1984–2022) in a 10-mile radius from the Project site reveals zero fires. Thus, the Project would not result in a cumulatively significant impact to wildfire risks.[13]

3.3.5 Emergency Medical Services

Although authorized to provide ambulance service, the Baker CSD does not actively provide this service at this time. Medical response and ambulance services in the community are provided by Baker Emergency Medical Services, Inc. (EMS). Baker EMS is a private company operating out of Baker that provides service within the Exclusive Operating Area #23, which encompasses the Project. The area is assigned by the Inland Counties Emergency Management Agency (ICEMA).[14] The time of response to the Project Site is estimated at 10 minutes.

[11] Soda Mountain Solar Environmental Impact Report, Section 3.20 Wildfire.
[12] Baker CSD Service Review San Bernardino Local Agency Formation Commission, July 2013
[13] Soda Mountain Solar Environmental Impact Report, Section 3.20 Wildfire.
[14] ICEMA is a joint powers authority composed of the Counties of San Bernardino, Mono, and Inyo with the San Bernardino County Board of Supervisors as the ex officio ICEMA Board of Directors.

3.3.6 Waste Management

The Project will generate solid waste during its construction phase. All waste generated during construction would be stored in wind-proof and wildlife-proof containers that periodically would be transported to an off-site disposal facility authorized to accept the waste.

During operation and maintenance, some PV panels would require replacement due to breakage or other damage or to take advantage of new technologies. Removed PV panels would be recycled or disposed of in accordance with applicable local, state, and federal standards and regulations. The San Bernardino County Department of Public Works operates the Baker Transfer Station, located 3 miles south of Baker at 72799 Sodabaker Road on Kelbaker Road south of I-15. An option for the Project is to contract with the County to transfer and temporarily store the waste materials at the station.

The Baker CSD provides residential trash pickup and commercial dumpster service within the CSD service area only and would not serve the Project. Waste collection, transport, and disposal services for the general Newberry Springs-Baker CCD are provided by private waste management services that would be contracted to haul waste to the Baker Transfer Station or to authorized recycling or disposal locations elsewhere in the county.

3.3.7 Cost of Public Services

The County of San Bernardino has been notified of the Project's application to the CEC and has been invited to provide an assessment of the potential cost to serve the Project with public services. As discussed above, water and waste management are not expected to be provided by public agencies. Law enforcement, fire protection and emergency medical services will be provided by the County.

Due to the increase of commercial solar development in San Bernardino County, in 2013 the County Board of Supervisors passed Ordinance 2013 which established Solar Energy Development Standards (SBCC §84.29.040). Included in the standards is the requirement for the developer of an approved commercial solar energy generation facility to pay an annual public services impact fee on a per acre basis based on a project-specific study of the project's public safety services impacts, which study shall be paid at the developer's expense, using a consultant approved by the County. In lieu of the study the developer may pay an annual fee according to the following schedule:

Parcel Size	Fee Per Acre
0—4.99 acres	$580.00
5—14.99 acres	$280.00
15 acres or greater	$157.00

California law requires that local agencies shall make findings in a nexus study that any fees charged to a development project as a condition of development may not exceed the cost of services provided by the agency. Therefore, the Public Safety Services Impact fees above are substantive indication of the cost burden of County public safety service providers. Since Soda Mountain Solar, as an opt-in project, is not subject to SBCC §84.29.040 and therefore payment

of the Public Safety Services Impact fee the unpaid fee amount represents a cost to the County and would be a "disbenefit" to the County. This monetized annual value of this disbenefit for 2,670 acre Project is [redacted]. Over 30 years, the present value of the disbenefit is approximately [redacted], this amount would be deducted from the fiscal benefits the Project provides to the County.

3.3.8 Public Schools

The Project is located within the Baker Valley Unified School District (BVUSD). The BVUSD provides public preschool through high school and adult education to residents within its boundaries. While it is not expected that workers, or their families, would relocate to Baker in any significant numbers, the BVUSD would nevertheless collect school impact fees on the permanent enclosed floor area of the Project. This fee-chargeable area is described in the EIR Project Description as operations, maintenance building, and a warehouse, totaling 13,400 square feet. **Table 10** shows the calculation of the BVUSD school impact fee based on this floor area.

TABLE 10: SCHOOL IMPACT FEE

Chargeable Floor Area (square feet)	Fee Rate	Total School Impact Fee
13,400	$0.85	[redacted]

Source: California State Allocation Board, January 24, 2024.

The enrollment data for all districts in the region are presented in **Appendix A, Table A-5**.

3.4 Population and Housing Impacts of the Project

The Project would be considered to have a significant effect on population and housing if the effects exceed the significance criteria described below:

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

While construction of the project would create an average 200 temporary construction-related jobs at any one time, the work requirements of most construction projects are highly specialized such that construction workers remain at a job site only for the time during which their specific skills are needed to complete a particular phase of the construction process. The Project would draw from the existing regional pool of construction workers who typically move from project to project as work is available.

3.4.1 Worker Relocation

Project-related construction workers would not be expected to relocate their household's permanent place of residence because of their work on the Project. Therefore, the number of non-local worker that relocate to the Project area is negligible.

3.4.2 Housing Impact

At 8.8 percent and 9.8 percent, the housing vacancy rates for San Bernardino County and the North Desert Region, respectively, are above the statewide average of 7.4 percent[15]. According to this data, there are sufficient vacant housing units within the local communities to support the number of construction, operation, and maintenance workers to the extent that the Project's workforce would not be considered a substantial unplanned population growth that poses a burden on surrounding communities. The Project would not cause a shortage in available housing for existing residents of San Bernardino County, and would not trigger the need for new housing, and would not induce a substantial permanent growth to the regional population levels.[16]. The CalEnviroScreen tool indicates a 39 percent housing burden in Project's census tract (see Section 2.5), which means the Project's census tract is lower than 61 percent of all census tracts in the state in terms of its population impacted by lack of housing and housing affordability.

The Project would be constructed on undeveloped land administered by the U.S. Department of Interior, Bureau of Land Management (BLM). The site does not contain any residential structures and no people live on the site under existing conditions. Construction, operation, and maintenance, and decommissioning of the solar facilities would occur within the Project site boundaries and would not result in the displacement of any existing housing or people. and would not necessitate the construction of replacement housing elsewhere.

3.4.3 Available Temporary Housing

Although Project workers are not expected to seek housing within Baker, nevertheless an inventory of the temporary housing in Baker was conducted to estimate the housing opportunities available to the project's workers. There are two motels in Baker that are closed and boarded-up. 115 RV spaces in two lots, which represent the most likely opportunity for construction workers with RVs.

TABLE 11: TEMPORARY HOUSING IN BAKER

Rental Housing	Hotel Rooms	Airbnb Rooms	RV Parking Spaces	Total
97	0	2	115	214

3.5 Impacts to Environmental Justice Populations

Title 20 of the California Code of Regulations requires that an application for certification shall provide the following [17]:

- A discussion of the potential for disproportionate impacts from the Project on minority or low-income people; such discussion shall include, but not be limited to, the following:
- Demographic information by census tract, based on the most recent census data available, showing the number and percentage of minority populations and people living

[15] US Census Bureau ACS 2022
[16] The United States Department of Housing and Urban Development considers a vacancy rate below 5 percent as a factor that limits housing choice and the ability of households to find suitable housing.
[17] Title 20 Division 2 Article 7 Additional Provisions for Considering Expedited Applications Under Public Resources Code Section 25550, §2022 Information Requirements. (b)(2)(I)(4)(A)

below the poverty level within six miles of the proposed site.

This section will discuss environmental justice populations to determine whether disproportionately high and adverse human health or environmental effects of the Project are likely to fall on minority and/or low-income populations.

The Project area is located within US Census Tract 6071010300 (Tract) (see Figure 2). The CalEnviroScreen tool gives 3,547 as the Tract's population. The CalEnviroScreen 4.0 composite percentile for the Tract is 75; the Tract is in the top 25 percent of disadvantaged communities in the state.[18] The Tract's median income is 76.5 percent of the Riverside-San Bernardino-Ontario Metropolitan Statistical Area's (MSA) median family income. 20.4 percent of the Tract's households are below the federal poverty line. The Tract's minority population is 46 percent of the total population.[19] Only a small portion of the community of Baker is within the Project's 6-mile buffer. Baker's population is 48 percent minority; the number and percentage of minority population within the 6-mile buffer is unknown. Approximately 31 percent (171 individuals) of the Baker population is below the federal poverty level.[20]

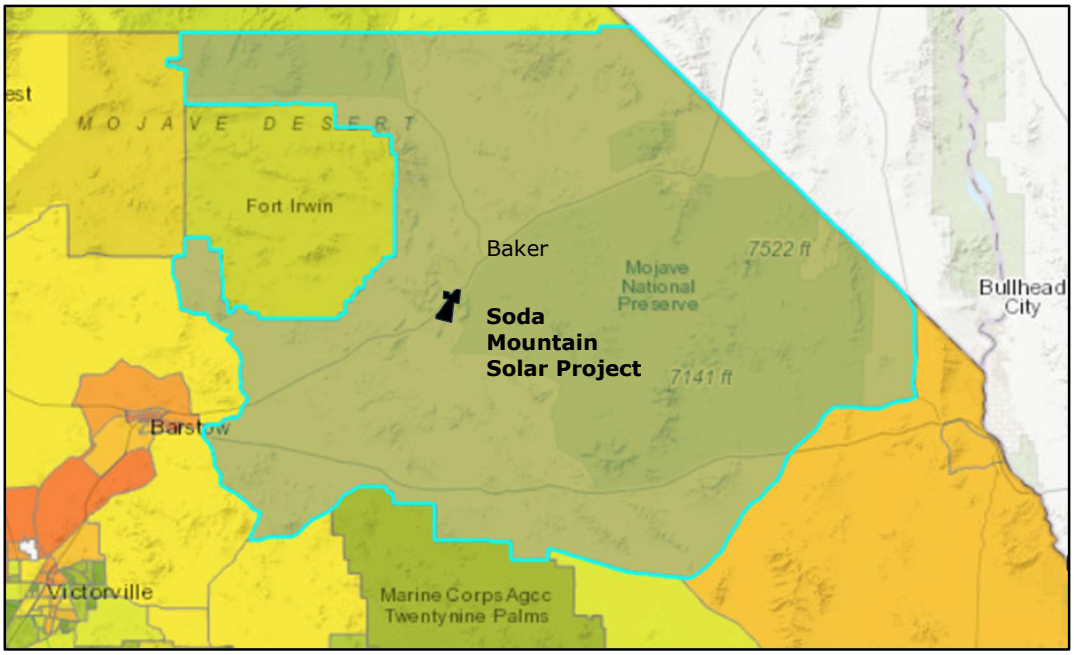

FIGURE 3: CENSUS TRACT 6071010300

The following indicator categories and components percentages for the Tract were collected from

[18] CalEnviroScreen Data Dashboard

[19] Federal Financial Institutions Examination Council, 2023 FRB Census Geocoder (ffiec.gov). Note, the federal poverty line for a 4-person household is about 30 percent of the Riverside-San Bernardino-Ontario MSA's median income ($94,500), whereas low-income is a household at 50 percent or below the median, according to the FFIEC criteria.

[20] ACS 2022 Table B17025 Poverty Status in the Past 12 Months by Nativity, Baker CA CDP

the CalEnviroScreen tool.[21] The percentages are shown for the component where the Tract is in the upper 50 percentile of all census tracts in California:

- Overall Percentiles
    - CalEnviroScreen Composite: 75
    - Pollution Burden: 62
    - Population Characteristics: 77
- Pollution Exposures
    - Ozone: 77
    - Drinking Water: 87
- Environmental Effects
    - Cleanup Sites: 94
    - Groundwater Threats: 93
    - Hazardous Waste: 79
    - Solid Waste: 100
- Sensitive Populations
    - Asthma: 55
    - Low Birth Weight: 99
    - Cardiovascular Disease: 74
- Socioeconomic Factors
    - Education: 54
    - Poverty: 76
    - Unemployment: 95
    - Housing Burden: 39 (shown for comparison in reference to Section 2.4 of this report)

A complete listing of all component percentages for each indicator is in Appendix **Table A-6**

3.5.1 Significance of Indicators

The following is a brief explanation of the above indicators:

- Overall percentiles: The average percentages of the components in the four indicator categories are combined to calculate the Tract's score, which is then sorted among all tract scores in the state to find the Tract's percentile. Similarly, the Pollution Burden and Population Characteristics represent an average of the components within those categories relative to all census tracts in the state.

