SAN BERNARDINO COUNTY INITIAL STUDY/MITIGATED NEGATIVE DECLARATION ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of the Initial Study pursuant to San Bernardino County Guidelines under Ordinance 3040 and CEQA Guidelines Section 15063.

PROJECT LABEL:

APN: 0490-171-01 USGS Quad: Lockhart, CA and

Twelve Gauge Lake, CA

Applicant: Juniper Energy, LLC **T.R. Section:** T 11N R 04W Sec 32

Project #: PROJ-2022-00066 Community Plan: Hinkley

Staff: Delanie Garlick, Senior Planner LUZD: RL – Rural Living

Rep: Joshua Saunders, Dudek **Overlays:** Burrowing Owl, Desert

Tortoise, Mojave Ground

Squirrel

Proposal: Conditional Use Permit to

construct and operate an 8-Megawatt photovoltaic solar power generating facility on approximately 75 acres

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino

Land Use Services Department 385 N. Arrowhead Avenue, First Floor San Bernardino, CA 92515-0182

Contact Person: Delanie Garlick, Senior Planner

Phone No: (916) 903-2983 **Fax No:** (909) 387-3223

E-mail: delanie.garlick@weareharris.com

Juniper Energy, LLC APN: 0490-171-01 February 2025

PROJECT DESCRIPTION AND BACKGROUND:

Summary

Juniper Energy LLC (the Applicant) is requesting approval of a Conditional Use Permit (CUP) to construct and operate two 4-Megawat solar photovoltaic (PV) power generating facilities with battery storage capabilities for a combined 8-Megawats in total on approximately 75 acres located northwest of the unincorporated community of Hinkley (the Project). The Project would generate electricity using solar PV modules mounted on single-axis trackers and arranged in north-south arrays across the Project Site. See Figure 2, Site Plan. The system would store electrical production in long-duration batteries, which require no cooling system and have no risk of fires. Switchgear, a weather station, inverters, and transformers would manage the system and convert power for distribution to the nearby transmission grid. Electrical conduit, transmission and collection lines would be installed both overhead and underground.

The solar PV facilities would interconnect to the 33kV distribution line owned and operated by Southern California Edison (SCE). One system would interconnect at a point near the southwestern border of the Project Site. The second system would interconnect along the northern boundary through a new electric line installed along the access easement at a point located at the corner of Roy Road and Harper Lake Road.

The Project Site occurs in an area characterized by solar thermal plants and high-voltage transmission lines. The property is located on Roy Road, approximately one-half mile east from Harper Lake Road and approximately 9 miles northwest of the unincorporated community of Hinkley (the Project Site). See Figure 1, Project Location. The Project Site is currently designated RL. To guarantee access, the owner of the northwest parcel adjacent to the Project Site (APN 0490-171-30) granted Applicant an easement (Accessor No. 2023-0027268) to access the site, pave the existing dirt road, and construct utility improvements along the right-of-way designated Roy Road. The properties to the north, east, south, and west are also zoned Rural Living (RL). The Project Site has a couple of abandoned structures and is otherwise vacant. Two houses and a large thermal solar farm are located on the properties north of the property. The properties on the east and west are vacant. Multiple high-voltage transmission lines run along the property to the south.

Once constructed, the solar PV system would be operated remotely. Occasional maintenance crews would visit the site to clean the modules, and repair and replace equipment as needed. The solar system and the battery storage system would not generate any hazardous waste. A cleaning crew would wash the solar panels once or twice per year, using water trucked to the site. Construction of the solar system would take approximately nine months to complete. Trailers, storage containers, equipment and materials would be stored at the Project Site during construction. Large flatbed trucks would make occasional deliveries of equipment to the site. The undeveloped vacant land at the Project Site would provide sufficient space for crews to park vehicles and stage construction activities off adjacent roads.

Juniper Energy, LLC APN: 0490-171-01 February 2025

ENVIRONMENTAL/EXISTING SITE CONDITIONS:

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "...the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time the environmental analysis is commenced..." (CEQA Guidelines §15125[a]).

The Project does not require the preparation of an Environmental Impact Report and a Notice of Preparation is not required. Thus, the environmental setting for the Project is the approximate date that the Project's Initial Study Checklist commenced in May 2022.

The Project Site comprises primarily undeveloped, flat desert terrain. Specifically, the southern portion of the Project Site (approximately 45 acres) is undeveloped (steel lattice towers supporting regional transmission lines are located along the southern border) and covered by low and dry desert shrubs (generally no taller than 2-4 feet high) that present as a stippled appearance across the site. See Figure 3, Site Photographs, that consists of four photographs which present existing site conditions. A desert wash/drainage also occurs on the southern portion and generally extends from the southwest to the northeast corner of the site. The northern portion of the site displays a similar terrain and vegetation character as the southern portion however, a former housing compound comprised of two dilapidated structures (and the remnants of up to four others) is also present. The northern portion is also crossed by several dirt access roads associated with the former compound and several trees ostensibly planted to provide wind breaks.

Surrounding land uses and land use districts are shown in Table 1.

Table 1 – Existing Land Use and Land Use Zoning Districts

	<u> </u>					
Location	Existing Land Use	Land Use District				
Project Site	Vacant	RL – Rural Living				
North	Vacant; residential use; commercial use; large solar farm	RL – Rural Living				
East	Vacant	RL – Rural Living				
South	Vacant; utility access road; multiple high- voltage power lines	RL – Rural Living				
West	Vacant	RL – Rural Living				

Juniper Energy, LLC APN: 0490-171-01 January 2025

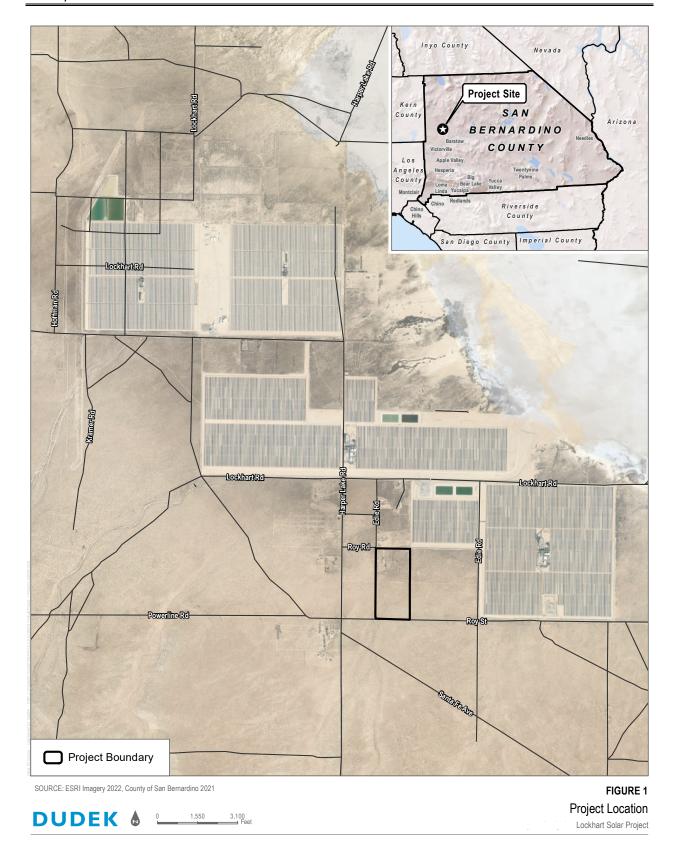
Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

Federal: None.

State of California: Lahontan Water Board.

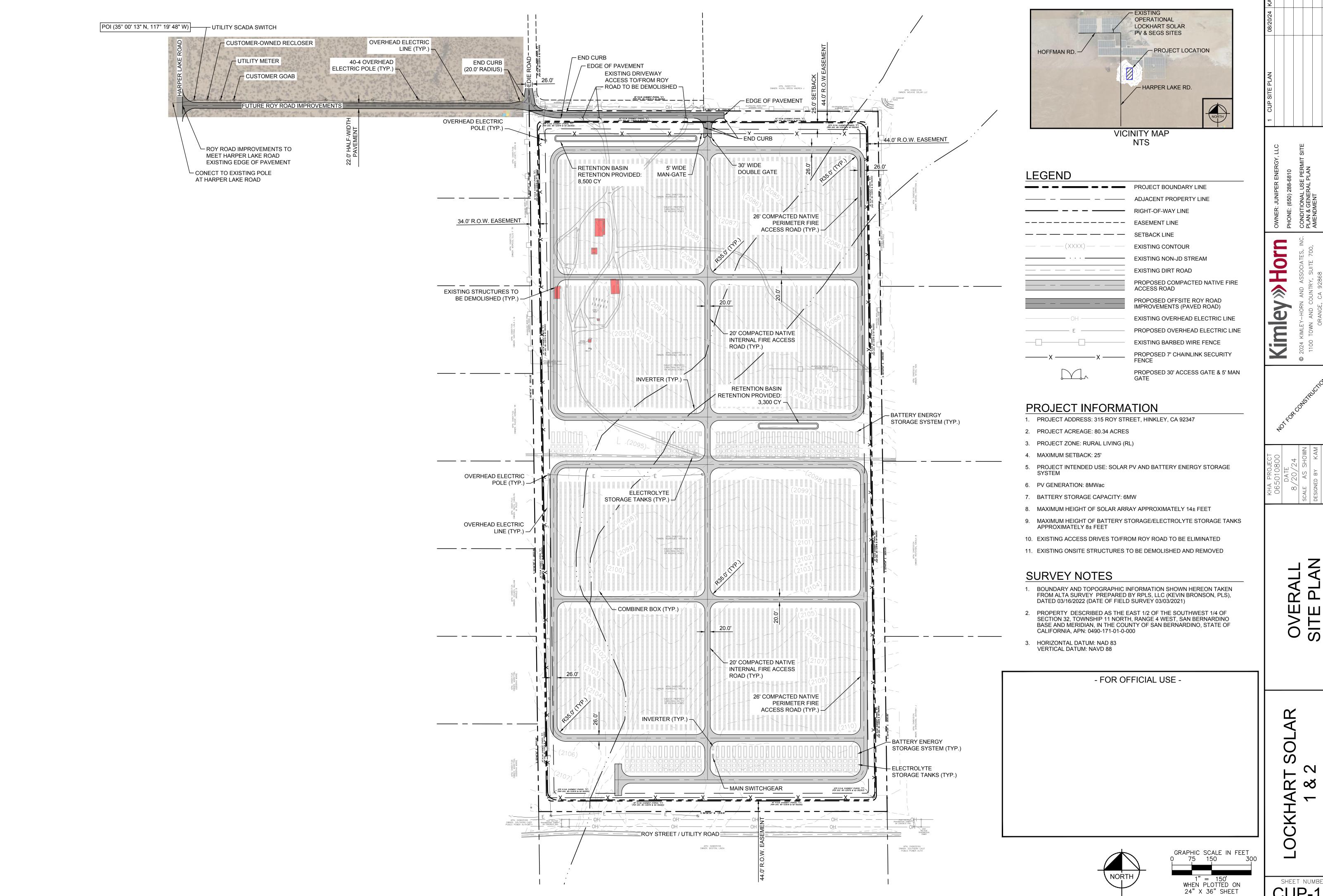
<u>County of San Bernardino</u>: Land Use Services Department-Building and Safety; Geologist, Public Health-Environmental Health Services, Special Districts, and Land Development Public Works: Surveyor, Traffic, Solid Waste Management, HazMat.

<u>Regional</u>: Mojave Desert Air Quality Management District. Local: San Bernardino County Fire Department.



Juniper Energy, LLC APN: 0490-171-01 January 2025

[Figure 2, Site Plan, attached hereto]



SHEET NUMBER CUP-1.0

Figure 3 – Site Photographs

Figure 3(a) – View of site from the center of the northern border viewpoint



Figure 3(b) – View of the site from the southeastern corner viewpoint



Figure 3(c) – View of the site from the southwestern corner viewpoint



Figure 3(d) – Panorama of site from the center of the western border



CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentially, etc.?

On April 23, 2023, the County mailed notification of the proposed Project, pursuant to AB52 to the following tribes: Colorado River Indian Tribes, Serrano Nation of Mission Indians, Morongo Band of Mission Indians (MBMI), Fort Mohave Indian Tribe, San Manuel Band of Mission Indians (SMBMI), Soboba Band of Luiseno Indians, and the Twentynine Palms Band of Mission Indians. Requests for consultations were due to the County by May 25, 2023. The table below shows a summary of comments and responses.

AB 52 Consultation

Tribe	Comment Letter Received	Summary of Response	Conclusion
Colorado River	None	None	Concluded
Twentynine Palms Band of Mission Indians	None	None	Concluded
Morongo Band of Mission Indians	Yes	Requested formal consultation	Concluded
Ft. Mojave	None	None	Concluded
Yuhaaviatam of San Manuel Nation	Yes	Requested formal consultation	Concluded
Serrano Nation of Mission Indians	None	None	Concluded
Soboba Band of Luiseno Indians	None	None	Concluded

Formal consultation was requested by the MBMI on June 7, 2023, and documents were provided the tribe. MBMI requested that the Applicant enter into a separate Tribal Monitoring Services Agreement (TMSA). Formal consultation was requested by the SMBMI which took place on June 16, 2023. The resulting recommended mitigation and monitoring measures have been added to Section V, Cultural Resources, and Section XVIII, Tribal Cultural Resources, of the Initial Study Checklist.

Juniper Energy, LLC APN: 0490-171-01 January 2025

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

EVALUATION FORMAT

This Initial Study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based on its effect on 20 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially	Less than Significant	Less than	No
Significant Impact	with Mitigation Incorporated	Significant	Impact

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

- 1. **No Impact**: No impacts are identified or anticipated and no mitigation measures are required.
- 2. **Less than Significant Impact**: No significant adverse impacts are identified or anticipated and no mitigation measures are required.
- 3. Less than Significant Impact with Mitigation Incorporated: Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)
- 4. **Potentially Significant Impact**: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (List of the impacts requiring analysis within the EIR).

Juniper Energy, LLC APN: 0490-171-01 January 2025

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Energy
Geology/Soils	Greenhouse Gas Emissions	Hazards & Hazardous Materials
Hydrology/Water Quality	Land Use/Planning	Mineral Resources
Noise	Population/Housing	Public Services
Recreation	Transportation/Traffic	Tribal Cultural Resources
Utilities/Service Systems	Wildfire	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

011 t	.110 0031	is of this initial evaluation, the for	owing infamig is made.	
		The proposed project COULD NO environment, and a NEGATIVE D	OT have a significant effect on the ECLARATION shall be prepared.	
		environment, there shall not be revisions in the project have bee	could have a significant effect on the a significant effect in this case because in made by or agreed to by the project TIVE DECLARATION shall be prepared.	
		The proposed project MAY have and an ENVIRONMENTAL IMPAC	a significant effect on the environmen T REPORT is required.	t,
		"potentially significant unless mileast one effect 1) has been adequired pursuant to applicable legal stan mitigation measures based on the	a "potentially significant impact" or tigated" impact on the environment, be quately analyzed in an earlier document dards, and 2) has been addressed by the earlier analysis as described on attact PACT REPORT is required, but it must hain to be addressed.	ıt
		environment, because all potent analyzed adequately in an earlie to applicable standards, and (b) that earlier EIR or NEGATIVE DEC	could have a significant effect on the cially significant effects (a) have been r EIR or NEGATIVE DECLARATION pursuchave been avoided or mitigated pursua CLARATION, including revisions or posed upon the proposed project, nother contracts.	ant to
L				
Sign	ature:	Prepared by Delanie Garlick Senior Planner	Date	
Sign	ature:	Susan O'Strander Assistant Director of Land Use S	 Date Service	

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
I.	AESTHETICS – Except as provided in Public Reproject:	esources C	ode Section	21099, wo	ould the
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare, which will adversely affect day or nighttime views in the area?				
SUBST	ANTIATION: (Check if project is located within General Plan): San Bernardino Cour Impact Analysis, September 23, 2022	ntywide Plar			

- a) Less than Significant Impact. A Visual Impact Analysis, dated September 23, 2022, was prepared for the Project by Dudek. The presence of Project components in future views from local roads in the surrounding area would not substantially interrupt views to distant hillside and ridgeline terrain the region. Therefore, impacts to scenic vistas resulting from implementation of the Project would be less than significant.
- b) **No Impact**. The site is not adjacent to a state scenic highway and would not be readily visible from the nearest state scenic highway (State Route 58; located nearly 5 miles to the south of the Project Site). Thus, no impacts to scenic resources within a designated state scenic highway would occur.
- c) Less Than Significant Impact. Due to the presence of existing solar development in the immediate area (approximately 2,000 acres of solar development is present within a 5-mile

Juniper Energy, LLC APN: 0490-171-01 January 2025

distance of the Project Site), construction and operation of a PV solar facility would not degrade the existing character of the landscape. Impacts would be less than significant.

d) Less Than Significant Impact. New light and glare sources within the Project Site would generally be limited to low-elevation security lighting at a site ingress/egress gate(s). All lighting installed on the Project Site would be directed downwards and shielded to control illumination of off-site areas (including nearby residential lands) and reduce skyglow. Regarding glare, panels would be angled such that reflected light from inbound sun rays would be projected at a similar angle and would generally be "above" the typical height of nearby residences and motorists on roads in the immediate surrounding area of the Project Site. Therefore, impacts would be less than significant.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
II.	agricultural resources are significant environmentate California Agricultural Land Evaluation and by the California Dept. of Conservation as an of on agriculture and farmland. In determining including timberland, are significant environmentation compiled by the California Departmentation to the State's inventory of forest Assessment Project and the Forest Legacy measurement methodology provided in Forest	nental effect I Site Assess ptional mod g whether nental effect artment of land, inclu Assessmen	ets, lead age sment Mode del to use in impacts to ets, lead age Forestry ar ding the F t project; a	ncies may el (1997) p assessing forest res ncies may nd Fire Pro forest and and forest	refer to repared impacts sources, refer to otection Range carbon
a)	Resources Board. Would the project: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non- agricultural use or conversion of forest land to non-forest use.				
Bernar	ANTIATION: (Check if project is located in t dino County General Plan, 2020; California Departn oring Program.	-			

Juniper Energy, LLC APN: 0490-171-01 January 2025

- a) **No Impact**. The California Department of Conservation, Farmland Mapping and Monitoring Program, is responsible with mapping Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance (Farmland) across the State. The entire Project Site has been classified as grazing land by the agency. As proposed the Project would not convert Farmland to non-agricultural use. The Project would not result in impacts relating to converting important Farmland. No impacts would result from the Project.
- b) **No Impact**. The proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. The Project Site is not zoned for agricultural use or under a Williamson Act contract. Accordingly, no impacts would result from the Project.
- c) **No Impact**. The proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The proposed Project area has never been zoned as forest land or timberland because the site is within the desert region, it does not contain forested lands. No impacts would result from the Project.
- d) **No Impact**. The proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. The proposed Project Site is within the desert region of the County and does not contain forest lands. No impacts would result from the Project.
- e) **No Impact**. The proposed Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use. No impacts would result from the Project.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact		
III.	AIR QUALITY - Where available, the significant air quality management district or air pollution make the following determinations. Would the	n control c			-		
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes			
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non- attainment under an applicable federal or state ambient air quality standard?						
c)	Expose sensitive receptors to substantial pollutant concentrations?						
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?						
SUBST	number of people? SUBSTANTIATION: (Discuss conformity with the South Coast District Air Quality Management Plan, if applicable): San Bernardino County General Plan, 2020; California Emissions Estimator Model (CalEEMod Version 2016.3.2 Data Sheets); Mojave Desert Air Quality Management District 2017 (MD AQMD); Air Quality and Greenhouse Gas Assessment, Air Quality & Greenhouse Gas Study dated October 17, 2022, prepared by BlueScape Environmental.						

a) Less than Significant Impact. Air pollutants are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Control Board (CARB) regulates at the state level; and the Mojave Desert Air Quality Management District (MDAQMD) regulates air quality in San Bernardino County.

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate the emission of airborne pollutants and have established ambient air quality standards for the protection of public health. The USEPA is the federal agency designated to administer national air quality regulations, while CARB is the state equivalent in the California Environmental Protection Agency (CalEPA). Local control over air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCDs) (also referred to as Air Quality Management Districts). CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide. The Project Site is located in the Mojave Desert Air Basin (MDAB), which

Juniper Energy, LLC APN: 0490-171-01 January 2025

is under the jurisdiction of the MDAQMD. The MDAQMD has developed regional significance thresholds for regulated pollutants, shown below in Table 2, Significant Emissions Thresholds.

A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that a project is consistent with the land use plan that was used to generate the growth forecast.

Construction of the Project would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM10 and PM2.5) from soil disturbance and exhaust emissions (NOx and CO) from heavy construction vehicles. Based on the emissions shown below in Tables 2 and 3, Significant Emissions Thresholds and Maximum Daily Construction Emissions with Control Measures, respectively, construction of the proposed Project would not exceed the MDAQMD regional construction emission thresholds for annual emissions. Thus, the Project construction would not violate an air quality standard or result in a cumulatively considerable increase in ozone or particulate matter emissions or expose receptors to substantial pollutant concentrations.

In addition, the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert set forth a comprehensive set of programs that would lead the MDAB into compliance with federal and state air quality standards. The control measures and related emission reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with these attainment plans for development projects is determined by demonstrating compliance with Air Quality Management Plans (AQMPs).

Growth projections included in the AQMPs form the basis for the projections of air pollutant emissions and are based on general plan land use designations and the Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS) demographics forecasts (SCAG 2017). While SCAG has recently adopted the 2020-2045 RTP/SCS, the MDAQMD has not released an updated AQMP that utilizes information from the 2020-2045 RTP/SCS. As such, this consistency analysis is based off the 2016-2040 RTP/SCS. The population, housing, and employment forecasts within the 2016-2040 RTP/SCS are based on local general plans as well as input from local governments, such as the County. The MDAQMD has incorporated these same demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment) into the AQMPs.

The Project would be required to comply with all applicable MDAQMD Rules and Regulations, including, but not limited to Rules 401 (Visible Emissions), 402 (Nuisance), 403 (Fugitive Dust), and Rule 1113 (Architectural Coatings). Since the Project would conform to local land use plans and would comply with all applicable MDAQMD Rules and Regulations, impacts related to conformance with the applicable attainment or maintenance plans would be less than significant.

Juniper Energy, LLC APN: 0490-171-01 January 2025

b) Less than Significant Impact. An Air Quality & Greenhouse Gas Study dated October 17, 2022, was prepared by BlueScape Environmental for the Project. As previously discussed, the MDAQMD has developed regional significance thresholds for regulated pollutants, shown below in Table 2. The MDAQMD's Guidelines indicate that any projects in the MDAB with daily regional emissions that exceed any of the indicated thresholds may be considered as having an individually and cumulatively significant air quality impact.

Table 2. Significant Emissions Thresholds

Criteria Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO _x)	25	137
Volatile Organic Compounds (VOC)	25	137
Sulfur Oxides (SO _x)	25	137
Particulate Matter (PM ₁₀)	15	82
Particulate Matter (PM _{2.5})	12	65

Source: Air Quality & Greenhouse Gas Study dated October 17, 2022, BlueScape Environmental

Construction of the Project would generate temporary air pollutant emissions. For the purpose of estimating emissions, it was assumed that 53 acres within the parcel would be disturbed and graded for overall site development. No haul trips are expected because import or export of soils would not be required to achieve final grades. Construction phases would generally consist of demolition, site preparation and grading, and construction of the solar PV energy storage system and the associated racking system.

Construction is anticipated to occur over six months. As shown in Table 3, below, construction emissions for the proposed Project would not exceed MDAQMD's daily emissions thresholds as demonstrated in Table 3, and therefore, impacts would be considered less than significant.

Table 3. Maximum Daily Construction Emissions with Control Measures

		Maximum Emissions (lbs/day)					
	voc	NO _x	СО	SO ₂	PM ₁₀	PM _{2.5}	
Summer Daily Maximum	6.10	32.3	63.8	0.211	15.7	4.87	
Winter Daily Maximum	5.98	33.1	57.1	0.201	15.7	4.87	
Significance Thresholds	13	137	548	137	82	65	
Threshold Exceeded?	No	No	No	No	No	No	

Source: Air Quality & Greenhouse Gas Study dated October 17, 2022, BlueScape Environmental

Juniper Energy, LLC APN: 0490-171-01 January 2025

Table 4 summarizes the Project maximum annual construction emissions, including dust control measures. Based on the emissions shown, construction of the proposed Project would not exceed the MDAQMD regional construction emission thresholds for annual emissions.

Table 4. Maximum Annual Construction Emissions with Control Measures

	Maximum Emissions (tons/year)						
	voc	NOx	СО	SO ₂	PM ₁₀	PM _{2.5}	
Annual Maximum	0.206	1.27	2.03	0.007	0.548	0.177	
Significance Thresholds	25	25	100	25	15	12	
Threshold Exceeded?	No	No	No	No	No	No	

Source: Air Quality & Greenhouse Gas Study dated October 17, 2022, BlueScape Environmental

Therefore, construction of the Project would not violate an air quality standard or result in a cumulatively considerable increase in ozone or particulate matter emissions or expose receptors to substantial pollutant concentrations (MD thresholds 1 and 2).

Over its lifetime, the Project would comply with the regulations set forth by the MDAQMD Rule Book or CEQA and Federal Conformity Guidelines. Electricity generation via the use of photovoltaic solar systems does not generate chemical emissions that would negatively contribute to air quality. Once operational, the facility would be operated remotely, generating limited traffic. Periodic maintenance visits would not exceed once per month on average. Thus, potential emissions from operations would have less than significant impact.

c) Less Than Significant Impact. The MDAQMD defines sensitive receptors as residences, schools, daycare centers, playgrounds and medical facilitates. The closest existing sensitive receptor to the Project Site is a residence located approximately 110 feet north (across Roy Road). Given the relatively limited number of heavy-duty construction equipment and construction schedule necessary to the complete the Project, the proposed Project would not result in a long-term substantial source of toxic air containment emissions and corresponding individual cancer risk.

Table 3 above summarizes the Project's maximum daily construction emissions, including dust control measures. Based on the emissions shown, construction of the proposed Project would not exceed the MDAQMD regional construction emission thresholds for daily emissions. Thus, construction of the Project would not violate an air quality standard or result in a cumulatively considerable increase in ozone or particulate matter emissions or expose sensitive receptors to substantial pollutant concentrations (MD thresholds 1 and 2). Therefore, no significant adverse impacts are anticipated.

d) Less Than Significant Impact. The proposed Project would involve the use of diesel-powered construction equipment. Diesel exhaust may be noticeable temporarily at adjacent properties while construction activities occur. Construction activity would cease to occur after construction is completed. Other than during construction, no additional sources of objectionable odors have been identified for the proposed Project.

The proposed Project could release localized odors during operations from vehicles visiting the site and routine maintenance and repairs. The Project, however, does not include industrial or

Juniper Energy, LLC APN: 0490-171-01 January 2025

agricultural uses that are typically associated with objectionable odors. Moreover, such odors, if any, would be confined primarily to the Project Site and would readily dissipate. Therefore, impacts associated with objectionable odors would be less than significant.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
IV.	BIOLOGICAL RESOURCES - Would the project	:			
a)	Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife Service?				
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?				
SUBS	TANTIATION: (Check if project is located in the Bio for any species listed in the Califo Bernardino County General Plan, 20 and Desert Tortoise Survey, Dudek, N October 2022; Mohave Ground Squi	ornia Natura 20; Biologic May 2022; Bi	al Diversity [al Resources iological Tech	Database Constraints nical Report]): San Analysis :, Dudek,

Juniper Energy, LLC APN: 0490-171-01 January 2025

Approved Jurisdictional Determination, U.S. Army Corps of Engineers, March 17, 2023.

a) Less than Significant Impact with Mitigation Incorporated. Biological Resources Constraints Analysis and Desert Tortoise Survey dated May 2022, a Biological Technical Report dated October 2022, and the Mohave Ground Squirrel Live-Trapping Survey, Juniper Solar Project, San Bernardino County, California dated October 20, 2023, were prepared for the Project by Dudek. Dudek biologists conducted literature reviews and field surveys of the Project Site. Field surveys conducted within the Project Site included a wildlife habitat assessment, vegetation mapping, a formal jurisdictional delineation, rare plant survey, and protocol-level surveys for the desert tortoise (Gopherus agassizii) and the State-threatened Mohave ground squirrel (MGS, *Xerospermophilus mohavensis*).

The field surveys identified 14 vascular plant species consisting of 10 native species (71 percent) and 4 nonnative species. A total of 11 wildlife species were observed within the project site consisting of eight bird species and three reptile species. These species are summarized in Table 5 and 6.

Wildlife Species

Table 5: Wildlife Species on the Project Site

Common Name (Scientific Name)	Description
Birds	
Say's phoebe Sayornis saya	Say's phoebe is a passerine bird in the tyrant flycatcher family, <i>Tyrannidae</i> . A common bird across western North America, it prefers dry, desolate areas. It was named for Thomas Say, an American naturalist.
Common raven Corvus corax	The common raven is a large all-black passerine bird. It is the most widely distributed of all corvids, found across the Northern Hemisphere.
Northern mockingbird Mimus polyglottos	The northern mockingbird is a mockingbird commonly found in North America. This bird is mainly a permanent resident, but northern birds may move south during harsh weather. This species has rarely been observed in Europe.
LeConte's thrasher Toxostoma lecontei	LeConte's thrasher is a pale bird found in the southwestern United States and northwestern Mexico. It prefers to live in deserts with very little vegetation, where it blends in with the sandy soils. LeConte's thrashers are nonmigratory birds that reside in the same territory annually.
House sparrow Passer domesticus	The house sparrow is a bird of the sparrow family <i>Passeridae</i> , found in most parts of the world. It is a small bird that has a

Common Name (Scientific Name)	Description			
	typical length of 16 cm and a mass of 24–39.5 g. Females and young birds are colored pale brown and grey, and males have brighter black, white, and brown markings.			
Mourning dove Zenaida macroura	The mourning dove is a member of the dove family, <i>Columbidae</i> . The bird is also known as the American mourning dove, the rain dove, colloquially as the turtle dove, and it was once known as the Carolina pigeon and Carolina turtledove.			
European starling Sturnus vulgaris The common starling, also known as the European star North America and simply as the starling in Great Brita Ireland, is a medium-sized passerine bird in the starling family, Sturnidae.				
Sagebrush sparrow Artemisiospiza nevadensis	The sagebrush sparrow is a medium-sized sparrow of the western United States and northwestern Mexico. It used to be placed in the genus <i>Amphispiza</i> , but evidence from 2007 and 2009 suggested it be placed in its own genus.			
Reptiles				
Common side-blotched lizard Uta stansburiana	The common side-blotched lizard is a species of side-blotched lizard in the family <i>Phrynosomatidae</i> . The species is native to dry regions of the western United States and northern Mexico.			
Tiger whiptail Aspidoscelis tigris	The western whiptail is a species of lizard in the family <i>Teiidae</i> . The species is found throughout most of the southwestern United States and northern Mexico. Most of its populations appear stable, and it is not listed as endangered in any of the states comprising its range.			
Long-nosed leopard lizard Gambelia wislizenii	The long-nosed leopard lizard is a species of relatively large North American lizard in the family <i>Crotaphytidae</i> . <i>Gambelia wislizenii</i> ranges in snout-to-vent length from 8.3 to 14.6 cm. It has a large head, a long nose, and a long round tail that can be longer than its body.			