[21] CalEnvironScreen 4.0 environment hazard exposure tool

- Ozone: The Tract has a summed concentration of 0.058 parts per million (ppm), which is the mean of summer months (May through October) of the daily maximum 8-hour ozone concentration (ppm). This measurement is used to represent short-term ozone health impacts. The ozone percentile for this concentration is higher than 77 percent of the census tracts in California. Ozone concentrations in California range between 0.03 - 0.07 ppm.
- Drinking Water: The Tract drinking water contaminant score is 770, which is the sum of the contaminant and violation percentiles. The drinking water contaminant percentile for the Tract is 87, meaning it is higher than 87 percent of the census tracts in California.
- Cleanup Sites: This indicator is calculated by considering the number of cleanup sites, including Superfund sites, on the National Priorities List (NPL), the weight of each site, and the distance to the Tract. The Tract's cleanup site indicator is higher than 94 percent of the census tracts in California.
- Groundwater Threats: This indicator is calculated by considering the number of groundwater cleanup sites, the weight of each site, and the distance to the Tract. The number and type of groundwater threats is higher than 93 percent of the census tracts in California.
- Hazardous Waste: This indicator is calculated by considering the number of permitted Treatment, Storage and Disposal Facilities, and generators of hazardous waste or chrome plating facilities, the weight of each generator or site, and the distance to the Tract. The number and type of hazardous waste generators and sites is higher than 79 percent of the census tracts in California.
- Solid Waste: This indicator is calculated by considering the number of solid waste facilities including illegal sites, the weight of each, and the distance to the Tract. The number and type of solid waste facilities is higher than 100 percent of the census tracts in California.
- Asthma: This indicator is an estimate of the number of emergency department visits for asthma per 10,000 people over the years 2015 to 2017. An estimated 49 people per 10,000 people in the Tract visited the emergency department for asthma. The asthma rate is higher than 55 percent of the census tracts in California.
- Low Birth Weight: This indicator measures the percentage of babies born weighing less than 2,500 grams (about 5.5 pounds) out of the total number of live births in the Tract over the years 2009 to 2015. 9.43 percent of births in the Tract were low birth weight. The percent low birth weight percentage is higher than 99 percent of the census tracts in California.
- Cardiovascular Disease: This indicator is an estimate of the number of emergency department visits for acute myocardial infarction (or heart attack) per 10,000 people over the years 2015 to 2017. An estimated 16.50 people per 10,000 in the Tract visited the emergency department for a heart attack. The Cardiovascular Disease rate for the Tract is higher than 74 percent of the census tracts in California.

- Education: The low education indicator measures the percentage of adults over 25 in the Tract with less than a high school education. The data is from 2015 to 2019. 14 percent of adults in the Tract have less than a high school education. This percentage of adults without a high school education is higher than 54 percent of the census tracts in California.
- Poverty: The poverty indicator measures the percentage of people in the Tract living in households below twice the federal poverty level. Twice the poverty level (about $62,000 for a family of 4) is used due to the high cost of living in California. 45 percent of people in the Tract live in household with incomes below twice the federal poverty level. This percentage living below twice the poverty level is higher than 76 percent of the census tracts in California. The data is from 2015 to 2019.
- Unemployment: The unemployment indicator measures the percentage of people over 16 in the Tract who are unemployed and eligible for the workforce. The indicator excludes retirees, students, homemakers, institutionalized persons except prisoners, those not looking for work, and military personnel on active duty. 14 percent of adults in the census tract are unemployed. The percentage of unemployed people is higher than 95 percent of the census tracts in California.
- Housing Burden: This indicator measures the percent of households in a census tract that are both low income (making less than 80% of the county median family income) and severely burdened by housing costs (paying greater than 50% of their income to housing costs). 14 percent of people in the Tract are housing burdened low-income households. The housing burden percentile for this tract is 39 percent, meaning the percent of those households that housing burdened is higher than 39 percent of the rest of the state. There are about 1305 housing units in the Tract. About 575 of them are considered low income. Of these low-income households, about 185 are considered housing burdened.

The Project would not cause the percentiles of any of these components to increase to any significant degree. There may be some insignificant increase in the unemployment component if the Project seeks to hire locally.

3.6 Environmental Justice Assessment

In accordance with California Code of Regulations (CCR) Title 20, Division 2, Section 1704, Appendix B, this section provides a discussion of impacts to environmental justice (EJ) populations to determine whether disproportionately high and adverse human health or environmental effects of the Project are likely to fall on minority and/or low-income populations.

This Project has been developed in accordance with Title VI of the Civil Rights Act of 1964, as amended, and Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” Title VI states that “*No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance*.” Executive Order 12898 requires each federal agency (or its

designee) to take the appropriate and necessary steps to identify and address "disproportionately high and adverse" effects of federal or federally funded projects on minority and low-income populations.

The federal guidelines set forth the following three-step screening process which has been used for the Project's environmental justice analysis:

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

3.6.1 Methodology

The Council on Environmental Quality's (CEQ's) *Climate and Economic Justice Screening Tool* (CEJST) was utilized to determine if the Census tract where the Project site is located is considered disadvantaged. CEJST considers a tract disadvantaged if it meets the threshold for at least one of the tool's "categories of burden," or if the land is within the boundaries of Federally Recognized Tribes. Categories of burden include the following[22]:

- Climate Change: Census tracts that are at or above the 90th percentile for expected agriculture loss rate, expected building loss rate, expected population loss rate, projected flood risk, or projected wildfire risk, and are at or above the 65th percentile for low income.
- Energy: Census tracts that are at or above the 90th percentile for energy cost or $PM_{2.5}$ in the air, and are at or above the 65th percentile for low income.
- Health: Census tracts that are at or above the 90th percentile for asthma, diabetes, heart disease, or low life expectancy, and are at or above the 65th percentile for low income.
- Housing: Census tracts that have experienced historic underinvestment, or are at or above the 90th percentile for housing cost, lack of green space, lack of indoor plumbing, or lead paint, and are at or above the 65th percentile for low income.
- Legacy Pollution: Census tracts that have at least one abandoned mine land or Formerly Used Defense Site, or are at or above the 90th percentile for proximity to hazardous waste facilities, proximity to Superfund sites (National Priorities List (NPL)), or proximity to Risk Management Plan (RMP) facilities, and are at or above the 65th percentile for low income.
- Transportation: Census tracts that are at or above the 90th percentile for diesel particulate matter (DPM) exposure, transportation barriers, or traffic proximity and volume, and are at or above the 65th percentile for low income.

[22] Council on Environmental Quality, *Climate and Economic Justice Screening Tool, Methodology*, https://screeningtool.geoplatform.gov/en/methodology, accessed October 14, 2024.

- Water and Wastewater: Census tracts that are at or above the 90th percentile for underground storage tanks and releases or wastewater discharge, and are at or above the 65th percentile for low income.

- Workforce Development: Census tracts that are at or above the 90th percentile for linguistic isolation, low median income, poverty, or unemployment, and more than 10 percent of people ages 25 years or older have less than a high school diploma.

A community is highlighted as disadvantaged on the CEJST map if it is in a Census tract that is (1) at or above the threshold for one or more environmental, climate, or other burden, and (2) at or above the threshold for an associated socioeconomic burden. In addition, a Census tract that is completely surrounded by disadvantaged communities and is at or above the 50 percent percentile for low income is also considered disadvantaged.

Additionally, the U.S. Environmental Protection Agency's (EPA's) NEPAssist[23] and EJScreen[24] tools were used to create a 10-mile buffer around the Project site and produce a demographic profile for that buffer in order to determine what portion of the Census tract population resides within a conservative distance of the Project and its potential impacts.

3.6.2 Affected Environment

Race/Ethnicity

The Project site is located within Census tract 06071010300, which is estimated to have a population of 3,547.[25] Within the 10-mile Project site buffer, there are approximately eight residents, representing 0.22 percent of the population.[26]

Table 12, breaks down the percentage of the population with the Project's Census tract that identifies as each race/ethnicity.

TABLE 12: CENSUS TRACT RACE/ETHNICITY

Race/Ethnicity	Percent
White	60
Black or African American	3
American Indian and Alaska Native	2
Asian	6
Native Hawaiian or Pacific Islander	0
Other	3
Two or more races	0
Hispanic or Latino	26

[23] U.S. Environmental Protection Agency, *NEPAssist: Analysis*, http://nepassisttool.epa.gov/nepassist/analysis.aspx, accessed October 14, 2024.
[24] U.S. Environmental Protection Agency, *EJScreen ACS Summary Report*, Location: User-specified point center at 35.140257, -116.181537, Ring (buffer): 10-mile radius, October 11, 2024.
[25] Council on Environmental Quality, *Explore the Map*, https://screeningtool.geoplatform.gov/en/#7.44/35.166/-116.118, accessed October 14, 2024.
[26] U.S. Environmental Protection Agency, *EJScreen ACS Summary Report*, Location: User-specified point center at 35.140257, -116.181537, Ring (buffer): 10-mile radius, October 11, 2024.

As demonstrated in **Table 12**, the majority of the population within the Census tract identifies as White, and therefore this is not considered a minority population for the purpose of analyzing EJ. Further, since 2 percent of the population identifies as American Indian/Alaska Native, an EJ tribal community is not present. It should be noted that of the 8 people residing within the 10-mile Project buffer, 5 people identify as Hispanic or Latino, 3 people identify as White, and none identify as American Indian/Alaska Native.[27] As such, the residents in the 10-mile Project buffer represent an EJ minority population, but not an EJ tribal population.

Income

The Census tract is characterized as being in the 76th percentile for low-income, and is therefore an EJ low-income population.[28] The per capita income for the 10-mile Project buffer is $25,441, which is below the 200% Federal poverty level income threshold of $30,120.[29] Therefore the 10-mile Project buffer also represents an EJ low-income population.

Burden Indicators

CEJST does not highlight populations beneath the Census tract level; as such, the 10-mile Project buffer was not analyzed for burden indicators. The Census tract was determined to be above the thresholds for the following burden indicators, as represented in **Table 13**; the Census tract was below the thresholds for all other burden indicators. Based on the CEJST methodology, regardless of burden indicators, because the Census tract is above the 50 percent percentile for low income, it is considered a disadvantaged community, i.e. an EJ community.

TABLE 13: CENSUS TRACT BURDEN INDICATORS

Burden	Percentile
Lack of indoor plumbing	94 (above 90th)
Energy cost	90 (above 90th)
Formerly Used Defense Sites	Yes
Unemployment	94 (above 90th)
High School Education	14 (above 10th)
Low Income	76th (above 65th)

Source: Council on Environmental Quality, *Explore the Map*, https://screeningtool.geoplatform.gov/en/#7.44/35.166/-116.118, accessed October 14, 2024.

Results

Based on the above criteria for an EJ community, with consideration for race/ethnicity, income level, and environmental burdens, it is determined that both the Census tract and 10-mile Project buffer represent EJ communities who could face a disadvantage under adverse environmental

[27] U.S. Environmental Protection Agency, *EJScreen ACS Summary Report*, Location: User-specified point center at 35.140257, -116.181537, Ring (buffer): 10-mile radius, October 11, 2024.
[28] Council on Environmental Quality, *Explore the Map*, https://screeningtool.geoplatform.gov/en/#7.44/35.166/-116.118, accessed October 14, 2024.
[29] American Council on Aging, *2024 Federal Poverty Levels/Guidelines & How They Determine Medicaid Eligibility*, https://www.medicaidplanningassistance.org/federal-poverty-guidelines/, accessed October 14, 2024.

impacts.

3.6.3 Impact Analysis

The following analysis is based on the conclusions of the *Soda Mountain Solar Project Environmental Impact Report* (Soda Mountain EIR) and applicable Appendices of the CEC Opt-In Application prepared for the Project, and whether the determinations therein would cause disproportionately high and adverse human health or environmental effects to fall on minority and/or low-income populations (i.e., EJ populations) per CCR Title 20, Division 2, Chapter 5, Appendix B, *Information Requirements for an Application for Certification or Small Power Plant Exemption*, Section (g)(7)(B)(xiii).

CULTURAL AND TRIBAL CULTURAL RESOURCES

As discussed in Section 3-5, *Cultural Resources*, and Section 3-18, *Tribal Cultural Resources*, of the Soda Mountain EIR, records searches and a field survey conducted for the Project did not identify any significant known historical or cultural resources within or adjacent to the Project site. Additionally, it was determined that the soil on site was unlikely to contain subsurface deposits. Further, records searches did not identify any human remains or evidence of a cemetery on site. Native American consultation was also conducted with Native American tribes who had previously requested to be notified of future projects proposed by the County; the California Native American Heritage Commission (NAHC) was also contacted. No tribes provided responses and no further consultation was requested.

The Project applicant opted to implement Applicant-Proposed Measures (APMs) in the event that cultural resources are discovered during Project implementation. APM CUL-1 would require that a qualified archeologist provide cultural resource sensitivity training to construction personnel prior to any ground disturbing activities. APM CUL-2 would require the development of a Cultural Resources Discovery and Monitoring Plan (CRDMP) 30 days prior to ground disturbing activities, which would include that archeological monitoring occur during all construction activities, and would provide procedures and additional measures for handling a cultural or tribal cultural resource if one is discovered, with further direction if the resource is determined to be prehistoric or of Native American in nature. APM CUL-3 provides procedures for handling the inadvertent discovery of human remains during construction, with further direction if the remains are determined to be Native American human remains. While it was determined that the likelihood of cultural or tribal cultural resources occurring on site was low, implementation of APMs CUL-1 through CUL-3 would further ensure that impacts to cultural and tribal cultural resources would be less than significant. Given that an EJ tribal community of concern is not present within the Project vicinity, discovery of an unknown resource would not be of significant importance to an EJ tribal community. The EJ communities within the Census tract and within the 10-mile Project buffer would not be disproportionately or adversely effected by Project implementation because impacts regarding cultural and tribal cultural resources would be less than significant with implementation of APMs CUL-1 through APM CUL-3.