Table 6: Plant Species on the Project Site

Common Name (Scientific Name)	Description
Cheesebush Ambrosia salsola	Ambrosia salsola, commonly called cheesebush, winged ragweed, burrobush, white burrobrush, and desert pearl, is

Common Name (Scientific Name)					
	a species of perennial shrub in the family <i>Asteraceae</i> native to deserts of the southwestern United States and northwestern Mexico.				
Pincushion flower Chaenactis fremontii	Chaenactis fremontii, with the common names Frémont's pincushion and desert pincushion, is a species of annual wildflower in the daisy family. Both the latter common name, and the specific epithet are chosen in honor of John C. Frémont.				
Smooth desert dandelion Malacothrix glabrata	Malacothrix glabrata, commonly known as the smooth desert dandelion or desert dandelion, is an annual plant in the family Asteraceae. It is common to the southwestern deserts of North America and has showy pale-yellow to white flowers.				
Cryptantha sp. Cryptantha sp	Small annual, with small, brilliant white flowers. Several species of this genus occur in the Santa Monica Mountains, and they are difficult to distinguish. There appear to be three species on CI habitats.				
Tournefort's mustard Brassica tournefortii	Brassica tournefortii is a species of plant known by the common names Asian mustard, pale cabbage, African mustard, and Sahara mustard, and is well known as an invasive species, especially in California.				
Wiggins' cholla Cylindropuntia echinocarpa	Cylindropuntia echinocarpa is a species of cactus known by the common names silver cholla, golden cholla, and Wiggins' cholla. It was formerly named Opuntia echinocarpa.				
Allscale Atriplex polycarpa	Atriplex polycarpa (Allscale, Cattle spinach, Allscale saltbush, Cattle saltbush) is a plant in the Amaranthaceae family. It is native to the southwestern United States and northern Mexico.				
Redstem stork's bill Erodium cicutarium	Erodium cicutarium, also known as common stork's-bill, redstem filaree, redstem stork's bill or pinweed, is a herbaceous annual – or in warm climates, biennial – member of the family Geraniaceae of flowering plants.				
Great Basin langloisia Langloisia setosissima	Langloisia setosissima, the bristly langloisia, bristly-calico, Great Basin langloisia or lilac sunbonnets, is a flowering plant, the sole species in the genus Langloisia in the family Polemoniaceae.				
Anderson's boxthorn	Lycium andersonii is a species of flowering shrub in the nightshade family, Solanaceae. Its common names include				

Juniper Energy, LLC APN: 0490-171-01 January 2025

Common Name (Scientific Name)	Description
Lycium andersonii	water-jacket, redberry desert-thorn, Anderson thornbush, Anderson's desert thorn, Anderson boxthorn, Anderson <i>lycium</i> , Anderson wolfberry, and squawberry.
Peach thorn Lycium cooperi	Lycium cooperi is a species of flowering plant in the nightshade family known by the common name peach thorn. It is native to the southwestern United States, where it grows in a variety of desert and mountain habitat types.
Tamarisk Tamarix ramosissima	Tamarix ramosissima, commonly known as saltcedar salt cedar, or tamarisk, is a deciduous arching shrub with reddish stems, feathery, pale green foliage, and characteristic small pink flowers. The cultivar 'Pink Cascade' has gained the Royal Horticultural Society's Award of Garden Merit.
Creosote bush Larrea tridentata	Larrea tridentata, called creosote bush and greasewood as a plant, chaparral as a medicinal herb, and gobernadora in Mexico, due to its ability to secure more water by inhibiting the growth of nearby plants. In Sonora, it is more commonly called hediondilla; Spanish hediondo = "smelly".
Arabian schismus Schismus arabicus	Schismus arabicus is a species of grass known by the common name Arabian schismus. It is native to northern Africa, temperate Asia, and it is also known as an introduced species in the southwestern United States. It grows in many types of habitat, including disturbed areas.

The surveys also identified the possible impacts to special-status species, defined as follows:

- Species classified as endangered or threatened by USFWS under the federal Endangered Species Act ("federally listed")
- Species classified as endangered, threatened, or rare by CDFW under the California Endangered Species Act ("state listed")
- Candidates for future listing under the federal or state Endangered Species Act
- Plant species designated by CNPS as "rare, threatened, or endangered in California" (California Rare Plant Rank of 1B and 2B)
- Wildlife species designated as a species of special concern by CDFW
- Wildlife species fully protected under California Fish and Game Code Sections 3511, 4700, 5050, and 5515

Juniper Energy, LLC APN: 0490-171-01 January 2025

Species that are considered a locally significant species; that is, a species that is not rare
from a statewide perspective but is rare or uncommon in a local context, such as within
a county or region, or is so designated in local or regional plans, policies, or ordinances

Special-status species data were compiled from the following sources: the CNDDB (CDFW 2022a), the CNPS Inventory of Rare and Endangered Plants (CNPS 2022a), and the USFWS species occurrence database (USFWS 2022). The CNDDB and CNPS queries were run for all species recorded within the Twelve Gauge and Lockhart U.S. Geological Survey 7.5-minute quadrangles and the surrounding 10 quadrangles. To determine current range and other species-specific parameters, a number of species-specific resources were used, including the Consortium of California Herbarium (2022), California Wildlife Habitat Relationships data (CDFW 2022b; Zeiner et al. 1990), and California Bird Species of Special Concern (Shuford and Gardali 2008). Table 7 summarizes potential for special-status species to occur at the Project Site.

Table 7. Special-Status Wildlife Species Potential to Occur

Common Name (Scientific Name)	Potential to Occur
Amphibians	
Arroyo Toad Anaxyrus Californicus	Not expected to occur. Suitable aquatic habitat is not present on the project site or in the vicinity.
Reptiles	
Mojave Desert Tortoise Gopherus Agassizii	Moderate potential to occur. There are local, recent records of the species and suitable habitat is present; however, no recent sign of the species was observed during the initial survey.
Mohave Fringe-toed Lizard Uma Scoparia	Not expected to occur. Suitable habitat is not present on the project site or in the vicinity.
Birds	
Golden Eagle Aquila Chrysaetos (nesting & wintering)	Not expected to occur (nesting and wintering). Suitable nesting habitat is not present on the project site or in the vicinity; however, the species may forage in the area.
Burrowing Owl Athene Cunicularia (burrow sites & some wintering sites)	Moderate potential to occur. There are local, recent records of the species and suitable habitat is present; however, no sign of the species was observed during the initial survey.

Common Name	Potential to Occur		
(Scientific Name)			
Western Snowy Plover Charadrius Alexandrinus Nivosus (nesting)	Not expected to occur (nesting). Suitable habitat is not present on the project site or in the vicinity.		
Mountain Plover Charadrius Montanus (wintering)	Not expected to occur (wintering). Suitable aquatic habitat is not present on the project site or in the vicinity.		
Western Yellow-billed Cuckoo Coccyzus Americanus occidentalis (nesting)	Not expected to occur. Suitable habitat is not present on the project site or in the vicinity.		
Prairie Falcon Falco Mexicanus (nesting)	Not expected to occur (nesting). Suitable nesting habitat is not present on the project site or in the vicinity; however, the species may forage in the area.		
Loggerhead Shrike Lanius Ludovicianus (nesting)	Low potential to occur. Limited suitable habitat within the site and species was not observed during the habitat assessment.		
Yuma Ridgway's Fail Rallus Obsoletus Yumanensis	Not expected to occur. Suitable habitat is not present in the project site.		
LeConte's Thrasher Toxostoma Lecontei	Observed within the site during the initial survey and potential to nest within desert scrub habitat.		
Fishes			
Mohave Tui Chub Siphateles Bicolor Mohavensis	Not expected to occur. Suitable aquatic habitat is not present on the project site or in the vicinity.		
Mammals			
Silver-haired Bat Lasionycteris Noctivagans	Not expected to occur. Suitable habitat is not present in the project site.		

Juniper Energy, LLC APN: 0490-171-01 January 2025

Common Name (Scientific Name)	Potential to Occur		
Mojave River Vole Microtus Californicus Mohavensis	Not expected to occur. Suitable habitat is not present in the project site.		
Mohave Ground Squirrel Spermophilus (Xerospermophilus) Mohavensis	Moderate potential to occur. There are local, recent records of the species and suitable habitat is present; however, no small burrows were observed during the initial survey.		
American Badger Taxidea Taxus	Moderate potential to occur. There are local, recent records of the species and suitable habitat is present; however, no active burrows were observed during the initial survey.		
Invertebrates			
Crotch Bumble Bee Bombus Crotchii	Low potential to occur. Limited floral resources occur within the site.		
Western Bumble Bee Bombus Occidentalis	Not expected to occur. Suitable habitat is not present in the project site.		
Monarch Butterfly Danaus Plexippus	Not expected to occur. Suitable habitat is not present in the project site.		

As part of an initial wildlife habitat assessment and rare plant survey, LeConte's thrasher was observed within the Project Site. In addition, the following special-status species have not been detected on site but have a moderate or low potential to occur: Mohave ground squirrel, burrowing owl, desert kit fox, American badger, and desert tortoise.

Mojave Desert Tortoise (Gopherus agassizii). The Mojave population of desert tortoise (Gopherus agassizii) includes all tortoises north and west of the Colorado River in Arizona, Utah, Nevada, and California. Listed as threatened in 1990, these tortoises are impacted by ongoing threats, including loss, degradation, and fragmentation of habitat due to development. They are also impacted by increased wildfire due to non-native invasive vegetation, disease, road mortality and predation of their eggs and hatchlings.

Desert tortoise is a federally and state-listed threatened species. Throughout most of the Mojave Desert, desert tortoises occur most commonly on gently sloping terrain with sandy gravel soils and where there is sparse cover of low-growing shrubs, which allows for the establishment of herbaceous plants. Soils must be friable enough for digging burrows, but firm enough so that burrows do not collapse (USFWS 2008).

Juniper Energy, LLC APN: 0490-171-01 January 2025

The Mojave Desert Tortoise has a moderate potential to occur in the Project area. Therefore, protocol-level surveys were conducted within the Project Site for desert tortoise. There are local, recent records of the Mojave Desert Tortoise and suitable habitat is present; however, no recent sign of the species were observed during the initial survey of the site by biologists. No desert tortoise signs (e.g., whitewash, scat, carapace), individuals, or suitable tortoise burrows were observed. Five burrows were mapped during the initial survey. However, these burrows were all partially collapsed, inactive (i.e., cobwebs present) and deemed not suitable for desert tortoise. Accordingly, because Desert Tortoise protocol level surveys were negative, impacts to unoccupied habitat would be less than significant and would not require mitigation.

Mohave Ground Squirrel (Spermophilus (Xerospermophilus) Mohavensis). The separate protocol survey was conducted in accordance with the Mohave Ground Squirrel Survey Guidelines from the California Department of Fish and Wildlife (CDFW 2010), or in accordance with any modified survey methodology as approved in writing by CDFW. As directed by the protocol, Dudek conducted surveys in May 2023. Based on the negative results of the surveys, Dudek concluded that the Mohave Ground Squirrel is not likely to occur on the project site. Therefore, impacts to this species are not anticipated with implementation of the Project. Additionally, because the Mohave ground squirrel surveys were negative, impacts to unoccupied habitat would be less than significant and would not require mitigation.

LeConte's Thraser (Toxostoma Lecontei). LeConte's thrasher was observed during the biological surveys conducted within the Project Site, and this species has potential to nest within scrub habitat on the Project Site. Given the mobile nature of this species (i.e., they are likely to move away from the Project Site to use adjacent areas of equally suitable habitat), it is anticipated that impacts from the Project would not result in direct impacts to birds outside of the nesting season. Implementation of Mitigation Measure BIO-1 (Nesting Bird Surveys) would reduce impacts if construction commences during nesting season. Additionally, because impacts to suitable nesting habitat would be small in comparison to the amount of suitable nesting habitat occurring in the surrounding area, impacts to suitable nesting habitat would be less than significant.

American Badger, Desert Kit Fox, and Burrowing Owl. There is a moderate potential for the American badger and desert kit fox to occur with the Project Site. Also, there is low potential for burrowing owl to occur within the Project Site based on the lack of suitable burrows and burrowing owl sign. Should these species be present, construction of the project could result in species mortality. Implementation of the Mitigation Measures BIO-2 (Burrowing Owl Pre-Construction Surveys), BIO-3 (American Badger and Desert Kit Fox Surveys), and BIO-4 (Education Programs) would reduce impacts to these respective species to less than significant.

Long-term (operational) indirect impacts to special-status wildlife would be less than significant due to solar array maintenance occurring infrequently and because it would not affect off-site areas.

Rare Plants

A rare plant survey for special-status plant species was conducted on April 7, 2022, by Dudek. Given the typical blooming periods of the special-status plant species potentially occurring within the Project Site based on soils, elevation, and vegetation communities, it was determined that all target special-status species could be surveyed in one pass in April. See Table 8, Vegetation Communities and Land Covers within the Project Site. The survey methods conformed to the

Juniper Energy, LLC APN: 0490-171-01 January 2025

California Native Plant Society's Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to Special- Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), and the USFWS General Rare Plant Survey Guidelines (Cypher 2002)

Table 8 - Vegetation Communities and Land Covers within the Project Site

Vegetation Community/Land Cover Type	Ranking ¹	Total Acreage
Allscale scrub (Atriplex polycarpha, 36.340.04)	G4, S4	77.69
Unvegetated Wash	GNR, SNR	0.86
Disturbed Habitat	GNR, SNR	3.86
Urban/Developed	GNR, SNR	0.56
	Total	82.97

No special-status plant species were observed occurring within the Project Site during the 2022 survey effort. There are no other special-status plant species with a moderate to high potential to occur on the Project Site.

- b) Less than Significant Impact with Mitigation Incorporated. The Project Site has no standing surface water and is devoid of native riparian vegetation or other sensitive natural community identified in local or regional plans, policies, regulations, or by California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). As such, the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- c) Less Than Significant Impact with Mitigation Incorporated. A system of braided ephemeral channels flows from the southwest corner to the northeast corner across the Project Site carrying surface flows. The braided channels dissipate within the middle of the site and dissipate off site prior to reaching Harper Lake (surface flow may be blocked by an existing solar facility).

Because NatureServe ranks vegetation communities at the global level, it has few rankings at the state or province level available. However, the Natural Communities List (CDFW 2021) includes state-level rarity rankings (i.e., the subnational [S] rank) for vegetation communities. This list is considered the authority for ranking the conservation status of vegetation communities in California. Natural Communities with ranks of S1–S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA (CDFW 2021).

¹ In September 2020, CDFW published the Natural Communities List (CDFW 2021), which uses the scientific name of the dominant species in that alliance as the alliance name and includes a global and state rarity rank based on the NatureServe Standard Heritage Program methodology (NatureServe 2022). The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global and S = subnational). The numbers have the following meaning (NatureServe 2022):

^{1 =} critically imperiled

^{2 =} imperiled

^{3 =} vulnerable to extirpation or extinction

^{4 =} apparently secure

^{5 =} demonstrably widespread, abundant, and secure

NA = not applicable

GNR = unranked, global rank not yet assessed

SNR = unranked, subnational rank not yet assessed

Juniper Energy, LLC APN: 0490-171-01 January 2025

The Harper Valley is considered a closed basin and functions as an isolated intrastate watershed system lacking the presence of a traditional navigable water. Therefore, the Project area does not contain any streams, wetland waters, or other waters that are subject to federal jurisdiction under Section 404 of the Clean Water Act. Furthermore, Applicant will seek confirmation after completion of this study from the regional water quality control board and CDFW that there are no jurisdictional waters of State importance located at the Project Site.

The Project would require minimal grading, with minimal impact to existing drainage patterns and overall topography of the site. Indirect impacts to off-site jurisdictional waters could occur from accidental release of materials, such as debris, oil, or petroleum products, into jurisdictional waters during Project construction. Implementation of BIO-5 (Best Management Practices/Erosion/Runoff) would reduce indirect impacts from Project construction to less than significant by controlling site runoff and hazardous waste spills and implementing best management practices.