LAND USE

The Project is within an undeveloped rural area and located entirely on federally owned land managed by the Bureau of Land Management (BLM), and is classified as General Public Lands within the Desert Renewable Energy Conservation Plan (DRECP). The 2,670-acre Project site is located in a sparsely populated area and the nearest community is Baker, located approximately seven miles to the northeast. The Project site is bound directly to the west by Interstate-15 (I-15), to the east by the Mojave National Preserve, and the Rasor Off-Highway Vehicle (OHV) Recreation Area at the southeast corner. The closest residential use to the Project site is located adjacent to the Rasor Road Services Shell Oil gas station, roughly 260 feet southwest of the Project boundary.

The Project includes the development of a solar facility and gen-tie line. The gen-tie line would connect the collector lines from the substation to the Project switchyard by boring under I-15 within an existing Caltrans culvert. The Project would not adversely impact operations of the I-15. The Project would not result in the construction of new access routes that have the potential to divide existing communities, nor does the Project propose the elimination of existing area roadways that could have the potential to isolate uses or create a division between existing uses. The Project gen-tie also falls within the Soda Mountain Expansion Area of Critical Environmental Concern (ACEC) as designated by the BLM. The gen-tie construction could temporarily disrupt wildlife activity in the area, and temporarily and permanently remove some habitat for plants and wildlife (up to 0.22 percent of the ACEC). Additionally, access to portions of the Rasor OHV Recreation Area may be permanently impacted. However, the Soda Mountain EIR determined that the Project would not have the potential to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The Project applicant opted to implement APMs in coordination with the BLM; APM LU-1 would provide right-of-way (ROW) mapping to the BLM prior to Project construction, and APM LU-2 would provide the BLM with 100 percent design drawings prior to the issuance of a Notice To Proceed. Overall, temporary and permanent impacts to wildlife and public recreation would not be adverse to existing residents, ROW impacts would not occur adjacent to residential uses or result in relocation of existing residences or businesses, and implementation of APM's LU-1 and LU-2 would further reduce impacts regarding land use to less than significant levels. Given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents. As such, EJ communities would not be disproportionately or adversely effected by the Project because impacts regarding land use would be less than significant.

NOISE

The Soda Mountain EIR analyzed Project noise impacts as they relate to sensitive receptors. The proposed Project location is not close to any non-residential areas that might be sensitive to noise, such as schools, hospitals, daycare centers, or long-term care establishments. The nearest

schools, Baker Elementary, Middle, and High Schools, are over 6.5 miles away in the northeastern part of Baker. The closest residential use to the Project location can be found next to the Rasor Road Services Shell Oil gas station, roughly 260 feet southwest of the Project boundary. The Desert Studies Center of California State University is approximately 3.5 miles east of the Project site, on Zzyzx Road. This center serves as a hub for research and education, capable of hosting up to 75 people in dormitory-style rooms designed for two to 12 occupants. The Rasor Open Area, which lies about 2.5 miles south of the Project boundary, offers camping facilities and can be accessed via the Rasor Road exit from I-15.

The corresponding significance criterion used for the construction noise analysis is a noise level (L_{eq}) of 80 A-weighted decibels (dBA) at the noise-sensitive use. The highest estimated construction-related noise levels that could result at the nearby sensitive receptor (residential use located 260 feet southwest of the Project boundary) throughout the Project's construction period would be 79.0 dBA L_{eq}. The analyzed sensitive receptor near the Project site would not be exposed to construction-only noise levels exceeding 80 dBA L_{eq}. Additionally, the estimated noise levels generated by construction off-site traffic would be below the existing daytime ambient noise level at the noise sensitive receptors along the haul routes. Therefore, without employing mitigation, noise impacts associated with the construction activities for the Project would be less than significant. Nonetheless, the Project Applicant has opted to implement APM N-1, which would require that Project construction within 1.5 miles of a residence shall not occur between the hours of 10:00 p.m. and 7:00 a.m., Monday through Saturday, or any time on Sundays.

The intermittent noise from the switchyard components would be short-lived and infrequent, reducing the potential for prolonged exposure or disturbance. Considering the intermittent nature of the noise from the switchyard, the noise impacts during the operational phase are expected to be minimal. The underground placement of the gen-tie line would also contribute to minimizing transmission line noise. These measures ensure that any potential noise impact on the surrounding environment and community is kept to a minimum. The estimated noise levels from the operation of the proposed stationary noise sources are projected to be 24.2 dBA L_{eq} at the residential use located 260 feet southwest of the Project boundary. Consequently, these estimated noise levels would fall below the existing daytime ambient noise levels (53.1 dBA) and the thresholds outlined in Section 83.01.080(c) of the County's Development Code (55 dBA for daytime hours and 45 dBA for nighttime hours). Thus, the Project's operation would not result in substantial increases in noise levels at nearby off-site sensitive uses, rendering this impact less than significant.

In summary, the sensitive receptor located 260 feet southwest of the proposed boundary would not be significantly impacted by noise from Project implementation because adherence to APM N-1 would reduce impacts regarding noise to less than significant levels, and the there are no other residential uses within 1,500 feet of the Project site. Given that the 10-mile Project radius is sparsely populated (8 residents total) and that the nearest established community, Baker, is located approximately seven miles northeast of the Project boundary, noise generated during Project construction and operation would not adversely or disproportionately impact EJ

communities.

TRAFFIC AND TRANSPORTATION

The roadway network in the Project vicinity is characterized by free-flowing traffic conditions, with approximately 45,500 vehicles per day traveling along the I-15. The Transportation Impact Study (TIS) that was prepared for the Project determined that Project construction would add 1,068 daily vehicle trips, which represents a 2.3 percent increase in daily traffic volume. These traffic conditions would be considered temporary, and would decrease once the 18-month construction period ends. As a standard condition of approval, and per comments received on the Notice of Preparation, the proposed Project would be required to provide a Construction Traffic Management Plan (CTMP) to the County Department of Public Works, Traffic Division prior to the issuance of grading permits (APM TRA-1). The CTMP would include the number of trucks, type of trucks (size), the total number of equivalent single-axle loads, and planned truck routes to the Project site during construction. This information would be used to determine if a maintenance agreement is required to ensure all County-maintained roads utilized by Project construction traffic remain in acceptable condition during construction. The proposed Project would generate fewer than 110 daily vehicle trips on the surrounding roadway network during Project operations. This is considered a normal increase to existing daily traffic volumes.

Vehicular access to the Project site is currently provided via Rasor Road which also provides access to the Rasor OHV Recreation Area. Upon Project buildout, the Project site would be fenced off with vehicular access to be provided from existing Rasor Road at the southwestern corner of the Project site. There are unimproved roads on BLM land that are informally used by recreationalists and accessed via Rasor Road and Arrowhead Trail Road. Under the proposed plan, the Project site would be fenced off, restricting access for recreationalists. Thus, to ensure satisfactory operation of the roadway network during construction, implementation of APM TRA-2 would require Rasor Road to maintain public access during Project operation. No public transit, pedestrian, or bicycle facilities currently exist on Rasor Road, Arrowhead Road, or in the vicinity of the Project site such as Arrowhead Trail Highway. The proposed Project would also not develop any new public roadways, transportation facilities, or transportation-related improvements. As the proposed Project would not develop a new roadway system or road improvements beyond those proposed for Rasor Road, the proposed Project would not conflict with any programs, plans, ordinances, or policies related to transportation. Additionally, implementation of APM TRA-2 and other Rasor Road improvements and development of perimeter and internal roadways for operations would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections). Implementation of APM TRA-1 would limit potential traffic-related conflicts. Thus, the proposed Project would not substantially increase hazards due to a geometric design feature or incompatible uses. Further, the Soda Mountain EIR determined that the proposed Project screens out of requiring a detailed quantitative vehicle miles traveled (VMT) assessment based on the trip generation threshold (i.e., less than 110 daily vehicle trips for Project operations). Overall, impacts would be less than significant, and thus, EJ communities

would not be disproportionately or adversely effected.

Regarding impacts to emergency access, temporary lane closures are not anticipated during Project construction. The implementation of the CTMP (AMP TRA-1) would include construction traffic control measures to ensure that emergency access is maintained during Project construction. The CTMP would include implementation of safety measures such as directing construction traffic with a flag person (as needed to maintain safety adjacent to existing roadways), placing temporary traffic control signage along access routes to indicate the presence of heavy vehicles and construction traffic, using escort vehicles for wide loads, and ensuring access for emergency vehicles to the Project site. Future decommissioning impacts are anticipated to be similar to those of construction. All roads interior to the Project site would be constructed consistent with the County Fire Code, to ensure adequate emergency access during Project operation. Additionally, given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents. Overall, impacts regarding traffic and transportation would be less than significant, and thus, EJ communities would not be disproportionately or adversely effected.

VISUAL RESOURCES

The existing scenery in the visual analysis area is characterized by a gently downward-sloping and undulating broad unnamed alluvial valley nearly enclosed by mountains contained within the Soda Mountain Wilderness and the Mojave National Preserve. Human development within the analysis area includes two existing transmission lines northwest of I-15, opposite the Project site. A smaller distribution line can also be seen to the northwest. These vertical structures stand out against the relatively low and flat landscape, and contrast with the background mountains. The Project site is composed of rural desert land and is almost entirely undeveloped. Visual elements proposed by the Project would include solar arrays, battery storage facilities, substations, gen-tie lines, perimeter fencing, safety and surveillance lighting, and screen planting. I-15, adjacent to the Project site, is not designated as a scenic highway. The Project site is visible from I-15, from single-family detached structures and permanent mobile homes or mobile home parks and associated land uses at the Rasor Road Services Shell Oil gas station, and from the Rasor OHV Recreation Area.

Scenic vistas in the Project vicinity include hillsides and ridgeline backdrops associated with the Soda Mountain Wilderness and Mojave National Preserve. Most viewpoints would allow unaltered views over and beyond the proposed photovoltaic (PV) arrays, substations, battery energy storage system (BESS), and other Project components. As a result, the Project would maintain existing views of identified scenic vistas such as the surrounding mountains. Although the Project would introduce new structures and development on the site, these visual changes would not substantially affect public access to the visual resources that comprise scenic vistas in the area.

No light sources currently exist on the Project site. The Project would require permanent lighting at the Rasor Road site entrance, operations and maintenance buildings, substation, and

switchyard. Some portable lighting also could be required for essential nighttime maintenance activities. The implementation of APM AES-1 would minimize the amount of lighting potentially visible off-site. While these measures would not totally eliminate the light visible by surrounding user groups, Project lighting would be minimized and controlled such that it would not be a nuisance and would not detract from the ability for affected viewers to enjoy their surroundings or view the night sky. Therefore, impacts related to light would be less than significant. The Project would use PV panels that are uniformly dark in color, non-reflective, and designed to be highly absorptive of all light that strikes their glass surfaces. The Project would use an anti-reflective coating, designed to generate electricity rather than reflect light. The solar panels are also designed to track the sun to maximize panel exposure to the sun, which would direct most reflected light back toward the sun in a skyward direction. PV panels have a lower index of refraction/reflectivity than common sources of glare in residential environments. Any glare that results from Projects facilities (not panels) and the high-voltage gen-tie line would be reduced by incorporation of APM AES-1. This would require that the gen-tie facilities be finished with non-specular and non-reflective material and that the insulators be non-reflective and non-refractive. Building and structure paints and finishes would be selected to blend with the landscape. These measures would prevent glare or reduce glare from structural (not panel) surfaces to minimal levels that would not be noticeable or distracting to potential viewers.

Nonetheless, the Soda Mountain EIR determined that Project construction activities, including generation of dust and vehicular traffic, as well as proposed decommissioning activities, would impact visual quality and character, and that Project elements would create a contrast compared with the existing setting, resulting in significant and unavoidable impacts to the existing visual quality and character of the site and surroundings. While implementation of APMs AIR-1 through AIR-8 would minimize dust during construction, and APMs AES-1 through AES-5 would minimize visual impacts related to site design, construction, operation and maintenance, decommissioning and site reclamation, and would include a lighting plan and glint and glare monitoring, impacts would remain significant and unavoidable.

Given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents. While there are residential uses near the Rasor Road Services Shell Oil gas station, the significant and unavoidable impacts to visual quality and character identified in the Soda Mountain EIR would equally affect these viewers, viewers along I-15, and viewers from the Rasor OHV Recreation Area. As such, EJ communities would not be disproportionately or adversely effected by Project implementation regarding visual resources.

AIR QUALITY

Construction

The thresholds of significance, adopted by the Mojave Desert Air Quality Management District (MDAQMD), determine compliance with the goals of attainment plans in the region. As such, emissions below MDAQMD daily and annual significance thresholds would not conflict with or

obstruct implementation of the applicable air quality plans. The Soda Mountain EIR determined that emissions of criteria air pollutants generated during Project construction would be below the thresholds of significance; therefore, the Project does not conflict with implementation of MDAQMD applicable air quality plans. Additionally, the annual emissions would be below the applicable General Conformity de Minimis thresholds.

Short-term construction activities (18 months) could result in temporary increases in pollutant concentrations. The Project's emissions of toxic air contaminants (TAC) would be minimal and would consist of DPM emissions. Construction-related activities that would result in temporary, intermittent emissions of DPM would be from the exhaust of off-road equipment and on-road, heavy-duty trucks. On-road, diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive DPM emissions. In addition, studies show that DPM is highly dispersive and that concentrations of DPM decline with distance from the source. The estimated excess cancer risk and chronic hazard index for DPM from construction emissions would be below the MDAQMD thresholds of significance. Therefore, construction of the Project would not expose existing sensitive receptors to substantial concentrations of hazardous air pollutants from Project construction. Construction of the Project could result in emission of odors from construction equipment and vehicles; however, these odors would disperse rapidly from the Project site and diesel exhaust odors would be consistent with existing vehicle odors in the area. To further reduce impacts to construction air quality, APMs AIR-1 through AIR-8 (dust control practices) and APM AIR-9 (off-road equipment engine standards) would be implemented. Impacts from decommissioning activities would be short-term and similar to the construction phase. As such, Project-related impacts to air quality during construction would be less than significant. Given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents; thus, EJ communities would not be disproportionately or adversely effected.

Operation

Similar to construction emissions, emissions during Project operation would be below MDAQMD daily and annual significance thresholds and therefore would not conflict with implementation of MDAQMD applicable air quality plans. Additionally, operation-related TAC emissions would be negligible, as the Project would be controlled remotely, with few visits to the site for maintenance. No other TAC emission sources would occur during operations. The Project does not include any uses identified as being associated with odors. In addition, given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents. Further, the operation of the Project would create renewable energy over its planned lifetime and decrease the need for energy from fossil fuel–based power plants in the State, which is considered a beneficial impact to Statewide air quality. The energy produced by the Project would displace the criteria pollutant emissions

that would otherwise be produced by existing, business-as-usual power generation resources (including natural gas and coal). This benefit could directly impact the Census tract EJ community, which experiences the burden of energy costs. Overall, Project-related impacts to air quality during operation would be less than significant and thus, EJ communities would not be disproportionately or adversely effected.

HAZARDOUS MATERIALS HANDLING

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Additionally, the Project site is not located within two miles of an airport or airport land use plan, and the Project site is not located within 0.25-mile of a school. No extremely hazardous substances are anticipated to be produced, used, stored, transported, or disposed of as a result of Project implementation. Hazardous materials that may be used and stored during construction and/or operations and maintenance could include paints, thinners, solvents, sealants, lubricants, and drilling mud (for drilling cable conduits under I-15). Construction, operation, and decommissioning of the Project would not involve the handling of acutely hazardous materials that would have the potential to generate significant off-site consequences; therefore, no protocol for modeling of hazardous materials releases is included and no modeling is proposed.

The Project would implement APMs AIR-1, USS-1, and HAZ-1 through HAZ-3. AIR-1 (Fugitive Dust Control Plan) and APM HAZ-3 (Health, Safety, and Noise Plan) would reduce the potential for workers and the public to contract valley fever due to exposure to substantial concentrations of dust, which may contain *Coccidioides* fungus spores. APM HAZ-1 would require that no vehicle or equipment refueling occur within 100 feet of an ephemeral drainage or wetland. APM HAZ-2 would require the preparation of a Hazardous Materials Management Plan, and APM USS-1 would require the preparation of a Waste Recycling Plan. Adherence to the above APMs and compliance with applicable local, State, and federal regulations would ensure impacts regarding hazardous materials handling would be less than significant. Given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents; thus, EJ communities would not be disproportionately or adversely effected.

WORKER SAFETY

While impacts related to worker safety are not directly tied to EJ populations located within the Project vicinity, there is a potential for residents from EJ populations to be part of the work force that implements the proposed project.

Appendix Q, *Worker Safety Plan*, of the CEC Opt-In Application provides a Worker Safety Plan for the proposed Project; the Worker Safety Plan summarizes the worker health and safety issues that may be encountered during construction and operation of the Project. Health and safety programs identified in Table A, *Project Construction Hazard Analysis*, and Table B, *Project O&M Hazard Analysis*, of the Worker Safety Program would be developed to mitigate potential safety

hazards from Project construction and operation and maintenance (O&M) activities, and to comply with applicable regulations. Each program and plan detailed in Table A and Table B would contain job-specific training requirements that would be translated into trainings for Project personnel, as applicable. Laws, ordinances, regulations, and standards (LORS) applicable to worker safety are provided in Table E, *LORS Applicable to Worker Health and Safety*, of the Worker Safety program.

The contents of the respective health and safety programs include**:**

- Construction Injury and Illness Prevention Program.
- Construction Fire Protection and Prevention Program
- Construction Personal Protective Equipment Program.
- Construction Hazardous Materials Business Plan.
- O&M Injury and Illness Prevention Program.
- O&M Fire Protection and Prevention Program.
- O&M Personal Protective Equipment Program.
- O&M Emergency Action Plan.
- O&M Hazardous Materials Business Plan.
- Decommissioning Health and Safety Programs.
- Safety Training; and
- Fuel Handling and Fire Suppression

Comprehensive safety training programs for Project construction and O&M activities would be required for Project personnel. Each of the safety procedures developed to control and mitigate potential site hazards would require training through a variety of methods, consistent with the requirements of California Division of Occupational Safety and Health (Cal/OSHA) standards, the complexity of the topic, the characteristics of the workforce, and the degree of risk associated with each of the identified hazards. Following adherence to the Worker Safety Program, and consistent with the *Hazardous Materials Handling* analysis provided in the previous section of this document, impacts regarding worker safety would be less than significant, and thus, EJ communities in the workforce would not be disproportionately or adversely effected.

PUBLIC HEALTH AND WASTE MANAGEMENT

Appendix R, Waste Management Plan, of the CEC Opt-In Application, discusses the potential effect on human health and the environment from existing site conditions as well as non-hazardous and hazardous waste generated during construction and operation at the Project. According to the Waste Management Plan, which relies on the results of the Phase I Environmental Site Assessments (ESAs) prepared for the Project (June 2023), there are no reasons to suspect that contamination of soil on the Project site has occurred, and therefore, soil excavated during construction of the Project has been classified as nonhazardous. The Waste Management Plan includes a similar analysis as contained in Section 3.9, *Hazards and Hazardous Materials*, of the Soda Mountain EIR. Overall, the Project would generate both

hazardous and non-hazardous construction and operational waste. However, multiple waste facilities would have the capacity to accommodate both construction and operational hazardous and non-hazardous waste. Additionally, the Project would use third parties to manage the transportation of both hazardous and non-hazardous waste. Non-hazardous and hazardous waste handling for the Project would be governed by federal, State, and local laws. Applicable laws and regulations address proper waste handling, storage, and disposal practices to protect the environment from contamination and to protect facility workers and the surrounding community from exposure to nonhazardous and hazardous waste. Following adherence to existing laws, ordinances, regulations, and standards, impacts to public health and impacts regarding waste management were to determined to be less than significant, and EJ communities would not be disproportionately or adversely effected.

BIOLOGICAL RESOURCES

Section 3.4, Biological Resources, of the Soda Mountain EIR focuses on the direct and indirect impacts to plant and animal species as well as their habitat following implementation of the proposed Project. While temporary construction activities could impact biological resources, and operation of the Project would alter the existing habitat to the extent that permanent impacts to biological resources may occur, it was determined that implementation of APMs BIO-1 through BIO-37, and Mitigations Measures MM-BIO-1 through MM-BIO-27 would reduce impacts to less than significant levels. APMs BIO-1 through BIO-9 would mitigate impacts to vegetation, and outline procedures for revegetating areas of disturbance, including the use of herbicides and pesticides, salvage plants, and weed management. APMs BIO-10 through BIO-37 pertain to the protection of special-status plant and animal species, including required surveys, monitoring, and avoidance measures. Mitigation Measures BIO-1 through BIO-37 provide additional mitigation related to best management practices, worker awareness, biological monitoring, and species protection, avoidance, and potential relocation.

Impacts to biological resources that were identified in Section 3.4 and that pertain to human health and environment include vegetation removal, which would permanently alter the existing landscape, added sources of light and glare, generation of dust during construction and operation, and the use of hazardous materials which could be emitted into the air or could contaminate water sources on-site. However, the above listed APMs and Mitigation Measures would reduce these impacts to less than significant levels. Given that Project implementation would occur in a sparsely populated area with limited impacts on residents, EJ communities would not be disproportionately or adversely effected by Project implementation.

WATER RESOURCES

Construction activities would potentially loosen existing surface soils and sediments, increasing the potential for erosion during storm events and discharging sediment or other pollutants into waterways. Additionally, the use of construction equipment may involve the accidental release of fuel, oils, lubricants, antifreeze, and other potentially hazardous substances at the construction site. These water quality pollutants could become entrained in surface water during storm events,

and/or be infiltrated into groundwater and the underlying aquifer, resulting in the degradation of water quality. Potential threats to surface water and groundwater quality related to operation and maintenance include leaching of treated wastewater from the proposed septic field into underlying groundwater; potential increases in sediment loads to adjacent washes due to release of sediments from the site during storm events; and accidental spills of hydrocarbon fuels, oils, and greases, antifreeze, and other liquids associated equipment maintenance and usage on-site, which could become entrained in stormwater or groundwater. Decommissioning of the Project would result in impacts to hydrology and water quality, similar to construction activities. The Project site contains potentially jurisdictional aquatic resources including prominent and non-prominent drainages that meet the definition of waters of the State. The State Water Resources Control Board (SWRCB) regulates discharges of pollutants into "waters of the state," broadly defined as any surface water or groundwater within the boundaries of the state. As the Project could discharge pollutants (including fill material for construction) into these waters of the State during standard construction activities, the Project would submit a Notice of Intent application for a waste discharge requirements (WDRs) permit to the Lahontan Regional Water Quality Control Board (LRWQCB). As the Project would obtain a permit for discharge of any fill materials to waters of the State in compliance with the Porter-Cologne Act, the Project would not violate any WDRs.

As the Project contains construction activities on area over one acre, it would apply for coverage under the National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit (Order 2022-0057-DWQ) and any following versions applicable at the time of construction. The Construction General Permit was developed to ensure that stormwater is managed and erosion is controlled on construction sites. The Construction General Permit requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which requires implementation of BMPs to control stormwater run-on and runoff from construction work sites. BMPs may include, but would not be limited to, physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of infiltration swales, and protection of stockpiled materials. The application of a BMP plan serves to prevent and manage erosion, siltation, and accidental spills during construction, playing a crucial role in upholding water quality objectives and protecting the beneficial uses outlined by the LRWQCB. The permit also would require monitoring and reporting and would implement the water quality standards, guidelines, and prohibitions in the *Water Quality Control Plan for the Lahontan Region* (Basin Plan).

Implementation of APM HWQ-1 would ensure that construction and operation of the proposed Project would not result in a net impact relating to on-site drainage or patterns and rates of erosion or sedimentation by requiring the applicant to develop and implement a comprehensive drainage, stormwater, and sedimentation control plan. Under APM HWQ-2, at-grade crossings would be constructed to maintain existing flow channels and sediment transport, thereby leaving stormwater runoff volume unchanged, reducing the potential for increased erosion and sedimentation of stormwater. With the implementation of APM HWQ-1 and APM HWQ-2, impacts related to water quality would be less than significant, and thus, EJ communities would not be

disproportionately or adversely effected.

The Project would use water sourced from two groundwater wells within the Lower Mojave River Valley Groundwater Basin in San Bernardino County, California. During the construction process, the water demand is estimated to be 366 acre-feet for a period of 18 months, or 200,000 gallons per day. Operational water demand would be approximately 5.6 acre-feet per year and would begin in 2026, with a lifespan of 33.5 years following construction. Water use for the Project would total approximately 524 acre-feet, including water used during project construction and facility operation. Water supply availability projections indicate that sufficient water supplies are available to meet projected water demand, in addition to the existing and projected demand of the Project area. Given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents; thus, EJ communities would not be disproportionately or adversely effected by impacts to water supplies.

SOILS, PALEONTOLOGICAL RESOURCES, AND GEOLOGICAL HAZARDS AND RESOURCES

The Project site lies within a small, intermontane desert valley occupied by alluvial fan deposits and surrounded by the Soda Mountains. Elevations in the Project site range from approximately 1,600 feet above mean sea level (amsl) in the southwest to 1,550 feet amsl on the north and 1,250 feet amsl on the southeast. Terrain within the Project site consists of predominantly south- to east-sloping (at 2 percent to 4 percent) alluvial deposits emanating from the Soda Mountains to the west, with minor north- and west-sloping terrain at the edges of the smaller mountains on the east. Channels and washes are deeper and clast sizes increase up to small boulders closer to the base of the surrounding mountains. The predominantly flat, alluvial nature of the Project site generally precludes risk of or susceptibility to landslides. No landslide hazards are identified for the Project site on the County geologic hazards map. The majority of the alluvial formations throughout the Project site are sand- and gravel-rich and excessively drained to well-drained, thus reducing erosion potential. Project site soils were tested for pH, soluble sulfate content, soluble chloride content, and electrical resistivity. Testing results showed that most of the Project site soils have high corrosion potential for uncoated steel and low corrosion potential for concrete. For the Project site, no expansive soils were identified and based on the nature of alluvial deposition, no expansive soils are expected. Based on a geophysical investigation of the Project site, groundwater is estimated to be 180 to 350 feet below ground surface (bgs). Therefore, even with groundwater withdrawal from the valley, it is very unlikely that subsidence would occur. According to the California Geological Survey's *Seismic Hazards Program* map, there are no Alquist-Priolo Fault Hazard Zones or other active surface faults that cross through the Project site. The San Bernardino County Geologic Hazard Overlay Map shows no liquefaction areas on or near the Project site. Given the above existing conditions, impacts regarding geologic hazards would be less than significant. As the Project is already in a sparsely populated area, EJ communities would

not be disproportionately or adversely effected.