- d) Less Than Significant Impact. The Project Site does not provide for regional wildlife movement or serve as a regional wildlife corridor. Existing nearby habitat linkages and wildlife corridor functions would remain intact while construction activities are conducted and following the Project's completion. Wildlife movement may be temporarily disrupted during the construction phase of the Project, although this impact would be both localized and short-term. Nearby corridors that could support wildlife movement in the region, including the Desert Tortoise Conservation Area/Least Cost Corridor approximately 1,330 feet to the west, would not be impacted by the Project. Further, the Project Site does not contain nursery sites, such as bat colony roosting sites or colonial bird nesting areas. Therefore, impacts associated with wildlife movement, wildlife corridors, and wildlife nursery sites would be less than significant.
- e) **No Impact**. No special-status plant species were observed within the Project Site, and there are no other special-status plant species with a moderate to high potential to occur on the Project Site. The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, impacts are not anticipated.
- f) **No Impact**. The Project Site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impacts are anticipated.

MITIGATION MEASURES

Mitigation Measure BIO-1: Nesting Bird Surveys. In the event that construction activities occur during the nesting bird breeding season (February 1 through September 1), a qualified biologist shall conduct pre- construction survey within 7 days prior to any on-site grading and construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. Pre-construction nesting bird surveys shall also cover a 500-foot buffer around the site, as feasible.

If occupied nests are found, then limits of construction to avoid occupied nests shall be established by the qualified biologist in the field with flagging, fencing, or other appropriate barriers (e.g., 250 feet around active passerine nests to 500 feet around active non-listed raptor nests), and construction personnel shall be instructed on the sensitivity of nest areas. The nest area shall be avoided until the nest is vacated, and the juveniles have fledged and are no longer

Juniper Energy, LLC APN: 0490-171-01 January 2025

reliant upon the nest or parental care for survival, construction may proceed in the setback areas. If migratory birds are not detected during the pre-construction survey, no further measures would be required, and construction activities may proceed.

Mitigation Measure BIO-2: Burrowing Pre-Construction Owl Surveys. One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project Site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation or current version.

If burrowing owls are detected, the Burrowing Owl Relocation Plan shall be implemented in consultation with CDFW. As required by the Burrowing Owl Relocation Plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation or current version. No Project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed.

Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Burrowing owls shall be excluded from burrows in the immediate Project Site and within a buffer zone by installing one-way doors in burrow entrances. These doors shall be placed at least 48 hours prior to ground-disturbing activities. The Project Site shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities.

Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow.

Mitigation Measure BIO-3: American Badger and Desert Kit Fox Surveys. A pre-construction survey for American badger and desert kit fox shall be conducted on the Project Site within 10 days prior to the start of construction to determine the presence/absence of either species. If either species is discovered during the survey, an American Badger/Desert Kit Fox Mitigation and Monitoring Plan shall be developed. The Mitigation and Monitoring Plan shall include avoidance and minimization measures to reduce potential impacts to either species, as well as compensatory mitigation to offset direct or indirect impacts. The plan shall be developed in consultation with CDFW. At a minimum, the plan shall do the following:

- Identify pre-construction survey methods for American badger and desert kit fox.
- Describe feasible pre-construction and construction-phase avoidance methods.
- Describe pre-construction and construction-phase relocation methods, including the possibility for passive relocation.
- For burrows that would not be impacted by the Project, identify appropriate construction exclusion zones for both active and natal burrows.
- Coordinate survey findings prior to and during construction to meet the information needs
 of wildlife health officials in monitoring the health of kit fox populations.

Juniper Energy, LLC APN: 0490-171-01 January 2025

Mitigation Measure BIO-4: Education Program. An education program (Worker Environmental Awareness Program (WEAP)) for all persons employed or otherwise working at the Project Site shall be administered before performing any clearing and grubbing activities. The WEAP shall consist of a video presentation created by the qualified biologist that includes a discussion of the biology and status of the Burrowing Owl, LeConte's Thrasher, American Badger, and Kit Fox, and about the other biological resources mitigation measures described in the California Environmental Quality Act document. Interpretation for non-English-speaking workers shall be provided, and the same instruction shall be provided to any new workers before they are authorized to perform clearing and grubbing activities at the Project Site. Upon completion of the WEAP, which can be administered by the lead person from the construction crew, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent staff who would be conducting work at the Project Site.

Mitigation Measure BIO-5: Best Management Practices/Erosion/Runoff. The construction limits shall be flagged prior to ground-disturbance activities, and all construction activities, including equipment staging and maintenance, shall be conducted within the flagged disturbance limits.

All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly handled or disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area. Soil binding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.

All trash and food-related waste shall be placed in self-closing, animal-proof containers and removed at least once per week from the site to prevent overflow. The fully covered trash receptacles shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Workers shall not feed wildlife or bring pets to the Project Site. Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the Project Site on a daily basis.

Juniper Energy, LLC APN: 0490-171-01 January 2025

		Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
V.	CULTURAL	RESOURCES - Would the project:				
a)		ubstantial adverse change in the of a historical resource pursuant to				
b)		ubstantial adverse change in the of an archaeological resource §15064.5?				
c)	-	human remains, including those ormal cemeteries?				
SUBSTANTIATION: (Check if the project is located in the Cultural or Palaeontologic Roverlays or cite results of cultural resource review): San Bernarding General Plan, 2020; Federal Register; Built Environment Inventory and Enroport, Dudek, November 2022; and Cultural Resources Inventory and Enroport, Dudek, November 2022.			aluation			

a) **No Impact**. A Built Environment Inventory and Evaluation Report, dated November 2022, was prepared for the Project by Dudek. The Project Site contains buildings and structures over the age of 45, including a former residence, agricultural outbuilding, Quonset Hut and shed. Although there is no federal nexus for this Project, the subject property was evaluated in consideration of National Register of Historic Places (NRHP) designation criteria. The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to California Public Resources Code Section 5024.1(c) (1–4), a resource is considered historically significant if it (a) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Juniper Energy, LLC APN: 0490-171-01 January 2025

2. Is associated with the lives of persons important in our past.

- 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- 4. Has yielded, or maybe likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

A California Historical Resource Information System record search was completed by South Central Coastal Information Center (SCCIC) at California State University, Fullerton on May 18, 2022. In addition to the records search results from North Central Information Center, Dudek accessed several archival repositories, historical records, and related additional reports. Further, archeologists conducted an in-person field survey of the Project Site on August 16, 2021, documenting archaeological resources and built environment properties potentially affected by the Project and the property significance evaluation was conducted by architectural historians.

Four structures were present on the property; three more than 45 years old. As a result of archival research, field survey, and property significance evaluations, the properties located within the study area are ineligible for listing in the NRHP and the CRHR. Therefore, none of the properties located in the study area contain historical resources under CEQA. The project finding for built environment cultural resources under CEQA the project finding is no impact.

b) Less than Significant Impact with Mitigation Incorporated. A Cultural Resources Inventory and Evaluation Report dated November 2022 was prepared for the Project by Dudek. On May 18, 2022, Dudek requested a search of the California Historical Resources Information System (CHRIS) records held at SCCIC. The staff at SCCIC returned the results of the search to Dudek. The search of the proposed Project Site and a 1-mile radius included collections of mapped prehistoric, historic, and built environment resources; Department of Parks and Recreation (DPR) site records; technical reports; and ethnographic references. The search also included historical maps of the Project Site, the NRHP, the CRHR, the California Historic Property Data File, the lists of California State Historical Landmarks, California Points of Historical Interest, the Archaeological Determinations of Eligibility, and the Built Environment Resources Directory (BERD).

The archival research identified three previously recorded resources on the Project Site. All three of these resources were isolates, each consisting of a single aphanitic silica lithic flake. Dudek was unable to relocate these resources on the Project Site. The intensive survey identified two new archaeological resources on the Project Site: an isolated lithic flake and a historic-era refuse scatter. As isolates, the items lack research potential and are not eligible for listing in the NRHP or CRHR.

In addition, a small historic refuse scatter with no identifiable features was identified on the Project Site. The area appears to be a location of limited refuse dumping on the ground surface. The artifacts date to the mid-1950s. This low-density refuse scatter consists of a can, bottle

Juniper Energy, LLC APN: 0490-171-01 January 2025

fragments, nails, lumber, and other household refuse. This scatter is indicative of the dumping of a single or limited-time collection of domestic refuse with no association with a particular theme or person important to the region. As such the site lacks artifacts, features, or associations that could make it eligible for the NRHP under Criteria A, B, or C. Criterion D is most appropriately applied to an assessment of the site's NRHP eligibility. The scatter appears to be limited to the ground surface, although excavation may identify additional artifacts buried through erosion. However, excavation is unlikely to provide more or varied information about historic period occupation, but instead would support common domestic refuse dumped away from the place of consumption. As such, the site would be ineligible for listing in the NRHP under Criterion D. Likewise, the site would not be eligible for listing in the CRHR under Criteria 1, 2, 3, and 4.

In summary, no significant archaeological resources were identified on the Project Site. The resources identified within the Project Site are not eligible for listing in the NRHP, CRHR, or local registers as a significant archaeological resource under any of the criteria. These resources have been documented on DPR forms and are assigned a California Historical Resource Status Code of 6Z (found ineligible for the NRHP, CRHR, or local designation through survey evaluation).

Due to the lack of significant finds identified during the records search, sacred lands file search, and pedestrian survey, it is unlikely that unanticipated intact subsurface archaeological resources would be identified during construction. In the unlikely event that resources are encountered during construction, local regulations outlined in Section 2.2 for cultural resources under the County of San Bernardino General Plan's Conservation Element, Goal CO 3, in addition to standard protection measures to ensure that unanticipated archaeological resources in accordance with Mitigation Measure CUL-1 are treated properly are provided below.

c) Less Than Significant Impact with Mitigation Incorporated. The Project Site does not contain a cemetery, and no known formal cemeteries are located within the immediate site vicinity. In the event that human remains are discovered during Project grading or other ground disturbing activities, they would be treated in accordance with Mitigation Measure CUL-2 and California Public Resources Code Section 5097.98 or successor statues. Federal law may apply, and the Parties would take appropriate action under the Native American Graves Protection and Repatriation Act (NAGPRA) or successor statutes. Consistent with California Government Code Section 6254(r), unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed.

MITIGATION MEASURES:

Mitigation Measure CUL-1: Unanticipated Discovery of Archaeological Resources. A worker environmental awareness program training shall be prepared and conducted prior to ground-disturbing activities to inform all construction personnel working on the proposed Project about the archaeological sensitivity of the area. The purpose of the worker environmental awareness program training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the proposed Project and explain the importance of and legal basis for the protection of cultural resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and immediately contacting the appropriate County of San Bernardino personnel upon discovery or suspected discovery of cultural resources.

Juniper Energy, LLC APN: 0490-171-01 January 2025

In the event that potential archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether additional study is warranted. Depending on the significance of the find under CEQA (14 CCR 15064.5[f]; PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.

Mitigation Measure CUL-2: Unanticipated Discovery of Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are believed to be, Native American, he or she shall notify NAHC in Sacramento within 24 hours. In accordance with PRC Section 5097.98, NAHC must immediately notify those persons it believes to be the MLD (defined below) of the individual whose remains are discovered. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative shall then determine, in consultation with the property owner, the disposition of the human remains.

		Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VI.	ENERGY – Would t	he project:				
a)	impact due to unnecessary consur	y significant environmen wasteful, inefficient, nption of energy resourc ruction or operation?	or			
b)	conflict with or obstruct a state or local plan for renewable energy or energy efficiency?		for			
SUBSTA		nardino County Plan; Rer l Plan 2020; California End	• .		ntion Elemer	nt of the

a) Less than Significant Impact. Construction of the Project would employ diesel-powered equipment to grade, dig trenches, build equipment pads, deliver equipment and materials, and install array posts and mounting equipment. The amount of energy and fuel use anticipated by the Project's construction would be limited, as the activities primarily involve installation of equipment with minimal grading, and would take approximately six months to complete. Project construction equipment would conform to the applicable California Air Resources Board (CARB) emissions

Juniper Energy, LLC APN: 0490-171-01 January 2025

standards, acting to promote equipment fuel efficiencies. Adherence to CARB emissions standards would avoid wasteful, inefficient, or unnecessary consumption of energy resources, during the Project's construction. Once operational, the Project has been designed to consume little to no energy to maintain auxiliary systems.

b) No Impact. The County of San Bernardino General Plan Renewable Energy and Conservation Element (REC Element) is an established regulatory framework, and is supportive of other county, state, and federal plans. The proposed Project would directly assist in the implementation and the achieving of the goals and policies of the RECE. Additionally, the proposed Project would meet Title 24 Energy Efficiency requirements. Adherence to these requirements would ensure the Project would not conflict with or obstruct the RECE or any other State or local plan for renewable energy or energy efficiency.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VII.	GEOLOGY AND SOILS - Would the project:				
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii. Strong seismic ground shaking?			\boxtimes	
	iii. Seismic-related ground failure, including liquefaction?				
	iv. Landslides?				
b)	Result in substantial soil erosion or the loss of topsoil?				
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

Juniper Energy, LLC APN: 0490-171-01 January 2025

SUBSTANTIATION:	(Check if project is located in the Geologic Hazards Overlay District): San
	Bernardino County General Plan, 2020; Geologic Review by Partner Assessment
	Corporation dated October 4, 2022

a)

- i) Less than Significant Impact. A Geologic Review, dated October 4, 2022, was prepared for the Project by Partner Assessment Corporation. Pursuant to the San Bernardino County General Plan, Map HZ-1, the Project Site is not located within an official earthquake fault zone or within a quarter mile of a mapped fault, however, all of Southern California is subject to major earthquake activity. Moreover, the Project would not include any structures intended for habitation and would be operated remotely, limiting the risk of loss or injury to infrequent times when workers visit for maintenance or repairs. In terms of proximity to an active fault, the impact is less than significant.
- ii) Less than Significant Impact. The subject property is within an area subject to severe ground shaking as is most of Southern California. Adherence to California Building Code Seismic Design Standards, Chapter 16: Structural Design would help assure a less than significant impact.
- iii) No Impact. Seismic-related ground failure, including liquefaction, is a process in which cohesion-less, saturated, fine- grained sand and silt soils lose shear strength due to ground shaking and behave as fluid. The Project Site is not located in an area of high liquefaction susceptibility.
- iv) **No Impact**. The site is relatively flat and contains no slopes that may be subject to landslides. Accordingly, the site is not considered susceptible to seismically induced landslides. Therefore, there are no potential impacts.
- b) Less than Significant Impact. The Project would not result in substantial soil erosion or the loss of topsoil because of the minimal size of the building footprint and land disturbance area associated with the Project. The near surface sandy soils may be subject to some water erosion. Positive drainage would be provided around the perimeter of all structures and directed to all approved drainage devices to minimize water infiltrating into the underlying fill soils. Erosion control plans and grading plans would be required to be submitted, approved, and implemented for the proposed development. Therefore, no significant adverse soil erosion or related soil erosion water quality impacts are anticipated and this impact is less than significant.
- c) **No Impact**. According to San Bernardino County Geologic Hazard Map, the Project Site is not located within an area that is subject to liquefaction. The site is relatively flat and contains no slopes that may be subject to landslides; the site is not considered susceptible to landslides. Lateral spreading is a term referring to landslides that commonly form on gentle slopes and that have rapid fluid-like flow horizontal movement. Most lateral spreading is caused by earthquakes, but it is also caused by landslides. The Project Site contains no slopes that may be subject to lateral spreading. Subsidence is the downward movement of the ground caused by the underlying soil conditions. Collapse occurs in saturated soils in which the space between individual particles is completely filled with water. This water exerts a pressure on the soil particles that influences how tightly the particles themselves are pressed together. The soils lose

Juniper Energy, LLC APN: 0490-171-01 January 2025

their strength beneath buildings and other structures. As a mandatory condition of project approval, any proposed structures would be built in accordance with the California Building Code (CBC).