The Project site is underlain by geologic units with low to moderate potential to contain paleontological resources. Ground disturbances in geologic units that have very low to low paleontological sensitivity are unlikely to result in impacts to scientifically significant paleontological resources. These geologic units include late Holocene alluvial fan deposits (Qf), Holocene to late Pleistocene young eolian and dune deposits (Qye), Tertiary (Neogene) age formations of volcanic origin (Tv), and Mesozoic and older granitic and other intrusive crystalline rocks of all ages (gr). Ground-disturbing activities in Holocene to late Pleistocene young alluvial fan deposits (Qyf) and late to middle Pleistocene old alluvial fan deposits (Qof), both of which have low to moderate paleontological potential, increasing with depth may impact potentially significant paleontological resources at depth. Based on field observations and the depths at which fossils have been recovered in similar sediments elsewhere in the Mojave Desert, these older, moderate potential sediments may be present at depths as shallow as 4.5 feet bgs. Therefore, ground-disturbing activities that impact previously undisturbed sediments greater than 4.5 feet bgs in areas mapped as Qyf or Qof may result in impacts to scientifically significant paleontological resources.

APM GEO-7 through APM GEO-11 require retention of a BLM-permitted Principal Investigator (Project Paleontologist) to develop and implement a PRMMP; paleontological resource worker awareness training; adherence with unanticipated discovery protocols; paleontological monitoring in sensitive sediments; the collection, preparation, documentation, and curation of scientifically significant paleontological resources; and preparation of a final monitoring report. With the implementation of these APMs, impacts on paleontological resources would be less than significant, and thus, EJ communities would not be disproportionately or adversely effected.

TRANSMISSION SYSTEM SAFETY AND NUISANCE

According to Appendix A1, Engineering Generation Facility Description, Design and Operation, of the CEC Opt-In Application prepared for the Project, the Project does not require the construction any new or additional electrical transmission lines onsite or off-site. As such, impacts related to transmission system safety and nuisance would not occur, and thus EJ communities would not be disproportionately or adversely effected.

WILDFIRE

The Project site is not located within a State Responsibility Area or Local Responsibility Area for fire hazards, and is not with a Fire Hazard Severity Zone. Additionally, as discussed in the *Soils, Paleontological Resources, and Geologic Hazards and Resources* analysis of this document, the Project would not expose people to increased risk associated with flooding, landslides, or post-fire slope instability.

Nonetheless, the electrical components of the Project would pose a risk of fire if they become damaged or tampered with. Electrical components that may pose a risk of fire include voltage transformers, batteries, substations, and the switchyard. As these components are in a sparsely

vegetated and remote location away from densely populated areas, the potential for faulty electrical equipment to substantially exacerbate fire risks for populated areas is minimal. Additionally, assembly and installation of the electrical equipment would meet existing electrical and safety standards. Certified electricians and utility journeymen would be part of the construction workforce to ensure that all electrical equipment is assembled properly. The substation would be secured with a barbed wire chain-link fence to comply with electrical codes and would include communication systems to comply with Federal Energy Regulatory Commission and California Independent System Operator/Utility monitoring and control requirements to ensure safe operation. The battery energy storage system facilities would be housed in enclosed storage containers constructed on level cement or concrete foundations. The enclosures would contain any accidental fires and prevent them from spreading and causing further damage. Most of the solar facilities' equipment would consist of solar photovoltaic (PV) panels and their mounting systems, which would be assembled from materials that are not combustible or flammable. Given that 8 residents live within a 10-mile radius of the Project site and that the majority of the Census tract resides in Baker, located approximately seven miles northeast of the Project boundary, Project implementation would occur in a sparsely populated area with limited impacts on residents; thus, EJ communities would not be disproportionately or adversely effected by Project implementation because impacts regarding wildfire would be less than significant.

3.7 Project Labor Agreement

The Project's owner has entered into a Project Labor Agreement(s) (PLA) with various unions including: The International Brotherhood of Electrical Workers Local 477; Laborers Union Local 783; International Union of Operating Engineers Local No. 12; and Southwest Regional Council of Carpenters; Ironworkers Local 433.

4. ECONOMIC IMPACT ANALYSIS

4.1 Economic Impacts of the Project

4.1.1 Summary of Findings

The following section presents a summary of the estimated net economic benefits of the Project to the County of San Bernardino (the "permitting" authority if not for the opt-in) and the general economic impacts of the Project, both during the period of construction and during operations over an estimated 30-year life of the Project. All dollar amounts in these analyses are in constant 2024 dollars.

The economic benefits that a major development project provides to the region typically include:

- Employment growth.
- Housing development.
- Infrastructure improvements
- Environmental improvements.

- Assistance to public schools and education.
- Assistance to public safety agencies and departments.
- Property taxes and sales and use tax.

Net Fiscal Benefits of the Project

The fiscal benefit of the Project is a special case of economic benefit in that the County government is the beneficiary, whereas it is the region's residents and businesses that enjoy the general economic benefits of the Project's construction and operations.

The fiscal benefit includes the property tax (PI Tax), and local sales tax paid to the County of San Bernardino and the disbenefit of non-reimbursed public safety costs and address the final two bullet points above. These were discussed in the Executive Summary and Cost of Public Services sections and restated as follows:

- PI Tax 30-yr present value at 3%: [redacted]
- Sales Tax to San Bernardino County (high scenario): [redacted]
- Public Services Cost (annual acreage charge 30-yr present value at 3%) [redacted].

  Net Fiscal Benefit to the County [redacted]

The fees paid to the Baker Valley Unified School district were enumerated in **paragraph 3.3.8** as [redacted].

Of the top 4 bullet points: employment growth, housing development, infrastructure and environmental improvements, construction of the Project would provide a temporary increase in employment of approximately 200 direct (average) and another 420 indirect and induced jobs. Long-term (30-years or longer) employment growth derives from the operation of the Project and is estimated at up to 49 jobs per year. These values are discussed in paragraph **4.1.3** Project Economic Impacts. Housing development is not a factor since the demand for housing from the long-term employment generated by the Project is negligible considering the housing vacancy rate that existing in the North Desert Region and construction employment is of such a short duration that development of housing to serve the construction demand is not likely. The same conclusion can be reached for infrastructure to serve the Project or the temporary or long-term workers. The communities in the region currently have adequate infrastructure in terms of roads, water, sewer and schools and the Project would not be required to develop infrastructure beyond its immediate needs for operation. Through various mitigation measures described in its EIR, the Project's will provide environmental benefits. The EIR identifies significant and unavoidable visual impacts (dust, light, and glare) that may result from the Project's construction and operation. The Project's applicant proposes biological mitigation measures APM BIO 1 through 9 (including revegetation and plant relocation) designed to mitigate impacts to vegetation which would also serve to reduce visual impacts to less than significant levels.

In considering the benefits of a project the economic impact analysis should evaluate these factors that may detract from the gross benefits provided:

- The opportunity cost of investment in the proposed project;

- Projected cost of the County providing services (e.g., contracts with fire and law enforcement service providers, if any) to the project;
- Local economic development losses associated with the displacement of an existing energy source; or
- Potential increases or decreases in electricity rates or fuel prices resulting from project investments in new energy storage infrastructure.

A net benefit analysis should also include the gain and loss of jobs when calculating the net employment impact. A net analysis will consider the differences of the economic outputs from a proposed project versus the outputs from the current or allowable planned use for the project site.

The opportunity cost of the Project to economic benefit is two-fold: the value of alternative investments of the labor and capital used for the Project, and alternative uses for the land. Alternative investment of labor and capital is a private decision made by the developer and the investors in the Project. However, the way labor and capital are used does have implications for the region's economy. Neither of these inputs to production are limitless and what is not used for this Project could be used somewhere else, or for another type of project that may create a greater economic impact. At the local level, land use in California is normally more heavily influenced by public policy than are capital investment decisions. Therefore, the discussion of alternative uses for land can be more meaningful. For example, continuation of the current use of the Project site as a visual and wildlife resource is a valid consideration, and one the San Bernardino County Board of Supervisors deemed a critical factor when it decided to restrict solar and wind energy projects on private land in the unincorporated area of the county.[30] The value of natural areas cannot be understated. The number of annual visitors to Death Valley, and the Mojave National Preserve attests to the value of the resource.

Except in the very general sense through the imposition of the County's Public Services Fee discussed in **paragraph 3.3.7,** the cost of public services provided to the Project has not been determined. The San Bernardino Fire Protection District and the Sheriff Department are first responders for the Project and there will be a cost for the services they. The discussion with these agencies has been initiated.

The county has an existing fossil fuel electric power generating industry sector which has a $1.7 billion economic output. Theoretically, if the renewable energy sector were to grow exponentially in the next decade it could begin to supplant fossil fuels and displace the fossil fueled energy source. However, the projected energy demands of California and the US are such that the use coal, gas, and oil will continue to increase at least until the year 2050. In fact, studies show that adding renewable energy adds to energy consumption instead of replacing fossil fuels[31]

For this reasons stated above it should not be expected that the Project will have an appreciable effect, one way or the other, on electric power rates or fuel costs.

[30] https://www.latimes.com/business/la-fi-san-bernardino-solar-renewable-energy-20190228-story.html
[31] "*Green energy use is Growing; but so is use of fossil fuels*", Bjorn Lomborg in San Diego Union Tribune editorial October 13, 2024

4.1.2 Direct Project Costs

Table 14 shows the Project's direct development costs associated with a 300MW solar power generation facility. Total capital cost is estimated at [redacted] (including tax).

TABLE 14: CONSTRUCTION PHASE DIRECT PURCHASES AND LABOR COSTS

Construction Phase Direct Purchases	
Photo Voltaic Modules	[redacted]
Inverters	[redacted]
Mountings (Pile & Trackers)	[redacted]
Electrical (GSU, Gen tie, BESS & BOS)	[redacted]
Subtotal 1 – Purchases	[redacted]
State and Local Taxes (development phase only, with exclusion)	[redacted]
Subtotal 2 – Construction Phase – Direct Equipment Purchases (including taxes)	[redacted]
Predevelopment (Project Permitting, Planning and Engineering Services, etc.)	[redacted]
Construction Direct Labor*	[redacted]
Total Project Capital Cost (excluding taxes)	[redacted]
Total Project Cost (including taxes)	[redacted]

*Project labor cost over the construction period.
GSU: Generator Step-up Transformer; BESS: Battery Energy Storage System; BOS: Balance of Systems.

4.1.3 Project Economic Impacts

Over its construction and operation periods, the Project is expected to generate significant economic impacts in the State of California and San Bernardino County as summarized in **Table 15**. These economic impacts reflect the direct, indirect, and induced economic impacts that will result from Project-related construction and operations spending. The construction impact is limited to the period of construction, which is estimated to be 18 months. Operations are assumed to be conducted over a 30-year period.

TABLE 15: SUMMARY OF ECONOMIC IMPACTS

Project Phase		Jobs	Labor Cost	Output*
Construction	Direct Impact	200	[redacted]	[redacted]
	Indirect Impact	157	[redacted]	[redacted]
	Induced Impact	263	[redacted]	[redacted]
	Total	**620**	[redacted]	[redacted]
Operations**	Direct Impact	960	[redacted]	[redacted]
	Indirect Impact	314	[redacted]	[redacted]
	Induced Impact	200	[redacted]	[redacted]
	Total	**1,474**	[redacted]	[redacted]

*Output includes contractor profit and overhead and does not include state or local taxes paid by the Project.
**Project operations are expected to employ 25-40 personnel for administration, maintenance, inspection, and regular servicing. For the purposes of this model, the number of personnel needed for operations are assumed to be 32 FTEs for the full estimated 30-year operations cycle, or 960 FTE-years.

4.1.4 Direct Economic Impacts

The direct economic impacts were calculated using the IMPLAN model. IMPLAN is an industry standard used nationwide to estimate economic impacts of new investment and to forecast the effect of changes in state and local economic conditions. For this analysis, specific data for the State of California and San Bernardino County was inputted into the model to customize the results.

- During the construction period, the Project is anticipated to spend approximately [redacted] in direct construction, installation cost, labor, and related services, and generate indirect and induced economic activity. The Project is projected to directly employ an average of 200 full-time equivalent (FTE) jobs on site during the Project's 18-month construction period.
- On-site construction jobs will include electricians, ironworkers, laborers, etc., as well as Project management staff. This analysis estimates that the total cost of these workers in earned income, benefits, insurance, and other employment costs will approximate [redacted] over the construction period.

4.1.5 Direct Sales Tax Revenue

State and local sales tax applies to all equipment purchases by the Project during the construction phase. The current state and local combined sales tax rate is 7.75 percent. With passage of AB 1817 in 2018, a partial tax exclusion applies to taxable purchases of equipment to be used in renewable energy generation. The exclusion reduces the combined tax rate to 3.9375 percent on the first $200 million of purchases. The Project will directly purchase equipment and services subject to state and local sales taxes estimated at [redacted], resulting in approximately [redacted] and [redacted] million in sales tax revenues to the County in the low and high scenarios, respectively, based on a 3.9375 rate on the first $200 million of taxable sales and 7.75 percent on the amount exceeding $200 million in taxable sales, as summarized in **Table 16**.

TABLE 16: SUMMARY OF PROJECT DIRECT SALES TAX REVENUES TO SAN BERNARDINO COUNTY

	Low Scenario[1]			High Scenario		
Local Sales Tax	**One Time[2]**	**Annual[3]**	**Total (one-time plus 30 yrs. annual)**	**One Time[2]**	**Annual**	**Total (30 yrs.)**
County General Fund	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
County Transportation Authority Tax	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total County Sales Tax Revenue[2]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Sources: JEDI PV Model; IMPLAN 2023; Soda Mountain Solar, LLC.

[1]The low scenario assumes only products purchased from establishments within the county generate sales taxes to the county. The high scenario assumes local sales tax capture on PV panels and inverters if Project establishes a point-of-sale address for collecting sales tax on PV panels and inverters.

[2]One-time sales tax revenues are generated prior to and during the construction period.

[3]Annual sales tax revenues derive from taxable purchases used in operating the Project and taxable household purchases by the operating personnel.

4.1.6 Indirect and Induced Sales Tax Revenue

Indirect taxable sales, which are purchases by the Project from businesses within the county unincorporated area are estimated to total approximately [redacted] during the construction and operation phases. Assuming these purchases are eligible for the sales tax exclusion, the indirect purchases result in another approximately [redacted] in sales tax revenues to the County.

Induced taxable annual sales during the construction and operation phases, which are purchases by the Project's workers in the local economy is [redacted]. This translates to approximately [redacted] in sale tax revenues to the County, in addition to the direct and indirect sales tax revenues.

In summary, the direct, indirect, and induced county sales taxes during construction will generate approximately [redacted].

4.2 Economic Impact Modeling Methodology

Regional economic impact analysis and input-output (I/O) models in particular provide a means to estimate the total effects stemming from a particular industry or activity, and yield estimates of the number and types of jobs created, the amount of wage income associated with those jobs, and the total economic output or final sales and the value of services and products generated within the region by the various industries involved with the original activity. I/O models rely on economic "multipliers" that mathematically represent the relationship between the initial change in one sector of the economy and the expected effect of that change on other interdependent industry sectors, corresponding changes in demand for inputs to *those* sectors, and so on. These effects are commonly described as "direct," "indirect," or "induced" and are generally defined as follows:

- The "direct" effect is the initial change in economic activity in a specific industry or sector. For example, economic activities (notably employee earnings) at the Project would represent the direct impact on the San Bernardino County economy.
- The "indirect" effect results from industry-to-industry transactions required to support the direct activity. This effect is a measure of the change in the output of suppliers linked to the industry that is being evaluated. For example, Project construction will cause an increase in sales of construction materials, engineering services, and other goods from "business-to-business" suppliers in San Bernardino County and elsewhere. For this analysis, only indirect effects within San Bernardino County are estimated.
- The "induced" effect consists of impacts from employee spending in the regional economy. Specifically, the employees of the Project's construction contractors and indirectly affected supplier businesses generate this effect by purchasing goods and services in the regional economy (e.g., food, clothing, automobiles, health care). For this analysis, only induced effects within San Bernardino County are estimated. However, there would likely be additional induced effects in the other counties of Southern California as well.

The total economic impact is the sum of the direct, indirect, and induced effects, and measures the impact of an activity as the direct investment in the activity spent locally "ripples" through the economy.

4.3 JEDI Modeling

In addition to IMPLAN, this economic impact analysis uses the US Department of Energy's JEDI I/O model to calculate the local and state sales taxes expected to be derived from the Project.

First developed by the US Department of Energy, National Renewable Energy Laboratory's "Wind Powering America" program to model wind energy jobs and impacts, the JEDI model has been expanded to biofuels, coal, natural gas, and solar power plants. JEDI model defaults are based on interviews with industry experts and project developers. Economic multipliers contained within the model are derived from IMPLAN software and state data files. Using model defaults, results are reported on a statewide scale for California. The JEDI model was used to estimate the Project's operational impacts. Based on the model's default and Project-specific inputs, the JEDI model estimates the number of jobs and economic impacts to a local area that could reasonably be supported by the operation of a solar energy generation project.

4.4 Caveats to Input-Output Modeling

The I/O methodology assumes that demand for goods and services by industries or households increases in direct relation to the increase in income, and that an increase in demand results in a proportional increase in local supply and employment. This implies fixed linear relationships between the input (resource) use and the output and between income and consumption.

However, these relationships tend to vary with the income level, and responses to final demand changes are not always likely to occur in directly linear proportions.

Second, I/O models assume that local suppliers have sufficient capacity to respond to changes in final demand by increasing their output and hiring additional workers without shifting any production resources (inputs) from other competing needs. This assumption may not hold in areas with tight labor or capital markets since suppliers may find it difficult to obtain these labor or material inputs or other resources necessary to expand production. However, with an unemployment rate of approximately 6.3 percent countywide and between 6.4 percent and 11.4 percent in the regions cities, and a relatively large geographic area,[32] San Bernardino County is not constrained by a tight labor market; and, as such, the model's assumption is not expected to affect the accuracy of the results to a significant degree.

5. ANALYSIS AND RESULTS

5.1 Direct Economic Impacts

Since a significant portion of Project spending during construction would be on solar panels and related equipment expected to be imported from outside the county, expenditures on labor represent the single largest Project expenditure within the local economy. As such, the IMPLAN model estimates direct impacts in the local economy during construction based on Project expenditures on contracted labor and contractor profits and overhead paid by the Project. During operations, direct impacts have been estimated based on continuing labor over a 30-year period.

Table 17 shows the Project's estimated direct impacts on employment, employee compensation, and economic output in the county during the construction period and over 30 years of operation, summarized in **Table 17.**

[32] See Table 3.

TABLE 17: DIRECT ECONOMIC IMPACTS OF THE PROJECT

Project Phase		Labor Cost	Output
Construction	**Direct**	[redacted]	[redacted]
Operations	**Direct**	[redacted]	[redacted]
	Total Impacts	[redacted]	[redacted]

[1] Full-time equivalents. Direct employment also includes contracted workers during construction.

[2] Wage rates for construction and operations workers based on JEDI-estimated wages derived from the most recent available data from Bureau of Labor Statistics. Wage rates include benefits of approximately 45.6 percent of total wage.
Sources: JEDI PV Model; IMPLAN 2023; Soda Mountain Solar, LLC; and Michael Baker International.

5.1.1 Direct Economic Impacts during the Construction Period

On-site construction activities at the Project will support employment for a total of approximately 200 FTEs over the 18-month construction period. These jobs will include electricians, metal workers, and other skilled labor in addition to general laborers. The difference between "Labor Income" and "Output" is attributable to overhead and profit for the contractors providing the construction labor.

5.1.2 Direct Economic Impacts during the Operating Period

Project operations will involve the monitoring of systems' status, performance, diagnostics, and planning, as well as preventive maintenance activities, and periodic corrective maintenance activities and replacement of components.

Based on the Project description and operations plan, the Project is assumed to be unmanned during normal operations, with a team of 25 to 45 conducting regular maintenance, inspection, and updates throughout a projected 30-year operating period. For the purposes of this modeling, the number of maintenance and inspection employees are assumed to average to 32. This results in a total of 960 FTE-years over the 30-year operations period to manage the Project's ongoing activities. These jobs result in estimated annual earnings of approximately [redacted], based on the JEDI model.

5.2 Economic Impacts from Multiplier Effects

In addition to the Project's direct employment and related spending, the Project will purchase materials and equipment for installation, which in turn stimulates economic development and creates jobs in the sectors of the local economy that supplies these goods and services to the Project, both during development and operations. These additional impacts are the multiplier effects discussed above. Multiplier effects include both indirect and induced impacts to the economy. Indirect impacts result from additional rounds of spending by businesses in the Project's supply chain. Induced impacts result from household spending by new Project-related employees. For example, employees at the Project and at related businesses affected by the Project will need housing, transportation, medical services, food, clothing and other goods and services in the county.

Based on the Project's direct spending on labor as well as required materials and services,

additional rounds of spending will occur in the county. Businesses in the supply chain (providing materials, equipment, and services) will respond to meet the Project's demand. The spending and employment this generates constitutes the Project's "indirect" effects.

During the operations period, estimated local spending is based on cost estimates for goods and services that are anticipated to be sourced from vendors in the county. Examples of these purchases would include industrial supplies, business and professional services, labor, and materials for periodic improvements (e.g., access road maintenance and weed abatement), and similar costs of doing business. Providers of these goods and services are expected to be available in the county where they are most convenient and cost-effective to serve the Project.

5.2.1 Induced Economic Impact

Additional induced impacts are estimated from spending of direct and indirect employees. Employees of the Project and employees at local businesses indirectly affected by the Project will spend their wages on a variety of goods and services. For example, if an employee at the Project spends their wages on food for their family, part of that spending goes to the retail worker who sells the food, part goes to the trucker who delivers the food, part goes to the farmer who grows the food, and smaller parts go to various intermediaries such as processors and wholesalers.

Thus, in aggregate, the spending associated with direct and indirect employees' purchases creates demand for other businesses and helps to support other jobs in the county's economy.

Induced impacts are based on estimated direct employee compensation during construction and operations. **Table 18** summarizes the indirect and induced impacts on employment, employee compensation, and economic output generated due to the Project's spending at local businesses during construction and operations from the IMPLAN and JEDI models, respectively.

TABLE 18: INDIRECT AND INDUCED ECONOMIC IMPACTS

Construction	Jobs	Labor Cost	Output
Indirect	157	[redacted]	[redacted]
Induced	263	[redacted]	[redacted]
Operations			
Indirect	314	[redacted]	[redacted]
Induced	200	[redacted]	[redacted]
Total	**934**	[redacted]	[redacted]

5.2.2 State and Local Government Revenues

In addition to the broader economic impacts described in the preceding sections, the Project will benefit the state and county through increased tax revenues. The main type of state and local government discretionary revenue that would accrue to the state and county are sales and use

taxes.[33]

Tax revenues are presented in two ways: 1) the one-time revenues derived from taxable sales during construction, and 2) the ongoing operations over a 30-year period with taxable sales of services, material, and replacement equipment used at the facility. The one-time construction period tax revenues are estimated at either [redacted] (the low" scenario) or approximately [redacted] (the "high" scenario), and that, over 30 years of operations, the Project will generate an additional [redacted] in sales tax for San Bernardino County General Fund in the low scenario or [redacted], as shown in **Table 19.**

TABLE 19: SUMMARY OF LOCAL SALES TAX REVENUES TO SAN BERNARDINO COUNTY

	Low Scenario[1]			High Scenario		
Local Sales Tax	**One Time[2]**	**Annual[3]**	**Total (one-time plus 30 yrs. annual)**	**One Time[2]**	**Annual**	**Total (30 yrs.)**
County General Fund	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]
County Transportation Authority Tax	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]
Total County Sales Tax Revenue[2]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Sources: JEDI PV Model; IMPLAN 2023; Soda Mountain Solar, LLC.
[1]The low scenario assumes only products purchased from establishments within the county generate sales taxes to the county. The high scenario assumes local sales tax capture on PV panels and inverters if Project establishes a point-of-sale address for collecting sales tax on PV panels and inverters.
[2]One-time sales tax revenues are generated prior to and during the construction period.
[3]Annual sales tax revenues derive from taxable purchases used in operating the Project and taxable household purchases by the operating personnel.

The sales tax revenues derive from approximately [redacted] and [redacted] in taxable sales in the "low" end and "high" end, respectively, during both the construction and for 30-years of operations. The wide range reflects whether the Project establishes a "point-of-sale" address for all materials and equipment purchases during the construction phase. The low scenario assumes no such address is established, so sales and use taxes are collected at the location of the vendor of such goods (likely to be outside the county), in which case San Bernardino County as an entity would not receive taxes on the bulk of the construction materials (PV panels and inverters). For the high scenario, it is assumed that the Project vendors and contractors would establish a point-of-sale address at the jobsite, and thus the county would receive sales and use taxes on all eligible purchases.

Similarly, the county's cities would share in a portion of the sales tax revenue depending on the low or high scenario as shown in **Table 20** the high scenario results in San Bernardino County receiving a little more of the sales tax revenue than do the cities.

[33] Soda Mountain LLC indicated that the Project is exempt from property tax (including improvements) since the land is leased from the Bureau of Land Management. However as discussed in the Executive Summary the Project may liable to an possessory interest tax on the value of the lease.