- d) **No Impact**. Table 18-1-B of the Uniform Building Code is an index of the relative expansive characteristics of soil as determined through laboratory testing. No substantial risks to life or property would be created from soil expansion at the proposed Project. Even assuming the Project would be affected by expansive soils, there would be little risk as the Project contains no habitable structures and would be operated remotely. Project conditions of approval require that building permits be obtained for all construction and that the Project meets all standard seismic and soil test/compaction requirements.
- e) **No Impact**. During short-term construction, wastewater would be disposed via portable toilets. The Project Site is not in an area served by public sewer and no septic system would be required as this is an unmanned facility.
- f) Less Than Significant Impact with Mitigation Incorporated. Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine to medium grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils. No paleontological resources or unique geologic features are known to be present on the Project Site. However, undiscovered paleontological resources could exist beneath the ground surface. Site excavation and construction activities related to the Project could result in significant impacts to these undiscovered resources. To minimize the effects of this potential impact, Mitigation Measure GEO-1 is required.

Mitigation Measure GEO-1: Treatment of Previously Unidentified Paleontological Resources. Prior to the issuance of a grading permit, the following note shall be placed on the grading plans:

"If previously unidentified paleontological resources are unearthed during construction activities, construction work in the immediate area of the find shall be halted and directed away from the discovery until a qualified Paleontologist assesses the significance of the resource. The County of San Bernardino Land Use Services Department shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be historically significant according to CEQA (CEQA Guidelines Section 15064.5 (a)). The plan shall include, but not be limited to:

- 1. Preparation of recovered specimens to a point of identification and permanent preservation including washing of sediments to recover small invertebrates and vertebrates.
- 2. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impact to significant paleontological resources is not complete until such curation into an established repository has been fully completed and documented.
- 3. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the County Land Use Services Department- Current Planning along with confirmation of the curation of recovered specimens into an established, accredited museum repository, would signify completion of the program to mitigate impacts to paleontological resources."

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VIII.	GREENHOUSE GAS EMISSIONS – Would the p	roject:			
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				
SUBST	SUBSTANTIATION: Mojave Desert Air Quality Management District 2017 (MDAQMD); San Bernardin County General Plan 2020; Air Quality & Greenhouse Gas Study dated October 17 2022, prepared by BlueScape Environmental.				

a) **Less than Significant Impact**. A GHG emissions inventory was conducted for the Project utilizing the California Emissions Estimator Model (CalEEMod) as shown on Table 9.

Table 9. Construction GHG Emissions

	GHG Emissions				
	CO₂	CH₄	N₂O	CO₂e	
Maximum Daily Construction Total (lb CO₂e/day)	21,543	1.61	1.25	21,958	
Daily Construction Total (lb CO₂e/day)	21,958				
Significance Threshold (lb CO₂e/day)	548,000				
Annual Construction Total (MTCO₂e/year)	645.1	0.056	0.038	657.9	
Total (MTCO₂e/year)		65	7.9		
Total (tons CO₂e/year)	725.2				
Significance Threshold (tons/year)	100,000				

Source: Air Quality & Greenhouse Gas Study dated October 17, 2022, BlueScape Environmental

As shown in Table 9, construction of the Project would result in 21,958 lbs CO2e per day and 725.2 tons CO2e per year, without accounting for applicable regulatory requirements and

Juniper Energy, LLC APN: 0490-171-01 January 2025

renewable energy. GHG emission impacts before regulatory requirements are well below the MDAQMD significance thresholds. Therefore, this impact is less than significant.

b) Less than Significant Impact. In March 2021, San Bernardino County adopted a Regional GHG Reduction Plan (RGHGRP), which provides a framework for attaining SB 32 GHG reduction goals. The RGHGRP recommends general GHG reduction measures and jurisdiction-specific measures, including those for unincorporated areas of the county. Unincorporated San Bernardino selected a goal to reduce its community GHG emissions to a level that is 40% below its 2020 GHG emissions level by 2030. Approximately 80% of this reduction goal would be achieved through state efforts and the remaining 20% through local efforts. Of the ten local measures selected by unincorporated San Bernardino, two apply to the Project. GHG reduction measure Water-3 encourages water-efficient landscaping practices and Waste-2 encourages increased waste diversion reduction as applicable. The proposed Project would be consistent with applicable portions of the RGHGRP.

Pursuant to the Air Quality & Greenhouse Gas Study dated October 17, 2022, by BlueScape Environmental, the Project's consistency with SB 32 (2017 Scoping Plan) has been reviewed (CARB 2017). It should be noted that the Project's consistency with the 2017 Scoping Plan also satisfies consistency with AB 32 since the 2017 Scoping Plan is based on the overall targets established by AB 32. Consistency with the 2008 Scoping Plan is not necessary, since the target year for the 2008 Scoping Plan was 2020, and the Project's buildout year is 2024. As such the 2008 Scoping Plan does not apply and consistency with the 2017 Scoping Plan is relevant. The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The Project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Therefore, the proposed Project would result in a less than significant impact.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
IX.	HAZARDS AND HAZARDOUS MATERIALS – W	ould the p	roject:		
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				
SUBST	CANTIATION: San Bernardino County General Plan, Map Pioneertown (F121B).	2020; San B	ernardino Co	unty Hazard	Overlay

a) Less than Significant Impact. Small amounts of potentially hazardous materials would be used on this Project such as fuel, lubricants, and cleaning materials. Proper use of materials in

Juniper Energy, LLC APN: 0490-171-01 January 2025

accordance with local, state, and federal requirements, and as required in the construction documents, would minimize the potential for accidental releases or emissions from hazardous materials. This would assure that the risks of the Project uses impacting the human or biological environment would be reduced to a less than significant level. There would be no increase in traffic as a result of this Project, thus an increase in exposure due to the risks of transporting hazardous materials would not change as a result of the Project.

b) Less than Significant Impact. The potential for accidental releases and spills of hazardous materials during construction is a risk on all construction sites. Construction contractors are required to comply with all applicable federal, state, and local laws and regulations regarding hazardous materials, including but not limited requirements imposed by the Environmental Protection Agency, California Department of Toxic Substances Control, Mojave Desert Air Quality Management District, and the Lahontan Regional Water Quality Control Board. As such, impacts due to construction activities would not cause a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Operational Activities would not include handling, storage, or dispensing hazardous or potentially hazardous materials. Proper use of materials in accordance with local, state, and federal requirements, and as required in the construction documents, would minimize the potential for accidental releases or emissions from hazardous materials. This would assure that the risk of the Project uses impacting the human or biological environment would be reduced to a less than significant level.

- c) **No Impact**. There are no existing or proposed schools within one-quarter mile of the Project Site. Therefore, there would be no impact.
- d) **No Impact.** The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State and local agencies to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites pursuant to Government Code Section 65962.5. Below are the data resources that provide information regarding the facilities or sites identified as meeting the "Cortese List" requirements.
 - List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database.
 - List of Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database.
 - List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit. List of "active" CDO and CAO from Water Board.
 - List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.

Based on a review of the Cortese List maintained by the California Environmental Protection Agency website at https://calepa.ca.gov/SiteCleanup/CorteseList/, the Project Site is not identified on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

e) **No Impact**. The Project Site is not located within an airport land use plan or within 2 miles of a public use airport or private airstrip. The nearest airport is the Barstow-Daggett Airport located

Juniper Energy, LLC APN: 0490-171-01 January 2025

over 30 miles to the southeast of the Project Site. As such, the Project would not result in safety hazard impacts to or from aircraft-related uses. No impact is anticipated.

- f) **No Impact**. The Project Site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. The Project would not result in a substantial alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan, there is no impact.
- g) **No Impact**. The Project would not expose people to risk from wildland fires. It would not construct buildings that would be occupied by people or structures that would be affected by wildland fires and accordingly there is no impact.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
х.	HYDROLOGY AND WATER QUALITY - Would	the project			
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	 result in substantial erosion or siltation on- or off-site; 				
	substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;				
	iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of runoff; or				
	iv. impede or redirect flood flows?			\boxtimes	
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				
SUBS	FANTIATION: San Bernardino County General Plan Solar, Kimley-Horn, August 2024.	, 2020. Prelir	minary Draina	age Report,	Lockhart

Juniper Energy, LLC APN: 0490-171-01 January 2025

a) Less than Significant Impact. Maintenance of the solar facility would primarily involve panel washing and repairs or replacement of panels or other electrical equipment. Panel washing would be conducted as needed but is expected to occur up to two times annually. Panels would be power washed with clean water that would contain no cleaning agents or other additives. Long term non-point discharges from the Project would be minimal but could result in infrequent discharges associated with landscape irrigation, uncontaminated pumped ground water, and discharges of potable water during water tank cleaning [as defined in 40 CFR 35.2005(21)]. In this context, water quality impacts resulting from long-term discharges associated with the Project would be less than significant.

Construction of the Project would involve clearing, some grading, trenching, utility installation, and installation of equipment pads, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. To protect water quality, grading plans are required as part of construction activities review and approval and would include the following:

- Provisions to intercept and conduct the tributary offsite/onsite drainage flows around and through the site in a manner, which would not adversely affect adjacent or downstream properties at the time the site is developed.
- County grading ordinance design requirements, adopted County grading standards and best management practices (such as silt fencing, straw wattles, construction entrances to control soil discharges, primary and secondary containment areas for petroleum products, paints, lime and other materials of concern, etc.), mandated limitations on work in wet weather, and standard grading inspection requirements designed to reduce potential water quality impacts during construction of the Project.

The final grading plan would include applicable drainage infrastructure, including facilities to manage stormwater on-site. Stormwater management facilities would be sized appropriately to ensure that County standards for hydromodification and drainage are met. The grading plan would be prepared in accordance with the San Bernardino Grading Code and approved by the County. Therefore, impacts are less than significant.

b) Less than Significant Impact. The proposed Project would not use ground water either during the construction process or in connection with operations of the Project. Water would be trucked to the site during construction. Once operational, water would be trucked to the site for periodic panel washing.

The proposed site design would increase the imperviousness of the surface by approximately 6.1%. Two retention basins are proposed on-site that would treat stormwater prior to percolation into the basin. Drainage design in accordance with County guidelines combined with the basins would ensure that stormwater discharge resulting from the addition of impervious surfaces do not substantially alter the existing drainage pattern and water quality, thereby allowing runoff from the Project Site to be utilized as a resource that can eventually be used for groundwater recharge. Accordingly, the potential impacts would be less than significant.

c) Less Than Significant Impact with Mitigation Incorporated.

Erosion. Erosion is the wearing away of the ground surface as a result of the movement of wind or water, and siltation is the process by which water becomes dirty due to fine mineral particles

Juniper Energy, LLC APN: 0490-171-01 January 2025

in the water. Soil erosion could occur due to a storm event. Natural infiltration capacity would be maximized by incorporating a design that promotes water retention through placement of proposed landscape, soil development, grading techniques, and allowing natural drainage into the landscaped areas. Existing vegetation would be protected in place to the extent feasible. In addition, erosion control practices and design features shall be submitted to the County Land Use Services for review and approval with the grading permit. Therefore, less than significant impacts are identified or anticipated.

Surface Runoff and Flood Control. A Preliminary Drainage Report, dated August 2024, was prepared by Kimley-Horn for the Project. The report compared the peak discharge and peak depth in the combined stream before and after construction of the proposed Project. The proposed unit hydrograph was developed using AES software. Compacted native roads were considered 30% impervious, equipment pads and paved roads were considered 100% impervious, and piles were assumed to be 6" x 6" spaced every 25 feet along tracker rows and 100% impervious. The proposed site design would increase the imperviousness of the surface by approximately 6.1%. According to the engineer's analysis, approximately 28,902 cubic feet of storage is required for the change in runoff due to the increase in imperviousness of the proposed site design, as summarized in Table 10.

The proposed Project must comply with the post-construction standards set forth in the NPDES General Permit for Stormwater Discharges in California NPDES NO. CAS00002 (General Permit). To accommodate increases. To meet these requirements, the engineers proposed in their study that two detention basins with approximately 28,902 cubic feet of storage in the aggregate would be required to account for the increase in runoff. One basin would be located in approximately the middle of the Project Site and the second one at the northwestern corner. The basins would be located to maximize runoff from a 100-year flood event. Therefore, the detention basin would accommodate the potential increase in stormwater such that development of the Project would not result in an increase of surface runoff. With implementation of MM HYDRO-1, this impact would be less than significant.

Table 10: Proposed Detention Design Summary

Basin	Water Storage Depth (ft)	Existing Peak Discharge (cfs)	Proposed Unmitigated Peak Discharge (cfs)	Proposed Mitigated Peak Discharge (cfs)	Weir Length (ft)	Storage Required (Cu-Ft)	Storage Provided (Cu-Ft)
1	1.25	41.34	44.35	41.33	112	28,902	29,197

Mitigation Measure HYDRO-1: Detention basins shall be incorporated into the final design of the proposed project in accordance with the final drainage report subject to approval by the County of San Bernardino.

d) No Impact. The Project Site is not located in a flood zone or other areas subject to potential flood hazard according to Federal Emergency Management Agency. According to the California Department of Conservation, California Official Tsunami Inundation Maps the site is not located within a tsunami inundation zone. Seismic seiches are standing waves set up on rivers, reservoirs,

Juniper Energy, LLC APN: 0490-171-01 January 2025

ponds, and lakes when seismic waves from an earthquake pass through the area. The Project Site is not near a water body that could create a seiche. Therefore, there would be no impact.

e) Less than significant Impact. The proposed Project would not otherwise substantially degrade water quality, as appropriate measures relating to water quality protection would be implemented through the implementation of the detention basins, discussed above, and best management practices. Appropriate best management practices would be reviewed and approved by the County. The Project Site is not within a region for which a groundwater management plan has been adopted. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact			
XI.	LAND USE AND PLANNING – Would the proje	ct:						
a)	Physically divide an established community?				\boxtimes			
b)	b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?							
SUBST	SUBSTANTIATION: San Bernardino County General Plan, 2020.							

- a) **No Impact**. The Project would not divide an established community. The region is sparsely populated and primarily characterized by utility solar generation systems and utility transmission lines. Also, the Project Site allocates land on all sides of the site for future public access roads.
- b) Less than Significant Impact. The Project would not conflict with any applicable policy document, including, without limitation, the County of San Bernardino General Plan, the Mojave Desert Air Quality Management District Air Quality Management Plan, the County of San Bernardino Greenhouse Gas Emissions Reduction Plan, and the Lahontan District Regional Water Quality Control. The purpose of these plans is to avoid or mitigate an environmental effect. Accordingly, the Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating adverse environmental effects and impacts are less than significant.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XII.	MINERAL RESOURCES - Would the project:				
a)	Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				
SUBS	SUBSTANTIATION: (Check if project is located within the Mineral Resource Zone Overlay): San Bernardino County General Plan, 2020.				

- a) **No Impact**. The California Department of Conservation does not designate the Project Site as being located within a zone with significant important mineral deposits. Moreover, the County's General Plan does not identify any important mineral resource recovery sites on- or in the proximity of the Project Site. Accordingly, the Project would result in the loss of availability of a known mineral resource. Therefore, no impact is anticipated.
- b) **No Impact**. The Project Site is not identified as a resource recovery site on the General Plan, a specific plan or other land use plans. Therefore, there would be no impact.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIII.	NOISE - Would the project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive ground borne vibration or ground borne noise levels?				
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?				
SUBST	TANTIATION: (Check if the project is located in the to severe noise levels according to Bernardino County General Plan, 202	the Gener	•		—

a) Less than Significant Impact with Mitigation Incorporated. Construction noise generated by the Project would be temporary. Construction equipment used for the Project would include a combination of trucks, concrete mixers, power tools, and portable generators. When combined, noise from this equipment can reach high levels. The number and mix of construction equipment are expected to occur during site preparation, grading and installation of the solar generation and battery storage equipment.