TABLE 20: SUMMARY OF SALES TAX REVENUES TO OTHER JURISDICTIONS IN THE COUNTY

	Low Scenario			High Scenario		
Local Sales Tax	One Time[2]	Annual	Total (one-time plus 30 yrs. annual)	One Time[2]	Annual	Total (30 yrs.)
Other Jurisdictions	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]

Total estimated taxable sales generated in the development of the Project and its operation is summarized in **Appendix B, Table B-1**. Direct taxable sales are based on the Project's projected taxable purchases. The developer may ask Project suppliers and contractors to establish a billing and delivery address at the jobsite in unincorporated San Bernardino County for sales tax payment on all purchases of equipment and materials for the Project's construction. Without such a "point of sale" address for the jobsite, only those purchases made at locations in unincorporated San Bernardino County would generate sales and use taxes for the county. For comparison, both low and high results are shown to reflect the economic impacts of both scenarios, which yield substantial differences.

Because the major cost for the Project will be PV panels and inverters that are expected to be purchased from out-of-county suppliers, establishing the point-of-sale address for these purchases greatly increases sales taxes for the county in the high scenario, since none of these purchases would generate county taxes in the low scenario. While required mountings and electrical equipment and materials are likely to be available from suppliers within the county, only about 20 percent of total taxable sales in the entire San Bernardino County (including incorporated areas) are made in the unincorporated areas. Thus, it is assumed that 20 percent of in-county taxable sales would be made at locations in the unincorporated area in the low scenario and the remaining 80 percent of taxable purchases made in the county's cities. The sales and sales tax share of the remaining jurisdictions of San Bernardino County are also estimated.

Indirect taxable sales during the construction phase are based on sales of construction supplies and materials by "business-to-business" vendors (e.g., wholesalers to retailers). The JEDI model estimates that indirect taxable sales will total [redacted] during the construction period. These purchases would likely not be subject to the point-of-sale address since they are assumed to be locally based, and thus are the same in both the low and high scenarios. Induced annual sales are estimated to be [redacted] during the construction phase, and likewise would not change between the two scenarios.

During operations, the JEDI model estimates annual output (i.e., non-labor expenses) to be approximately [redacted] per year. This amount is assumed to be taxable sales of goods and services and shared by the jurisdictions in the county for an annual sales tax revenue of [redacted]), or approximately [redacted] over 30 years.

The detailed calculations of the state and local sales tax revenues generated by Project are shown in Appendix B, Table B-3.

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APPENDIX A: SOCIOECONOMIC DATA

Table A-1: Regional Population Data

Town/City/CDP	San Bernardino County	Baker	Barstow	Victorville	Adelanto	Apple Valley	Hesperia
Population	2,180,563	553	25,235	134,417	37,960	75,603	99,878
Race Demographics							
White	975,461	290	10,222	56,549	13,125	46,528	61,355
Black/African American	171,762	0	3,870	23,080	5,800	6,091	3,943
American Indian/Alaskan Native	25,467	32	592	2,124	408	623	1,026
Asian	169,063	12	405	6,014	868	2,426	1,992
Native Hawaiian/Other Pacific Islander	7,333	14	134	381	223	110	191
Some other race	484,024	88	4,024	20,866	6,905	7,199	15,315
Two or more races	347,453	117	5,988	25,403	10,631	12,626	16,056

Town/City/CDP	Lake Arrowhead	Mountain View Acres	Oak Hills	Phelan	Piñon Hills	Spring Valley Lake	Wrightwood
Population	10,189	3,457	7,838	18,272	7,157	8,764	4,461
Race Demographics							
White	7,609	1,690	5,024	12,806	4,906	6,913	3,778
Black/African American	232	320	12	142	26	234	0
American Indian/Alaskan Native	47	120	42	294	0	150	0
Asian	255	260	167	403	503	251	201
Native Hawaiian/Other Pacific Islander	90	0	68	52	116	0	63
Some other race	535	435	1,025	956	534	532	87
Two or more races	1,421	632	1,500	3,619	1,072	684	332

Table A-2: Regional Population Data—Age Distribution

Town/City/CDP	San Bernardino County	Baker	Barstow	Victorville	Adelanto	Apple Valley	Hesperia
Under 18	564,737	159	7,815	40,650	12,601	21,862	29,288
18-24	227,084	82	2,289	14,017	4,210	6,178	10,862
25-44	621,371	155	7,157	38,418	11,313	17,616	27,585
45-64	507,444	129	5,035	27,662	7,132	17,508	22,244
65 or older	259,927	28	2,939	13,670	2,704	12,439	9,899

Town/City/CDP	Lake Arrowhead	Mountain View Acres	Oak Hills	Phelan	Piñon Hills	Spring Valley Lake	Wrightwood
Under 18	1,945	991	1,496	5,532	1,887	2,160	881
18-24	688	226	660	1,638	325	1,074	97
25-44	2,192	946	2,434	4,939	1,922	1,822	1,105
45-64	3,046	778	1,861	4,534	1,780	2,032	1,068
65 or older	2,318	516	1,387	1,629	1,243	1,676	1,310

DP05: American Community Survey Demographic and Housing Estimate

Table A-3: Regional Housing Data

	San Bernardino County	Barstow	Baker	Victorville	Adelanto	Apple Valley	Hesperia
Total units	**731,899**	**9,620**	**167**	**38,928**	**9,601**	**27,181**	**30,344**
Occupied	667,836	8,790	125	37,024	9,185	25,928	29,144
Owner-occupied	406,247	3,851	35	21,280	5,364	18,075	19,066
Renter-occupied	261,589	4,939	90	15,744	3,821	7,853	10,078
Vacant	64,063	830	42	1,904	416	1,253	1,200
For Rent	13,786	421	7	834	185	361	484
Rented, not occupied	1,446	22	0	84	26	39	48
For sale only	5,580	83	2	433	68	346	222
Sold, not occupied	1,941	27	0	93	19	89	70
For seasonal, recreational, or occasional use	31,585	44	9	69	14	159	116
All other vacant units	9,725	233	24	391	104	259	260
	Lake Arrowhead	**Mountain View Acres**	**Oak Hills**	**Phelan**	**Piñon Hills**	**Spring Valley Lake**	**Wrightwood**
Total units	**11,737**	**995**	**3,166**	**5,033**	**2,912**	**4,130**	**953**
Occupied	5,113	954	2,941	4,500	2,624	3,511	722
Owner-occupied	3,950	694	2,605	3,521	2,055	2,762	485
Renter-occupied	1,163	260	336	979	569	749	237
Vacant	6,624	41	225	533	288	619	231
For Rent	272	8	42	50	30	117	22
Rented, not occupied	27	5	3	8	8	10	4
For sale only	160	5	46	144	43	186	20
Sold, not occupied	42	3	23	27	19	17	17
For seasonal, recreational, or occasional use	5,895	3	36	121	89	143	98
All other vacant units	228	17	75	183	99	146	70

Source: DP05: American Community Survey Demographic and Housing Estimate

Table A-4: Regional Unemployment Data (2022 Rates)

	San Bernardino County	Barstow	Baker	Victorville	Adelanto	Apple Valley	Hesperia
White	7%	7.90%	3.70%	9.60%	11.10%	8.30%	9.10%
Black or African American	11.30%	15.80%	-	17.40%	13.80%	15.20%	10.60%
American Indian or Alaska Native	8.20%	28.10%	0%	19.70%	10.60%	12.40%	8.30%
Asian	5%	0.0%	0%	10.10%	0%	6.40%	0%
Native Hawaiian or Other Pacific Islander	8.70%	0%	0%	0%	100%	43.90%	0%
Some other race	6.30%	4.70%	13.70%	7.60%	10.40%	4.70%	9.40%
2 or more races	8.20%	9.60%	0%	8.40%	11.60%	14%	14%
Hispanic or Latino origin (of any race)	7%	7.70%	2.30%	8.30%	10.70%	9.90%	10.50%

	Lake Arrowhead	Mountain View Acres	Oak Hills	Phelan	Piñon Hills	Spring Valley Lake	Wrightwood
White	5.50%	6.0%	5.50%	14.20%	13.70%	5.6%%	1.90%
Black or African American	13.80%	0%	-	100%	-	0%	-
American Indian or Alaska Native	0%	19.60%	0%	0%	-	0%	-
Asian	1.40%	0%	0%	0%	27%	0%	2%
Native Hawaiian or Other Pacific Islander	-	-	0%	0%	0%	-	0%
Some other race	0%	15.50%	1.30%	8.50%	0%	18.5%%	22.50%
2 or more races	9.30%	0%	1.50%	4.80%	18.10%	14.1%%	0%
Hispanic or Latino origin (of any race)	8.20%	6.80%	2.90%	13.80%	19.80%	6.7%%	6.70%

Source: American Community Survey 2022

Table A-5: Public School District Enrollment 2023-2024 School Year

	San Bernadino County	Baker Valley Unified	Barstow Unified	Victor Elementary	Victor Valley Union High	Adelanto Elementary
Total Enrollment	396,860	129	6,318	12,402	12,345	8,348
Grade TK	9,128	3	158	558	0	217
Grade K	25,399	6	499	1,439	0	743
Grade 1	27,383	8	512	1,587	0	810
Grade 2	28,574	10	550	1,687	0	835
Grade 3	28,971	16	499	1,761	0	851
Grade 4	29,368	7	575	1,761	0	885
Grade 5	29,765	13	499	1,761	0	885
Grade 6	30,161	15	512	1,835	0	910
Grade 7	30,558	6	436	0	1,568	927
Grade 8	30,558	10	461	0	1,494	935
Grade 9	31,749	5	436	0	2,432	159
Grade 10	32,146	11	404	0	2,296	109
Grade 11	31,352	6	385	0	2,296	58
Grade 12	32,939	13	398	0	2,197	17

Source: California Department of Education
All enroll

Table A-5: Public School District Enrollment (continued)

	Apple Valley Unified	Hesperia Unified	Rim of the World Unified	Mountain View Elementary	Snowline Joint Unified
Total Enrollment	15,252	25,356	2,853	3,156	7,967
Grade TK	366	609	68	174	183
Grade K	1,007	1,521	191	363	502
Grade 1	1,068	1,699	191	379	598
Grade 2	1,113	1,800	205	385	558
Grade 3	1,129	1,724	214	335	621
Grade 4	1,144	1,826	203	303	605
Grade 5	1,159	1,927	194	322	629
Grade 6	1,220	1,851	217	294	637
Grade 7	1,235	1,952	205	294	613
Grade 8	1,205	1,927	180	309	621
Grade 9	1,129	2,130	237	0	653
Grade 10	1,144	2,181	228	0	582
Grade 11	1,159	2,054	274	0	598
Grade 12	1,190	2,181	245	0	566

Source: California Department of Education

Table A-6: CalEnviroScreen 4.0 Indicator Indices

Indicator	Index	Average Component Score
Pollution Exposure		34%
Ozone	77%	
PM2.5	7%	
Diesel PM	4%	
Pesticides	39%	
Toxic Releases	3%	
Traffic	14%	
Drinking Water	87%	
Lead	39%	
Environmental Effects		73%
Cleanup Sites	94%	
Groundwater Threats	93%	
Hazardous Waste	79%	
Impaired Water Bodies	0%	
Solid Waste	100%	
Sensitive Populations		76%
Asthma	55%	
Low Birth Weight	99%	
Cardiovascular Disease	74%	
Socioeconomic Factors		59%
Education	54%	
Linguistic Isolation	38%	
Poverty	76%	
Unemployment	95%	
Housing Burden	34%	

Source: CalEnviroScreen 4.0
CalEnviroScreen 4.0 Results (arcgis.com)

APPENDIX B: ECONOMIC IMPACT DATA

Table B-1: Estimated Total Project Spending in San Bernardino County During Construction and Operations

	Estimated Spending	Local Capture	Estimated Spent Locally
Construction Phase[1]			
Project Development and Onsite Labor Impacts (over 18-month construction period)	[redacted]	[redacted]	[redacted]
Pre-Development			
Project Permitting, Planning Services, and Other Costs	[redacted]	[redacted]	[redacted]
Construction Materials			
Mounting (rails, clamps, fittings, etc.)	[redacted]	[redacted]	[redacted]
Electrical (BOS, BESS, etc.)[2]	[redacted]	[redacted]	[redacted]
Modules	[redacted]	[redacted]	[redacted]
Inverters	[redacted]	[redacted]	[redacted]
Subtotal	[redacted]		[redacted]
Sales Tax at 7.75%	[redacted]		
Subtotal Pre-Development and Non-Labor Construction Spending	[redacted]		[redacted]
Total Spending Pre-Development and Construction (not including Sales Tax)	[redacted]		[redacted]
Operations Phase			
PV System Annual Operating Maintenance Labor[3]	[redacted]	[redacted]	[redacted]
PV System Annual Operating Maintenance Materials	[redacted]	[redacted]	[redacted]
Total Annual Spending during Operations	[redacted]	[redacted]	[redacted]

[1] Construction and operations materials, services, and labor costs provided by Soda Mountain, LLC.

[2] Assumes modules and inverters will be purchased out of the County.

[3] Calculated by JEDI includes local revenue, supply chain and induced impacts

Sources: JEDI PV Model; IMPLAN 2023; Soda Mountain Solar, LLC; and Michael Baker International

Table B-2: Estimated Taxable Sales

Phase	Total Estimated Taxable Sales	%	Accrues only to Unincorporated San Bernardino County Low[1]	%	High[2]	%	Shared among Incorporated cities San Bernardino County Low[1]	%	High[2]
Construction Phase Direct Purchases									
PV Modules and Inverters[3]									
Mounting (rails, clamps, fittings, etc.)									
Electrical (BOS, BESS, etc.)									
Subtotal									
Indirect Sales (Purchases from Local Businesses)[4]									
Induced taxable sales to employees during construction									
Subtotal Construction Period Taxable Sales									
Operations Phase (Annual)									
Indirect Taxable Sales during Operations[5]									
Induced Operations-related Employee Sales									
Subtotal Operations-related Annual Taxable Sales									

[1] Low scenario assumes no local sales tax capture on PV modules and inverters bought from outside of County, and 20% of mounting and electrical equipment purchased In-County are in the unincorporated county capture, consistent with countywide taxable sales data from California Board of Equalization.

[2] High scenario assumes local sales tax capture on PV panels and inverters if project establishes a point-of-sale address for collecting sales tax on PV panels, inverters, mounting and electrical equipment. Low scenario assumes only products purchased from establishments within the County generate sales taxes to the County.

[3] Estimate of solar panels and inverters provided per VC Renewables

[4] Additional sales from subsequent rounds of re-spending in the Wholesale and Retail Trades, estimated using JEDI.

[5] Estimated using JEDI; reflects additional rounds of business-to-business spending on retail after initial project spending on O&M services.

Sources: JEDI PV Model; California Board of Equalization; VC Renewables

Table B-3: Estimated Shares of Tax Revenues by Jurisdiction at Reduced Sales Tax Rate

			Share in Unincorporated San Bernardino County					
			Low[1]			High[1]		
Taxable Sales Category			**One Time**	**Annual**	**Total (includes one-time plus 30 yrs. of annual**	**One Time**	**Annual**	**Total (includes one-time plus 30 yrs. of annual**
Direct Taxable Sales								
Construction Materials & Supplies			[redacted]		[redacted]	[redacted]		[redacted]
Operations Materials & Supplies				[redacted]	[redacted]		[redacted]	[redacted]
Indirect Taxable Sales (Supply Chain Businesses)[2]								
Construction Materials & Supplies			[redacted]		[redacted]	[redacted]		[redacted]
Annual Operations Materials & Supplies				[redacted]	[redacted]		[redacted]	[redacted]
Total Taxable Sales (includes one-time plus 30 yrs. of annual)			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Local Sales Tax Revenue	**Tax Rate**	**County Share**	**One Time**	**Annual**	**Total (30yrs)**	**One Time**	**Annual**	**Total (30 yrs.)**
Local Sales Tax (General County Operations)	0.64%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
County Transportation Authority Tax	0.25%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Local Sales Tax Revenue			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
State Sales Tax			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total State and Local	3.9375%		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[1]High scenario assumes local sales tax capture on PV panels and inverters if project establishes a point-of-sale address for collecting sales tax on PV panels and inverters. Low scenario assumes only products purchased from establishments within the County generate sales taxes to the County; in this case, only the mounting fixtures allocated 20%/80% unincorporated county/cities, respectively.

[2] Indirect and induced taxable spending estimated using JEDI model.

Sources: California Board of Equalization; JEDI PV Model; IMPLAN 2024; Soda Mountain Solar, LLC; and Michael Baker International

Table B-3: Estimated Shares of Tax Revenues by Jurisdiction at Reduced Rate (continued)

			Share in Remaining Jurisdictions of San Bernardino County					
			Low[1]			High[1]		
Taxable Sales Category			**One Time**	**Annual**	**Total (includes one-time plus 30 yrs. of annual**	**One Time**	**Annual**	**Total (includes one-time plus 30 yrs. of annual)**
Direct Taxable Sales								
Construction Materials & Supplies			[redacted]			[redacted]		[redacted]
Operations Materials & Supplies				[redacted]	[redacted]			
Indirect Taxable Sales (Supply Chain Businesses)[2]								
Construction Materials & Supplies			$[redacted]		[redacted]	[redacted]		[redacted]
Operations Materials & Supplies				[redacted]	[redacted]		[redacted]	[redacted]
Total Taxable Sales			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Local Sales Tax Revenue	**Tax Rate**	**County Share**	**One Time**	**Annual**	**Total (30 yrs.)**	**One Time**	**Annual**	**Total (30 yrs.)**
Local Sales Tax (General County Operations)	0.64%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
County Transportation Authority Tax	0.25%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Local Sales Tax Revenue			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
State Sales Tax Revenue	3.9375%		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total State and Local Tax Revenue			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[1] High scenario assumes local sales tax capture on PV panels and inverters if project establishes a point-of-sale address for collecting sales tax on PV panels and inverters. Low scenario assumes only products actually purchased from establishments within the County generate sales taxes to the County.

[2] Indirect and induced taxable spending estimated using JEDI model.

Sources: California Board of Equalization; JEDI PV Model; IMPLAN 2023; Soda Mountain Solar, LLC; and Michael Baker International

Table B-4: Estimated Shares of Tax Revenues by Jurisdiction at Full Sales Tax Rates

			Share in Unincorporated San Bernardino County					
			Low[1]			High[1]		
Taxable Sales Category			**One Time**	**Annual**	**Total**	**One Time**	**Annual**	**Total (includes one-time plus 30 yrs. of annual**
Direct Taxable Sales								
Construction Materials & Supplies						[redacted]		[redacted]
Operations Materials & Supplies								
Induced Taxable Sales (Employee Purchases)[2]								
During Construction			[redacted]		[redacted]	[redacted]		[redacted]
During Operation Annual & 30 years				[redacted]	[redacted]		[redacted]	[redacted]
Total Taxable Sales			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Local Sales Tax	**Tax Rate**	**County Share**	**One Time**	**Annual**	**Total (30yrs)**	**One Time**	**Annual**	**Total (30yrs)**
Local Sales Tax (General County Operations)	1.25%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
San Bernardino County Transportation Authority Tax	0.50%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Local Sales Tax Revenue			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
State Sales Tax	6.00%		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total State & Local Sales Tax Revenue			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Two Tax Rates Combined--County of San Bernardino								
General County Operations			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
San Bernardino County Transportation Authority			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Table B-3: Estimated Shares of Tax Revenues by Jurisdiction at Full Rate (continued)

			Share for Remaining Jurisdictions of San Bernardino County					
			Low[1]			High[1]		
Taxable Sales Category			**One Time**	**Annual**	**Total**	**One Time**	**Annual**	**Total**
Direct Taxable Sales								
Construction Materials & Supplies			[redacted]			[redacted]		[redacted]
Operations Materials & Supplies							[redacted]	[redacted]
Induced Taxable Sales (Employee Purchases)[2]								
Construction Materials & Supplies			[redacted]		[redacted]	[redacted]		[redacted]
Operations Materials & Supplies Annual & 30 years				[redacted]	[redacted]		[redacted]	[redacted]
Total Taxable Sales			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Local Sales Tax	**Tax Rate**	**County Share**	**One Time**	**Annual**	**Total (30yrs)**	**One Time**	**Annual**	**Total (30yrs)**
Local Sales Tax (General County Operation)	1.25%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
San Bernardino County Transportation Authority Tax	0.50%	100%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Local Sales Tax Revenue			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
State Sales Tax	6.00%		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total State & Local Sales Tax Revenue			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

APPENDIX C: FISCAL DATA

Table C-1: San Bernardino County Fire Protection District FY 21-22 Budget

Budget Category	Financing Sources	Percentage	Budget Category	Expenditures	Percentage
County General Fund Support	$23,702,898	7.3%	*Salaries & Benefits*	$192,193,803	59.1%
Taxes & Special Assessments	$152,079,063	46.8%	*Operations*	$78,264,770	24.1%
Other Governmental & Grants	$5,685,255	1.7%	*Fixed Assets*	$10,725,990	3.3%
Fees & Service Charges	$64,555,712	19.9%	*Other Requirements*	$43,901,553	13.5%
Other Revenue	$9,125,301	2.8%			
Fund Balance	$21,866,030	6.7%			
Reserve Transfers In	$48,071,857	14.8%			
Total	**$325,086,116**		*Total*	**$325,086,116**	

Table C-2: San Bernardino County Fire Statistics FY 2022-23

Budget Total	$367.7M
County Fire Personnel	1,166
Fire Suppression Personnel	712
Investigations	519
Pounds Hazardous Waste Managed	3,380,579

Hazardous Materials Division

Residents Served	64,301
Businesses Served	274
Hazardous Materials Regulation, Response, Request for Information, CUPA	
Regulated Facilities	7,654
Facility Inspections	5,783
Non-Emergency Calls	213
Haz-Mat Team Responses	158
Underground Storage Tank Facilities	820
Underground Storage Tank Systems	2,331
Requests for Records & Certified Records Research	775

Service Calls Between July 1, 2023 – April 30, 2024

Type of Call	Countywide	Division 5 (North Desert)
Structure Fire	1,158	243
Vegetation Fire	198	64
Vehicle Fire	1,192	428
Other Fire	4,858	997
Investigation/Alarm	4,777	1,049
Hazardous Materials	1,501	388
Medical Aid	86,342	18,953
Public Service	1,132	318
Rescue	199	29
Traffic Collisions	7,901	2,037
Traffic Collisions + Extrication	290	83
Miscellaneous	2,403	632
Total Calls for Service	**111,951**	**25,221**

Table C-3: San Bernardino County General Fund Budget

	Fiscal Year 2024-2025		Fiscal Year 2023-2024	
	Recommended	**Percent change from prior year**	**Adopted Budget**	**Percent change from prior year**
Requirements				
Staffing Expenses	3,156,016,898	2.34%	3,034,388,500	5.37%
Operating Expenses	5,010,900,782	3.29%	4,710,135,931	6.57%
Capital Expenditures	1,303,210,895	-9.38%	1,322,502,871	0.59%
Reimbursements	660010250	7.53%	591,664,522	1.98%
Contingencies	269,081,244	5.07%	417,763,610	20.80%
Subtotal Appropriation	**9,070,199,569**	**0.62%**	**8,893,126,390**	**6.12%**
Operating Transfers Out General Fund	563,646,790	-21.33%	587,334,402	-16.52%
Contributions to Reserves	173,548,205	-53.82%	243,285,292	5.76%
Non-General Fund Contr. To Reserves/Net Position	14,373,215	-50.05%	29,174,269	52.02%
Total Requirements	**9,821,767,779**	**-3.09%**	**9,752,920,353**	**4.50%**

Source: San Bernardino County Finance and Administration Budget
https://main.sbcounty.gov/about-cao/finance-budget/

Table C-5
Selected Employment by Sector in San Bernardino County (100 or more)-2023

	Employment	Labor Income	Average Employee Compensation per Wage and Salary Employee
Truck transportation	32,335	$3,015,631,881.88	$87,629.03
Architectural, engineering, and related services	10,028	$773,475,361.89	$105,429.80
Construction of new commercial structures, including farm structures	8,993	$657,264,495.66	$75,541.61
Office administrative services	8,197	$494,649,890.48	$79,456.12
Maintenance and repair construction of nonresidential structures	4,456	$336,085,052.83	$78,556.17
Construction of new power and communication structures	4,342	$333,595,815.36	$80,775.78
Construction of other new nonresidential structures	4,142	$318,726,372.91	$81,114.65
Commercial and industrial machinery and equipment repair and maintenance	3,335	$275,053,885.36	$88,324.30
Waste management and remediation services	2,361	$210,716,029.01	$91,659.46
Environmental and other technical consulting services	2,326	$148,611,108.89	$80,680.32
Electronic and precision equipment repair and maintenance	1,861	$125,675,118.86	$79,605.14
Facilities support services	1,773	$116,117,475.55	$81,524.96
Maintenance and repair construction of highways, streets, bridges, and tunnels	811	$61,861,309.01	$79,852.25
Specialized design services	795	$45,764,865.70	$71,654.97
Fabricated structural metal manufacturing	752	$65,671,349.59	$87,377.16
Electric power transmission and distribution	604	$102,771,669.41	$170,002.64
Other fabricated metal manufacturing	597	$51,877,827.17	$86,735.05
Water, sewage and other systems	397	$45,531,080.52	$114,296.45
All other miscellaneous electrical equipment and component manufacturing	376	$30,351,891.63	$79,086.11
Switchgear and switchboard apparatus manufacturing	340	$24,345,564.22	$72,634.83
Prefabricated metal buildings and components manufacturing	314	$33,132,765.49	$105,399.52
Valve and fittings, other than plumbing, manufacturing	265	$28,865,327.23	$111,368.00
Engineered wood member and truss manufacturing	255	$19,844,719.19	$82,231.06
Plastics pipe and pipe fitting manufacturing	232	$18,087,225.71	$77,976.25
Fabricated pipe and pipe fitting manufacturing	168	$15,430,451.58	$93,353.91
Metal tank (heavy gauge) manufacturing	132	$9,894,548.27	$74,601.44
Concrete block and brick manufacturing	101	$9,919,970.14	$92,713.23