The degree of construction noise would vary depending on the phase of construction and type of construction activity. Table 11 shows the typical noise levels generated by construction equipment.

Juniper Energy, LLC APN: 0490-171-01 January 2025

Table 11. Typical Construction Equipment Notice levels, dBA

Equipment	100 ft.	200 ft.	300 ft.
Excavator	75	69	65
Front End Loader	73	67	63
Pneumatic Tools	79	73	69
Dozer	76	70	66
Rollers	74	68	64
Trucks	80	72	70
Scrapers	81	75	71
Portable Generators	74	68	64
Backhoe	80	74	70
Grader	80	74	70

Source: Noise Control for Buildings and Manufacturing Plants, Bolt, Beranek & Newman, 1987

These noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. The nearest residence is over 200 feet from proposed construction work and others located to the north of the Project Site exceed 300 feet. All other surrounding properties are either industrial uses or vacant. In addition, construction noise sources are regulated within San Bernardino County under Section 83.01.080 (G) of the Development Code, which states that temporary construction, maintenance, repair, or demolition activities between 7AM to 7PM, except Sundays and Federal Holidays are exempt from the County's noise regulations. Regardless of the Project's consistency with the Development Code as described above, construction activities would result in Development Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers.

Therefore, to evaluate whether the Project would generate potentially significant construction noise levels at off-site sensitive receiver locations, a construction-related noise level threshold is adopted from the Criteria for Recommended Standard: Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health (NIOSH) which has been used in past CEQA documents in the County.

NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction related noise level threshold starts at 85 dBA for more than eight hours per day, and for every 3 dBA increase, the exposure time is cut in half. This results in noise level thresholds of 88 dBA for more than four hours per day, 92 dBA for more than one hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative construction noise level threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at the nearby sensitive receiver locations. Since this construction-relate noise level threshold represents the energy average of the noise source over a given time, they are expressed as Leq noise levels. Therefore, the noise level threshold of 85 dBA Leq over a period of eight hours or more is used to evaluate the potential Project-related construction noise level impacts at the nearby sensitive receiver

Juniper Energy, LLC APN: 0490-171-01 January 2025

locations. Given the distances between construction activities and possible receptors, all such activities would fall materially below the thresholds proscribed by NIOSH. Accordingly, implementation of the methods as described in MM NOISE-1 would reduce the impacts to less than significant.

Mitigation Measure NOISE-1: Construction activities for the Project shall be restricted as follows:

- a. All internal combustion engines used during construction of the Project shall be operated with mufflers that meet the requirements of the State Resources Code, and, where applicable, the Vehicle Code. Equipment shall be properly maintained and turned off when not in use.
- b. Pile driving activities shall be limited to 7:30 a.m. to 7:00 p.m. weekdays only.
- c. Construction maintenance, storage and staging areas for construction equipment shall avoid proximity to residential areas to the maximum extent practicable. Stationary construction equipment, such as compressors, mixers, etc., shall be placed away from residential areas and/or provided with acoustical shielding. Quiet construction equipment shall be used when possible.
- d. The developer shall designate a project manager with authority to implement the mitigation prior to issuance of a building/grading permit. The project manager's phone number shall be conspicuously posted at the construction site. The project manager shall determine the cause of noise complaints (e.g. starting too early, faulty muffler, etc.) and shall take prompt action to correct the problem.
- b) Less than Significant Impact. The proposed Project is not a manufacturing, earth moving and/or extracting business, and therefore is not anticipated to be a source of vibration. The proposed solar generation and battery storage system would not be a source of vibration based on its daily operation.
 - Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration would occur due to construction activities employing heavy construction equipment and trucks. Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage. Temporary construction, maintenance, repair, or demolition activities contained between 7AM and 7PM, except Sundays and Federal holidays, however, are exempt from vibration standards, as defined in sub-section 83.01.090(c)(2) of the County Code. Therefore, the operational impacts associated with ground-borne vibration would be less than significant.
- c) No Impact. The Project Site is not located within an airport land use plan or within 2 miles of a public use airport or private airstrip. The nearest airport is the Barstow-Daggett Airport located over 30 miles to the southeast of the Project Site. Accordingly, the Project would not result in impacts to aviation or expose people to excessive noise.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact		
XIV.	POPULATION AND HOUSING - Would the pro	ject:					
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?						
SUBSTANTIATION: San Bernardino County General Plan, 2020.							

- a) **No Impact**. The Project would not induce population growth in the area either directly or indirectly. The Project is not proposing any new residential development, would have no permanent on-site employees, and would make use of the existing roads and infrastructure. Therefore, not impact is anticipated.
- b) **No Impact**. The Project would not displace substantial numbers of existing people or existing housing units, or require the construction of replacement housing, as no housing units exist on the site. Therefore, not impact is anticipated.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact	
XV.	PUBLIC SERVICES					
a)	Would the project result in substantial adverse plof new or physically altered governmental facilities, the construction of whimpacts, in order to maintain acceptable service objectives for any of the public services:	ilities, need nich could	I for new or cause signific	physically cant enviro	altered nmental	
	Fire Protection?			\boxtimes		
	Police Protection?				\boxtimes	
	Schools?				\boxtimes	
	Parks?				\boxtimes	
	Other Public Facilities?				\boxtimes	
SUBSTANTIATION: San Bernardino County General Plan, 2020.						

a) Less than Significant Impact. Fire Protection. The Project would be conditioned by the Fire Department to provide a minimum of fire safety and support fire suppression activities, including compliance with State and local fire codes. The Project would increase the demand for fire protection services due to the development of the property, but new fire facilities would not be required to serve the Project. In addition, it is not anticipated it would result in substantial adverse impacts as the Fire Department has reviewed the Project and would provide fire protection services.

Police Protection. The Project is within a rural area with existing solar generation facilities and other utility infrastructure. Therefore, no new demand for police protection is anticipated.

Schools. The Project would not result in the need for new housing that would lead to a need for creating additional school facilities. Therefore, no new demand for school facilities is anticipated.

Parks. The Project would not result in the need for new housing that would lead to a need for creating additional park facilities as the proposed facility would not induce population growth or result in the relocation of workers to the Project region such that use of parks would increase. Therefore, no new demand for parks is anticipated.

Public Facilities. The Project's operation and or its construction would not generate substantial long-term increases in demand for roads, solid waste, or other public services or utilities because it would be operated remotely. The site is located along established roads, and near existing interstate highway 58, which would accommodate any minor increases in traffic and solid waste

Juniper Energy, LLC APN: 0490-171-01 January 2025

produced by maintenance crews performing routine inspections and repairs. Therefore, no impacts to public services or utilities are anticipated.

Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact				
XVI.	RECREATION								
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?								
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?								
SUBST	SUBSTANTIATION: San Bernardino County General Plan, 2020.								

- a) **No Impact**. The proposed Project's primary operational focus is electric generation and storage and would not increase the use of existing neighborhood or regional parks. The Project would not increase demand on regional parks or similar resources because it would be operated remotely and present no increase in population and/or housing. Therefore, no impact is anticipated.
- b) **No Impact**. The proposed Project does not include a recreational facility and is of a project-type that does not require the construction or expansion of a recreational facility. Therefore, no impact is anticipated.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact	
XVII.	TRANSPORTATION – Would the project:					
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?					
b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?					
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?					
d)	Result in inadequate emergency access?				\boxtimes	
SUBSTANTIATION: San Bernardino County General Plan, 2020; Traffic Management Plan, Partner Assessment Corporation, February 16, 2023.						

a) Less than Significant Impact. A Construction Management Plan, dated February 16, 2023, was prepared for the Project by Partner Assessment Corporation. During construction, additional trips would be added to area roads including but not limited to Harper Lake Road. Construction, however, would require a relatively small workforce and is not anticipated to generate daily trips that would noticeably alter existing conditions along project area roads. Construction workers would typically arrive at the Project Site in the morning and leave during the early afternoon during the work week. Furthermore, construction equipment would be able to access the Project Site without materially impacting traffic. Also, the Project contractor would utilize traffic control (flaggers) on Harper Lake Road to the extent necessary during the construction phase.

Once operational, the facility would be operated remotely, generating limited traffic. Periodic maintenance visits would not exceed once per month on average. Therefore, less than significant impacts are anticipated.

b) Less than Significant Impact. CEQA Guidelines Section 15064.3 (b) describes specific considerations for evaluating a project's transportation impacts utilizing vehicle miles traveled (VMT). For purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. The Project would generate minimal miles traveled as the facility would be operated remotely. Anticipated visits by maintenance crews would not exceed one per month on average. Therefore, the Project would result in less than significant impacts.

Juniper Energy, LLC APN: 0490-171-01 January 2025

- No Impact. The proposed Project would be contained within a rectangularly shaped site without an unusual or geometrically challenging design feature such as shape curves or dangerous features at the intersection. The Project would not create or result in any incompatible use such as operating agricultural equipment on public roads. The Project Site is surrounded by other utility related uses. Therefore, no potential impact is anticipated.
- d) **No Impact**. The Project Site borders established roadways and is near thoroughfares capable of providing adequate emergency access to the site, and the surrounding areas. Also, Applicant has obtained an easement to access the site via Roy Road from Harper Lake Road. Therefore, no potential impact is anticipated.

		Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVIII.	TR	IBAL CULTURAL RESOURCES				
a)	res cul	ould the Project cause a substantial adverse cource, defined in Public Resources Code sectural landscape that is geographically defined incred place, or object with cultural value to a Cal	tion 21074 terms of the	as either a e size and sco	site, feature pe of the lar	e, place, ndscape,
	i)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
	ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				
SUBSTANTIATION: San Bernardino County General Plan, 2020; and Cultural Resources Inventory and Evaluation Report, Dudek, November 2022.						

Juniper Energy, LLC APN: 0490-171-01 January 2025

a-i) **No Impact**. As outlined in CEQA Guidelines §15064.5(a), historical resources can include a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; a resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements [of] section 5024.1(g) of the Public Resources Code, or any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Pursuant to a records search, the Project Site is not identified as containing historical resources.

The Project area was also examined for the presence of any cultural resources, including prehistoric or historic archaeological sites or historic buildings. No historical resources pursuant to §15064.5 were discovered. As such, there would be no impact with respect to historical resources because of the Project.

- a-ii) Less than Significant Impact with Mitigation Incorporated. On July 1, 2015 AB 52 (Gatto, 2014) went into effect. AB 52 established "Tribal Cultural resources" as a resource subject to CEQA review. California Public Resources Code Section 21074, which was enacted as part of AB 52, provides the following:
 - (a) "Tribal cultural resources" are either of the following:
 - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
 - (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
 - (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
 - (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

AB 52 also created a process for consultation with California Native American Tribes in the CEQA process. Tribal Governments can request consultation with a lead agency and give input into potential impacts to tribal cultural resources before the agency decides what kind of environmental assessment is appropriate for a proposed project. Through the AB52 notification

Juniper Energy, LLC APN: 0490-171-01 January 2025

process, the County Land Use Services Department sent notices to the following tribes: (i) Colorado River Indian Tribes, (ii) Serrano Nation of Mission Indians, (iii) Morongo Band of Mission Indians (MBMI), (iv) Fort Mohave Indian Tribe, (v) San Manuel Band of Mission Indians (SMBMI), (vi) Soboba Band of Luiseno Indians, and (vii) Twentynine Palms Band of Mission Indians.

Formal consultation was requested by the MBMI on June 7, 2023, and documents were provided the tribe. MBMI requested that the Applicant enter into a separate Tribal Monitoring Services Agreement (TMSA) as a condition to approval of any permits. Also, formal consultation was requested by the SMBMI which took place on June 16, 2023. While not citing a specific impact by the Project, SMBMI requested the addition of certain mitigation and monitoring measures be added to Section V, Cultural Resources, and Section XVIII, Tribal Cultural Resources, of the Initial Study Checklist.

Mitigation Measure TCR-1: Tribal Monitoring. Due to the heightened cultural sensitivity of the proposed project area, at the discretion of the consulting tribes, Tribal monitors may be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation, and archaeological work). At the discretion of the consulting tribes, a sufficient number of Tribal monitors may be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels of monitoring coverage. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within CUL-1, and submitted to the Lead Agency for dissemination to the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI). Once all parties review and had the opportunity to comment on the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings would be subject to the protocol detailed within the Monitoring and Treatment Plan.

Mitigation Measure TCR-2: Treatment of Cultural Resources. If a pre-contact cultural resource is discovered during archaeological presence/absence testing, the discovery shall be properly recorded and then reburied in situ. A research design shall be developed by the archaeologist that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the archaeologist/applicant, and the Lead Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the archaeological significance of the resource, its potential as a Tribal Cultural Resource (TCR), avoidance (or other appropriate treatment) of the discovered resource, and the potential need for construction monitoring during project implementation. Should any significant resource and/or TCR not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by SMBMI. All plans for analysis shall be reviewed and approved by the Applicant and SMBMI prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of SMBMI that removed cultural material be

Juniper Energy, LLC APN: 0490-171-01 January 2025

reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by SMBMI, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency and SMBMI. All reburials are subject to a reburial agreement that shall be developed between the landowner and SMBMI outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.).

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with SMBMI to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and SMBMI for their review and comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the Lead Agency and SMBMI.

Mitigation Measure TCR-3: Inadvertent Discoveries of Human Remains/Funerary Objects. In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify SMBMI, the applicant/developer, and the Lead Agency. The Lead Agency and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public

Juniper Energy, LLC APN: 0490-171-01 January 2025

Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.

It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, parties, and Lead Agencies, would be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact			
XIX.	UTILITIES AND SERVICE SYSTEMS - Would the	e project:						
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?							
b)	Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?							
c)	Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?							
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?							
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?							
SUBS	SUBSTANTIATION: San Bernardino County General Plan, 2020; Submitted Project Materials.							

a) Less than Significant Impact. The Project would not require water or wastewater facilities, as it would be unmanned except for occasional panel cleaning or other maintenance work, which should take approximately one day and occur once or twice per year. Accordingly, the proposed Project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board, Lahontan Region, as determined by County Public Health – Environmental Health Services.

The Project would require the construction of a new electric line running several hundred feet along a utility access way from a pole located near Harper Lake Road to the southern boundary of site. The construction of the new line would run along a pre-existing easement for other utility power lines and would not impact any public or private land. Further, Application would install

Juniper Energy, LLC APN: 0490-171-01 January 2025

a new line along Roy Road, subject to an easement with the property owner to access the Project Site and construct necessary utilities. No new natural gas or telecommunications facilities are anticipated.

- b) **No Impact**. The proposed Project would not require construction of new water or wastewater treatment facilities or expansion of existing facilities. Once operational, the Project would be operated remotely with no permanent on-site personal. The Project would require water for washing the modules; such semi-annual panel washing is estimated to require less than one acre foot of water per year. Maintenance crews would truck to the site any water needed to clean panels, which would come primarily from groundwater located in the Este Subarea of the Mojave Groundwater Basin.
- c) **No Impact**. During construction, the Project would be served by portable toilets and would not generate wastewater. The Project would not generate wastewater during regular operations. The proposed Project would not require the construction or expansion of storm water drainage facilities. Most of the Project Site would remain pervious and existing soils are predominantly well drained. There are existing isolated depressions that collect storm runoff within the Project boundary. The minimal quantity of discharged water generated by solar panel washing (less than one and half acre-foot of water per year) would drain into the isolated depressions, continue to percolate through the ground, or evaporate. Therefore, no impacts are anticipated.
- d) Less than Significant Impact. The proposed Project is an unmanned solar electricity generating facility that would generate no operational waste and only small amounts of solid waste requiring disposal. Solid waste from the proposed Project would largely result from short-term construction activities (with short-term waste generation limited to minor quantities of construction debris). The proposed Project would not result in long-term solid waste generation. Solid wastes associated with the proposed Project would be disposed of as appropriate in local landfills or at a recycling facility.

San Bernardino County has adopted the California Green Building Standards Code (CALGreen), which includes mandatory construction and demolition waste recycling (San Bernardino County, 2013). Projects that have the potential to generate construction and demolition waste are required to submit a Construction and Demolition Solid Waste Management Plan (WMP) to identify the estimated quantity and location of recycling for construction and demolition waste resulting from the project. The goal of the WMP is to recycle, reuse, compost, and/or salvage a minimum of 50 percent by weight of the waste generated on site. The WMP must be approved by the Solid Waste Management Division prior to issuance of building permits. An "Actual Material Disposal/Diversion Worksheet" is required upon completion of construction that demonstrates the actual quantity of construction and demolition waste recycled.

The nearest active landfill is the Barstow Landfill, located at 32553 Barstow Road. This Class III landfill accepts agricultural, construction/demolition, industrial, mixed municipal, and biosolid wastes. According to the California Department of Resources Recycling and Recovery (CalRecycle), this landfill has a remaining capacity of 71,481,660 cubic yards and is not scheduled to cease operations until the year 2071 (CalRecycle, 2015a).

During construction, nonhazardous waste would be generated. Main sources of waste would include general construction debris, such as scrap metal, wood, glass, plastics, cardboard, waste concrete, and excavated soil. Other materials, such as packaging from the solar photovoltaic

Juniper Energy, LLC APN: 0490-171-01 January 2025

modules and associated equipment, as well as erosion control materials (e.g., silt fencing and straw wattles), may also be generated during construction. The nonhazardous waste produced during construction would be transferred off-site by a local commercial waste hauler. The estimated volume of construction waste is anticipated to be one 7-cubic-yard roll-off per week during active construction, which is estimated to be approximately 6 months.

The primary waste generated during operations would be solid waste from maintenance activities. An estimate of 0.3 cubic yards of solid waste per month would be generated during operations.

Decommissioning of the solar arrays would generate limited amounts of solid waste, which would be recycled to the extent feasible at a solid waste disposal or materials recovery facility permitted by the County solid waste services which adheres to County-developed recycling programs. It is anticipated that a small percentage of the solar arrays would be considered solid waste, requiring depositing into a solid waste facility. The Applicant (or contractor) would be responsible for contracting with a local franchise hauler for all solid waste disposal and recycling needs. Given the low volume of solid waste expected, the Project would not have a significant impact on area landfills. Therefore, a less than significant impact is identified for this issue area.

e) **No Impact**. There are no potential impacts anticipated due to construction waste because the California Green Building Standards Code requires all newly constructed buildings to prepare a Waste Management Plan and divert construction waste through recycling and source reduction methods. The County of San Bernardino, Department of Public Works, Solid Waste Management Division reviews and approves all new construction projects required to submit a Waste Management Plan. Therefore, the Project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

There are no potential impacts anticipated due to generation of operational waste as the Project would not generate any waste, other than from the occasional maintenance or replacement of equipment. All maintenance service providers would be required to comply with all applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to the landfills that serve the facility are reduced in accordance with existing regulations.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact	
XX.	WILDFIRE: If located in or near state responsifire hazard severity zones, would the project:		or lands cla	ssified as v	ery high	
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?					
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from wildfire or the uncontrolled spread of a wildfire?					
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water resources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?					
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?					
SUBS	SUBSTANTIATION: San Bernardino County General Plan, 2020; California Department of Forestry and Fire Protection Fire Hazard Severity Zones in LRA, September 17, 2007					

a-d) **No Impact**. The County has mapped areas that are susceptible to wild land fires within the Fire Hazard Overlay. The Fire Hazard Overlay is derived from areas designated in high fire hazard areas in the General Plan and locations derived from the California Department of Forestry, U.S. Forest Service, and the County Fire Department. The Project Site is in an area designated on Policy Map HZ-5 Fire Hazard Severity Zones as Non-Wildland/Non-Urban and accordingly there is no impact.

Juniper Energy, LLC APN: 0490-171-01 January 2025

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XXI.	MANDATORY FINDINGS OF SIGNIFICANCE:				
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?				

a) Less than Significant Impact with Mitigation Incorporated. Surveys of the Project Site identified the presence of one specially protected avian species, the LeConte's Thrasher. Most birds are protected, however, under the Migratory Bird Treaty Act and some avian species were observed or detected on site during the surveys. The Project Site does not contain suitable habitat for fish or amphibians. No currently protected plants were observed on the site as well. While not observed, there is the potential for the American Bader, Desert Kit Fox and the Burrowing Owl to occur at the site. Potential impacts to biological resources would be reduced to a less than significant level with implementation of Mitigation Measures BIO-1 to BIO-5. Therefore, the proposed Project is not anticipated to have the potential to significantly degrade the overall quality of the region's environment or substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, o reduce the number or restrict the range of a rare or endangered plant or animal.

Juniper Energy, LLC APN: 0490-171-01 January 2025

Surveys for cultural resources and historic buildings did not identify potential historic resources. Thus, the proposed Project would not impact known historical resources. The presence of isolated artifacts, however, demonstrates some sensitivity for potentially buried prehistoric cultural remains within the Project Site. Implementation of Mitigation Measure CR-1 would ensure no significant impacts to potential buried archaeological resources occur.

With implementation of Mitigation Measure CR-2, the potential impacts to paleontological resources can be reduced to a less than significant level. Therefore, no significant adverse impacts are anticipated with implementation of these mitigation measures.

- b) Less than Significant Impact with Mitigation Incorporated. Cumulative impacts are defined as two or more individual affects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:
 - (a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.
 - (b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Cumulative impacts have been assessed in a qualitative manner and in the context of each inventoried resource, ecosystem, or human community that might be affected. Thus, this cumulative analysis evaluates the Project in the context of other development in the region. The Project is not a commitment to a larger action, and it is not intended to facilitate substantial population growth in the region. In all instances where the Project has the potential to contribute to a cumulatively considerable impact on the environment, mitigation measures have been imposed to reduce potential effects to less-than-significant levels.

Aesthetics. Any projects that would result in modification of the landscape, such as new energy development, could contribute to the cumulative adverse impacts to visual quality and aesthetics when combined with other existing and planned development. Existing solar facilities and utility transmission lines have converted the aesthetics of the surrounding area from a natural desert environment to an area with thousands of acres of solar thermal or solar photovoltaic arrays. Existing solar generation systems have affected over 2,300 acres and proposed solar projects would affect an additional 1,350 acres. The proposed Project would cover approximately 80 acres (2% of the land area of the existing solar thermal facilities). The proposed Project would therefore have a minor incremental impact to a region already characterized by utility infrastructure.

Air Quality. Almost all air basins within the state are non-attainment areas for one or more criteria air pollutants. Activities that emit criteria pollutants within those air basins could have a significant cumulative impact on air quality. The MDAQMD has established rules and programs under their air quality plans that limit proposed project-specific contributions to the overall

Juniper Energy, LLC APN: 0490-171-01 January 2025

problems. These rules and regulations also apply to other projects in the air basin. As discussed in Section III, Air Quality, the contributions of the Project would not be cumulatively considerable because the proposed project would comply with applicable air district rules and plans for construction activities.

Biological Resources. Approximately 3,650 acres of natural desert habitat (e.g. allscale scrub and ephemeral surface waters) in the cumulative effects analysis area has been or would be converted for solar energy facilities (solar thermal and solar photovoltaic facilities). Other land in the analysis area has also been converted for agricultural uses in the past. Implementation of Mitigation Measures BIO-1 to BIO-5 would ensure the Project's construction has a minor incremental impact on biological resources through the conversion of 80 acres of habitat along with other past and future actions.

Hydrology and Water Quality. Construction and operation of the Project and other projects in the region would have the potential to result in a cumulative water quality impact, including erosion and sedimentation. In accordance with applicable federal, State, and local regulations, however, all development projects would be required to implement plans during construction and operation to minimize adverse effects to water quality, which would avoid a cumulatively considerable impact.

The Project and other projects in the region would be required to comply with federal, State, and local regulations to preclude flood hazards both on- and off-site. Compliance with federal, State, and local regulations would require on-site areas to be protected, at a minimum, from flooding during peak storm events (i.e., 100-year storm) and that proposed development would not expose downstream properties to increased flooding risks during peak storm events. Accordingly, a cumulatively considerable effect related to flooding would not occur.

Land Use. Land in the cumulative effects analysis area is primarily either developed with solar facilities, undeveloped vacant agricultural land, or residences. Development of other solar facilities surrounding the Project Site converted land used for agriculture. The proposed Project would convert an abandoned residence and vacant land to solar power generation. Additional projects, including a potential solar development, approximately 1.5 miles south of the Project Site, have or would convert vacant land to energy generation.

c) Less Than Significant Impact with Mitigation Incorporated. The proposed Project would not directly or indirectly cause substantial adverse effects on human beings. Of the resource categories involving effects to human beings, only air quality and noise could have a significant impact on human beings as a consequence of the Project. All potential effects of the Project on air quality and noise, however, would be mitigated to a less than significant level through compliance with local regulations and implementation of Mitigation Measure NOISE-1, and would therefore avoid causing substantial adverse effects on human beings. The impact analysis included in this environmental checklist indicates that for all other resource areas, the Project would either have no significant impacts, or for impacts that would not affect human beings, less than significant impacts with mitigation incorporated.

Juniper Energy, LLC APN: 0490-171-01 January 2025

MITGATION MEASURES.

(Any mitigation measures which are not 'self-monitoring' shall have a Mitigation Monitoring and Reporting Program prepared and adopted at the time of project approval)

BIOLOGICAL MITIGATION MEASURES

BIO-1: **Nesting Bird Surveys**. In the event that construction activities occur during the nesting bird breeding season (February 1 through September 1), a qualified biologist shall conduct pre-construction survey within 7 days prior to any on-site grading and construction activities in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. Pre-construction nesting bird surveys shall also cover a 500-foot buffer around the site, as feasible.

If occupied nests are found, then limits of construction to avoid occupied nests shall be established by the qualified biologist in the field with flagging, fencing, or other appropriate barriers (e.g., 250 feet around active passerine nests to 500 feet around active non-listed raptor nests), and construction personnel shall be instructed on the sensitivity of nest areas. The nest area shall be avoided until the nest is vacated and the juveniles have fledged and are no longer reliant upon the nest or parental care for survival, construction may proceed in the setback areas. If migratory birds are not detected during the preconstruction survey, no further measures would be required, and construction activities may proceed.

BIO-2: Burrowing Pre-Construction Owl Surveys. One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the Project Site shall be resurveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation or current version.

If burrowing owls are detected, the Burrowing Owl Relocation Plan shall be implemented in consultation with CDFW. As required by the Burrowing Owl Relocation Plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation or current version. No project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed.

Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Burrowing owls shall be excluded from burrows in the immediate Project Site and within a buffer zone by installing one-way doors in burrow entrances. These doors shall be placed at least 48 hours prior to ground-disturbing activities. The Project Site shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities.

Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow.

BIO-3: American Badger and Desert Kit Fox Surveys. A pre-construction survey for American badger and desert kit fox shall be conducted on the Project Site within 10 days prior to the start of construction to

Juniper Energy, LLC APN: 0490-171-01 January 2025

determine the presence/absence of either species. If either species is discovered during the survey, an American Badger/Desert Kit Fox Mitigation and Monitoring Plan shall be developed. The Mitigation and Monitoring Plan shall include avoidance and minimization measures to reduce potential impacts to either species, as well as compensatory mitigation to offset direct or indirect impacts. The plan shall be developed in consultation with CDFW. At a minimum, the plan shall do the following:

- Identify pre-construction survey methods for American badger and desert kit fox.
- Describe feasible pre-construction and construction-phase avoidance methods.
- Describe pre-construction and construction-phase relocation methods, including the possibility for passive relocation.
- For burrows that would not be impacted by the Project, identify appropriate construction exclusion zones for both active and natal burrows.
- Coordinate survey findings prior to and during construction to meet the information needs of wildlife health officials in monitoring the health of kit fox populations.

BIO-4: Education Program. An education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working at the Project Site shall be administered before performing any clearing and grubbing activities. The WEAP shall consist of a video presentation created by the qualified biologist that includes a discussion of the biology and status of burrowing owl, LeConte's Thrasher, American Badger, and Kit Fox, and about the other biological resources mitigation measures described in the California Environmental Quality Act document. Interpretation for non-English-speaking workers shall be provided, and the same instruction shall be provided to any new workers before they are authorized to perform clearing and grubbing activities at the Project Site. Upon completion of the WEAP, which can be administered by the lead person from the construction crew, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent staff who would be conducting work at the Project Site.

BIO-5: Best Management Practices/Erosion/Runoff. The construction limits shall be flagged prior to ground-disturbance activities, and all construction activities, including equipment staging and maintenance, shall be conducted within the flagged disturbance limits.

All vehicles and equipment shall be maintained in proper condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. Hazardous spills shall be immediately cleaned up and the contaminated soil shall be properly handled or disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated staging area. Soil binding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.

All trash and food-related waste shall be placed in self-closing, animal-proof containers and removed at least once per week from the site to prevent overflow. The fully covered trash receptacles shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Workers shall not feed wildlife or bring pets to the Project Site. Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the Project Site on a daily basis.

Juniper Energy, LLC APN: 0490-171-01 January 2025

CULTURAL MITIGATION MEASURES

CUL-1: Unanticipated Discovery of Archaeological Resources. A worker environmental awareness program training shall be prepared and conducted prior to ground-disturbing activities to inform all construction personnel working on the proposed Project about the archaeological sensitivity of the area. The purpose of the worker environmental awareness program training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the proposed Project and explain the importance of and legal basis for the protection of cultural resources. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection and immediately contacting the appropriate County of San Bernardino personnel upon discovery or suspected discovery of cultural resources.

In the event that potential archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether additional study is warranted. Depending on the significance of the find under CEQA (14 CCR 15064.5[f]; PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.

CUL-2: Unanticipated Discovery of Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has determined the appropriate treatment and disposition of the human remains. If the county coroner determines that the remains are, or are believed to be, Native American, he or she shall notify NAHC in Sacramento within 24 hours. In accordance with PRC Section 5097.98, NAHC must immediately notify those persons it believes to be the MLD (defined below) of the individual whose remains are discovered. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative shall then determine, in consultation with the property owner, the disposition of the human remains.

GEOLOGY & SOILS MITIGATION MEASURES

GEO-1: Treatment of Previously Unidentified Paleontological Resources. Prior to the issuance of a grading permit, the following note shall be placed on the grading plans:

"If previously unidentified paleontological resources are unearthed during construction activities, construction work in the immediate area of the find shall be halted and directed away from the discovery until a qualified Paleontologist assesses the significance of the resource. The County of San Bernardino Land Use Services Department shall make the necessary plans for treatment of the find(s) and for the evaluation and mitigation of impacts if the finds are found to be historically significant according to CEQA (CEQA Guidelines Section 15064.5 (a)). The plan shall include, but not be limited to:

1. Preparation of recovered specimens to a point of identification and permanent preservation including washing of sediments to recover small invertebrates and vertebrates.

Juniper Energy, LLC APN: 0490-171-01 January 2025

Identification and curation of specimens into an established, accredited museum repository with
permanent retrievable paleontologic storage. The paleontologist must have a written repository
agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impact to
significant paleontological resources is not complete until such curation into an established repository
has been fully completed and documented.

3. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the County Land Use Services Department- Current Planning along with confirmation of the curation of recovered specimens into an established, accredited museum repository, would signify completion of the program to mitigate impacts to paleontological resources."

HYDROLOGY AND WATER QUALITY MITIGATION MEASURES

HYDRO-1: Detention basins shall be incorporated into the final design of the proposed project in accordance with the final drainage report subject to approval by the County of San Bernardino.

NOISE MITIGATION MEASURES

NOISE-1: Construction activities for the Project shall be restricted as follows:

- a. All internal combustion engines used during construction of the Project shall be operated with mufflers that meet the requirements of the State Resources Code, and, where applicable, the Vehicle Code. Equipment shall be properly maintained and turned off when not in use.
- b. Pile driving activities shall be limited to 7:30 a.m. to 7:00 p.m. weekdays only.
- c. Construction maintenance, storage and staging areas for construction equipment shall avoid proximity to residential areas to the maximum extent practicable. Stationary construction equipment, such as compressors, mixers, etc., shall be placed away from residential areas and/or provided with acoustical shielding. Quiet construction equipment shall be used when possible.
- d The developer shall designate a project manager with authority to implement the mitigation prior to issuance of a building/grading permit. The project manager's phone number shall be conspicuously posted at the construction site. The project manager shall determine the cause of noise complaints (e.g. starting too early, faulty muffler, etc.) and shall take prompt action to correct the problem.

TRIBAL CULTURAL RESOURCES MITIGATION MEASURES

TCR-1: Tribal Monitoring. Due to the heightened cultural sensitivity of the proposed project area, at the discretion of the consulting tribes, Tribal monitors may be present for all ground-disturbing activities that occur within the proposed project area (which includes, but is not limited to, tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, drainage and irrigation removal and installation, hardscape installation, and archaeological work). At the discretion of the consulting tribes, a sufficient number of Tribal monitors may be present each workday to ensure that simultaneously occurring ground disturbing activities receive thorough levels

Juniper Energy, LLC APN: 0490-171-01 January 2025

of monitoring coverage. A Monitoring and Treatment Plan that is reflective of the project mitigation ("Cultural Resources" and "Tribal Cultural Resources") shall be completed by the archaeologist, as detailed within CUL-1, and submitted to the Lead Agency for dissemination to the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI). Once all parties review and had the opportunity to comment on the plan, it shall be adopted by the Lead Agency – the plan must be adopted prior to permitting for the project. Any and all findings would be subject to the protocol detailed within the Monitoring and Treatment Plan.

TCR-2: Treatment of Cultural Resources. If a pre-contact cultural resource is discovered during archaeological presence/absence testing, the discovery shall be properly recorded and then reburied in situ. A research design shall be developed by the archaeologist that shall include a plan to evaluate the resource for significance under CEQA criteria. Representatives from the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI), the archaeologist/applicant, and the Lead Agency shall confer regarding the research design, as well as any testing efforts needed to delineate the resource boundary. Following the completion of evaluation efforts, all parties shall confer regarding the archaeological significance of the resource, its potential as a Tribal Cultural Resource (TCR), avoidance (or other appropriate treatment) of the discovered resource, and the potential need for construction monitoring during project implementation. Should any significant resource and/or TCR not be a candidate for avoidance or preservation in place, and the removal of the resource(s) is necessary to mitigate impacts, the research design shall include a comprehensive discussion of sampling strategies, resource processing, analysis, and reporting protocols/obligations. Removal of any cultural resource(s) shall be conducted with the presence of a Tribal monitor representing the Tribe, unless otherwise decided by SMBMI. All plans for analysis shall be reviewed and approved by the Applicant and SMBMI prior to implementation, and all removed material shall be temporarily curated on-site. It is the preference of SMBMI that removed cultural material be reburied as close to the original find location as possible. However, should reburial within/near the original find location during project implementation not be feasible, then a reburial location for future reburial shall be decided upon by SMBMI, the landowner, and the Lead Agency, and all finds shall be reburied within this location. Additionally, in this case, reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, all cataloguing and basic recordation of cultural resources have been completed, and a final monitoring report has been issued to Lead Agency and SMBMI. All reburials are subject to a reburial agreement that shall be developed between the landowner and SMBMI outlining the determined reburial process/location and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.).

Should it occur that avoidance, preservation in place, and on-site reburial are not an option for treatment, the landowner shall relinquish all ownership and rights to this material and confer with SMBMI to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.

All draft records/reports containing the significance and treatment findings and data recovery results shall be prepared by the archaeologist and submitted to the Lead Agency and SMBMI for their review and

Juniper Energy, LLC APN: 0490-171-01 January 2025

comment. After approval from all parties, the final reports and site/isolate records are to be submitted to the Lead Agency and SMBMI.

TCR-3: Inadvertent Discoveries of Human Remains/Funerary Objects. In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify SMBMI, the applicant/developer, and the Lead Agency. The Lead Agency and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties.

It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, parties, and Lead Agencies, would be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

GENERAL REFERENCES

American Ornithological Society. 2020. Checklist of North American Birds (online). Accessed April 2021. http://checklist.americanornithology.org/taxa.

California Air Pollution Control Officers Association, California Emission Estimator Model (CalEEMod), CAPCOA, Released March 2022. Available at:

http://www.aqmd.gov/caleemod/download-model

California Air Resources Board, Ambient Air Quality Standards, California Air Resources Board, Updated May 2016.

www.arb.ca.gov/research/aaqs/aaqs2.pdf

Juniper Energy, LLC APN: 0490-171-01 January 2025

California Air Resources Board, California Air Resources Board 2017 Scoping Plan, CARB, November 2017.

https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents

California Air Resources Board 2022. 2019, 2020, & 2021 Annual Air Quality Data Summaries, California Air Resources Board. Accessed October 12, 2022.

www.arb.ca.gov/adam/topfour/topfour1.php

California Department of Conservation

https://maps.conservation.ca.gov/mineralresources

California Department of Fish and Game. 2010. Mohave Ground Squirrel Survey Guidelines. January 2003; minor process and contact changes in July 2010.

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March 7, 2012. Accessed January 31, 2020.

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline.

California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

California Department of Fish and Wildlife. 2019. A Conservation Strategy for the Mohave Ground Squirrel Xerospermophilus mohavensis.

http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=171301&inline.

California Department of Fish and Wildlife. 2020. Evaluation of a Petition from the Center for Biological Diversity to List Western Joshua Tree (Yucca Brevifolia) as Threatened Under the California Endangered Species Act. State of California Natural Resources Agency Department of Fish and Wildlife Report to the Fish and Game Commission. February 2020.

California Department of Fish and Wildlife. 2021. List of Vegetation Alliances and Associations: Natural Communities List Arranged Alphabetically by Life Form. August 2021. Accessed April 2022. https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/List

California Department of Fish and Wildlife. 2022a. California Natural Diversity Database (CNDDB). RareFind 5: Commercial version. CDFW, Biogeographic Data Branch.

https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx.

California Department of Fish and Wildlife. 2022b. "California Wildlife Habitat Relationships (CWHR)" [information system]. Version 9.0.

https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range.

California Department of Fish and Wildlife. 2023. California Natural Diversity Database, Element report for the Mohave ground squirrel. California Department of Fish and Game, Natural Heritage Division, Sacramento, California.

Juniper Energy, LLC APN: 0490-171-01 January 2025

_____. 2019. A Conservation Strategy for the Mohave Ground Squirrel (Xerospermophilus mohavensis). California Department of Fish and Wildlife.

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=171301&inline

____. 2010. Mohave Ground Squirrel Survey Guidelines. Unpublished guidelines produced by CDFG. Sacramento, California. 5 pp. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83975.

California Department of Forestry and Fire Protection

https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildfire-prevention-engineering/fire-hazard-severity-zones/

California Department of Transportation. Caltrans Scenic Highway Corridor Map http://www.dot.ca.gov/hq/LandArch/16 livability/scenic highways/index.html

California Department of Transportation. Scenic Highways: California State Scenic Highways. Accessed September 4, 2022.

https://dot.ca.gov/programs/design/lap-landscape-architecture-and- community-livability/lap-liv-i-scenic-highways

California Department of Water Resources, Water Data Library (WDL) Station Maps https://wdl.water.ca.gov/waterdatalibrary

California Environmental Quality Act (CEQA) Statute & Guidelines, Association of Environmental Professionals, 2022. Available at:

www.califaep.org/statute and guidelines.php

California Native Plant Society. 2001. CNPS Botanical Survey Guidelines. Published December 9, 1983; revised June 2, 2001.

http://www.cnps.org/cnps/rareplants/pdf/cnps survey guidelines.pdf.

California Native Plant Society. 2022. Rare Plant Inventory (online edition, v9-01 1.5). California Native Plant Society, Rare Plant Program.

https://rareplants.cnps.org/.

California Native Plant Society. 2022b. A Manual of California Vegetation, Online Edition. California Native Plant Society, Sacramento, California. Accessed April 2022.

http://www.cnps.org/cnps/vegetation/.

Census 2000 Urbanized Area Maps

https://www.census.gov/geo/maps-data/maps/ua2kmaps.html

County of San Bernardino, 2020 General Plan. October.

https://countywideplan.com

County of San Bernardino, County of San Bernardino 2007 Development Code https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-166578

Juniper Energy, LLC APN: 0490-171-01 January 2025

County of San Bernardino Greenhouse Gas Emissions Reduction Plan, September 2011 www.sbcounty.gov/Uploads/lus/GreenhouseGas/FinalGHGFull.pdf

County of San Bernardino Hazard Overlay Map

http://cms.sbcounty.gov/lus/Planning/ZoningOverlayMaps/HazardMaps.aspx

County of San Bernardino, Land Use Service Zoning Maps, Interactive Zoning Layers, Accessed on October 13, 2022. Available at:

https://sbcounty.maps.arcgis.com/apps/MapSeries/index.html?appid=f5a50c44766 b4c36a3ae014497aa430d

County of San Bernardino, San Bernardino Council of Governments, and Southern California Association of Governments. 2018. Draft San Bernardino County Regional Conservation Investment Strategy. Prepared by Dudek. December 2018.

https://www.gosbcta.com/wpcontent/uploads/2019/08/SBC RCIS Draft December 018.pdf

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. Prepared for U.S. Fish and Wildlife Service. December 1979; reprinted 1992.

http://www.fws.gov/wetlands/documents/classification-of-wetlands-and deepwater- habitats-of-the-united-states.pdf

Crother, B.I. 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding, edited by J.J. Moriarty. 8th ed. Society for the Study of Amphibians and Reptiles. https://ssarherps.org/wp-content/uploads/2017/10/8th-Ed-2017-Scientific-and-Standard-English-Names.pdf.

Cypher, E.A. 2002. General Rare Plant Survey Guidelines. Bakersfield, California: California State University, Stanislaus, Endangered Species Recovery Program. Revised July 2002. http://www.fws.gov/sacramento/ES/Survey-Protocols-Guidelines/Documents/rare_plant_protocol.pdf.

Gervais, J.A., D.K. Rosenberg, and L.A. Comrack. 2008. "Burrowing Owl (Athene cunicularia)." In California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California, edited by W.D. Shuford and T. Gardali, 218–226. Studies of Western Birds no. 1. California: Western Field Ornithologists (Camarillo), and California Department of Fish and Game (Sacramento). February 4, 2008. http://www.dfg.ca.gov/wildlife/nongame/ssc/birds.html.

Jepson Flora Project. 2022. Jepson eFlora. Berkeley, California: University of California. Accessed May 2022.

http://ucjeps.berkeley.edu/cgi-bin/get JM name data.pl.

Mojave Desert Air Quality Management District 2020. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, Mojave Desert Air Quality Management District, February 2020. Available at:

www.mdaqmd.ca.gov/home/showpublisheddocument?id=8510

Juniper Energy, LLC APN: 0490-171-01 January 2025

North American Butterfly Association. 2018. "Checklist of North American Butterflies Occurring North of Mexico – Edition 2.4." Adapted from North American Butterfly Association (NABA) Checklist and English Names of North American Butterflies, eds. B. Cassie, J. Glassberg, A. Swengel, and G. Tudor. 2nd ed. Morristown, New Jersey: NABA. Accessed April 2021.

https://www.naba.org/pubs/enames2 4.html.

NatureServe. 2022. "NatureServe Core Methodology."

https://www.natureserve.org/conservation- tools/standards-methods/natureserve-core-methodology.

Regional Water Quality Control Plan for the Sant Ana Basin Region, State Water Resources Control Board, January 2019

https://www.waterboards.ca.gov/santaana/water issues/programs/basin plan/index.html

Southern California Air Quality Management Plan 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, South Coast Air Quality Management District, 2008. Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds

Southern California Association of Governments 2017. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, Southern California Association of Governments, July 6, 2017. Available at:

https://scag.ca.gov/sites/main/files/file-attachments/f2016rtpscs amend02.pdf?1609373223

State of California, Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program

https://www.conservation.ca.gov/dlrp/fmmp

State of California, Department of Conservation, DOC Maps, Mines and Mineral Resources https://maps.conservation.ca.gov/mineralresources

State of California, Department of Forestry and Fire Protection, September 17, 2007 https://osfm.fire.ca.gov/media/6776/fhszl06 1 map64.pdf

State Water Resources Control Board. 2021. State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019; revised April 6, 2021.

https://www.waterboards.ca.gov/press_room/press_releases/2021/procedures.pdf.

U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Online ed. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. http://www.cpe.rutgers.edu/wetlands/1987-Army-Corps-Wetlands-Delineation-Manual.pdf.

U.S. Army Corps of Engineers. 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046489.pdf.

Juniper Energy, LLC APN: 0490-171-01 January 2025

U.S. Army Corps of Engineers. 2008b. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual. ERDC/CRREL TR-08-12. Prepared by R.W. Lichvar and S.M. McColley. Hanover, New Hampshire: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. August 2008.

https://apps.dtic.mil/dtic/tr/fulltext/u2/a486603.pdf.

U.S. Department of Agriculture. 2022a. Web Soil Survey. USDA Natural Resources Conservation Service, Soil Survey Staff. Accessed April 2022.

https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

U.S. Department of Agriculture. 2022b. Plants Database. USDA Natural Resources Conservation Service. Accessed April 2022.

https://plants.sc.egov.usda.gov/home.

U.S Fish and Wildlife Service. 2004. Application of the "Destruction or Adverse Modification" Standard under Section 7(a)(2) of the Endangered Species Act. Memorandum from M. Jones Jr. (Acting Director, USFWS) to USFWS regional directors (Regions 1–7) and manager of California–Nevada Operations Office. December 9, 2004.

U.S Fish and Wildlife Service. 2008. Draft Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Gopherus agassizii). California and Nevada Region, Sacramento, California.

U.S Fish and Wildlife Service. 2018. Preparing for any Action That May Occur within the Range of the Mojave Desert Tortoise (Gopherus agassizii). October 26, 2018.

https://www.fws.gov/sites/default/files/documents/ Mojave%20Desert%20Tortoise Preproject%20Survey%20Protocol 2019.pdf.

U.S Fish and Wildlife Service. 2022a. National Wetlands Inventory. Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service. Accessed April 2022. http://www.fws.gov/wetlands/Data/Mapper.html.

U.S Fish and Wildlife Service. 2022b. "Critical Habitat and Occurrence Data" [map]. USFWS Geospatial Services. Accessed April 2022.

http://www.fws.gov/data.

U.S. Geological Survey. 2021. "National Hydrography Dataset" [digital GIS data]. Accessed April 2022. http://nhd.usgs.gov/.

Juniper Energy, LLC APN: 0490-171-01 January 2025

PROJECT-SPECIFIC REFERENCES

- Visual Impact Analysis, September 23, 2022, Dudek
- Air Quality & Greenhouse Gas Study dated October 17, 2022, BlueScape Environmental
- Biological Constraints Report, April 15, 2022, Dudek
- Biological Technical Report, October 2022, Dudek
- Mohave Ground Squirrel Live-Trapping Survey, October 20, 2023, Dudek
- Cultural Resources Inventory and Evaluation Report, November 2022, Dudek
- Built Environment Inventory and Evaluation Report, November 2022, Dudek
- Geologic Review, October 4, 2022, Partner Assessment Corporation
- Preliminary Drainage Report, Lockhart Solar, August 2024, Kimley-Horn
- Traffic Management Plan, February 16, 2023, Partner Assessment Corporation
- Approved Jurisdictional Determination dated March 17, 2023, U.S. Army Corps of Engineers