DOCKETED	
Docket Number:	24-OPT-03
Project Title:	Soda Mountain Solar
TN #:	257936
Document Title:	Chapter 4 Alternatives
Description:	This chapter discusses a range of alternatives to the proposed project, including alternative locations, alternative designs, and a No Project Alternative.
Filer:	Hannah Gbeh
Organization:	Resolution Environmental
Submitter Role:	Applicant Consultant
Submission Date:	7/22/2024 5:19:38 PM
Docketed Date:	7/23/2024

CHAPTER 4. ALTERNATIVES ANALYSIS

4.1 INTRODUCTION

The California Environmental Quality Act (CEQA), Section 15126.6(a), requires an Environmental Impact Report (EIR) to "describe a reasonable range of alternatives to a project, or to the location of a project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." This chapter discusses a range of alternatives to the proposed project, including alternative locations, alternative designs, and a No Project Alternative. The State CEQA Guidelines provide direction for the discussion of alternatives to the proposed project. This section requires:

- Description of "...a range of reasonable alternatives to the project, or to the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (Section 15126.6[a])
- A setting forth of alternatives that "...shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project." (Section 15126.6[f])
- Discussion of the "No Project" alternative, and "...If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Section 15126.6[e][2])
- Discussion and analysis of alternative locations "...that would avoid or substantially lessen any of the significant effects of the project;" only these need to be considered for inclusion in the EIR. (Section 15126.6[f][2][A])
- "Prior to approval of the proposed subsequent project, the lead agency shall incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the EIR and provide notice in the manner required by §15087. (Section 15177[d])

Given the CEQA mandates listed above, this section: (1) describes the range of reasonable alternatives to the project; (2) examines and evaluates resource issue areas where significant adverse environmental effects have been identified and compares the impacts of the alternatives to those of the proposed project; and (3) identifies the Environmentally Superior Alternative.

4.2 ALTERNATIVES SELECTION

4.2.1 **Project Objectives**

The project's primary goal is to contribute to the achievement of California's renewable energy goals and create a vital new point of interconnection for renewable energy in San Bernardino County to connect to California's electric transmission infrastructure. The project objectives are identified as follows:

• Assist the State of California in achieving or exceeding its Renewables Portfolio Standard and greenhouse gas emissions reduction objectives by developing and constructing new California Renewables Portfolio Standard–qualified solar power generation facilities producing approximately 300 MW.

- Produce and transmit electricity at a competitive cost.
- Provide a new source of energy storage that assists the state in achieving its energy storage mandates.
- Use the existing transmission unused capacity that provides approximately 300 MW of capacity.
- Utilize existing energy infrastructure to the extent possible by locating solar power generation facilities near existing infrastructure, such as electrical transmission facilities.
- Site solar power generation facilities in areas of San Bernardino County that have the best solar resource to maximize energy production and the efficient use of land.
- Develop a solar power generation facility in San Bernardino County that would support the economy by investing in the local community, creating local construction jobs, and increasing tax and fee revenue to the County.

4.2.2 Significant Impacts Resulting from the Proposed Project

The proposed project would result in potentially significant and unavoidable adverse impacts for which feasible mitigation measures would not reduce the impacts to below a level of significance for Aesthetics (Chapter 3.1). Implementation of feasible mitigation measures would reduce potentially significant impacts for Biological Resources (Chapter 3.4).

4.3 ALTERNATIVES CONSIDERED BUT REJECTED

CEQA Guidelines Section 15126.6(c) recommends that an EIR identify alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection.

4.3.1 Alternative Site Location

CEQA Guidelines Section 15126.6(f)(2) addresses alternative locations for a project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by constructing the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR. Further, CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternative locations are whether the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the applicant).

The project applicant, Soda Mountain Solar LLC., does not have control of an alternate site. If control were viable, the applicant would have to re-initiate the application process as a new project. Similar to the proposed site, an alternate site would require environmental review once the applicant prepared sufficient project description information. It is unknown if the environmental impacts associated with this Alternative would be less than the proposed project, because it would be speculative to evaluate an unsecured alternate site. Therefore, an alternative site was eliminated from further consideration in this EIR.

4.3.2 North Array Alternative

In 2015, the BLM and the County of San Bernardino jointly prepared a proposed Plan Amendment to the California Desert Conservation Area (CDCA) Plan and Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) under NEPA and CEQA. The Proposed Action within the EIS/EIR included the North Array, 571 acres of solar panels on the northwest side of I-15. The North Array was not carried forward in the approved project due to the visual impacts and bighorn sheep connectivity.

Including the North Array as an alternative land area for the project was not pursued as this area is now within the Soda Mountain Expansion Area of Critical Environmental Concern, as designated under the DRECP in 2016, and is not available for renewable energy development.

4.4 NO PROJECT ALTERNATIVE

4.4.1 Description and Setting

Under the No Project Alternative, the construction of the project and associated infrastructure would not occur. As no project would be built and no ground disturbance would occur, none of the impacts associated with the construction, operation, and maintenance, and future decommissioning of the project to any of the resources identified and discussed in Chapter 4 would occur. The No Project Alternative would not contribute to any cumulative impacts.

4.4.2 Comparison of the Effects of the No Project Alternative to the Proposed Project

The No Project Alternative would fail to meet any of the project objectives. The No Project Alternative would not achieve any of the environmental benefits of increasing renewable energy generation consistent with the State of California's Renewable Portfolio Standard. If the energy needs that are unmet by the development of the project are not replaced with comparable renewable sources, the development of alternative energy projects could result in greater emissions from, for example, the burning of fossil fuels and the replacement projects would not contribute to meeting the state's greenhouse gas reduction goals. This impact would be greater than with the project.

The No Project Alternative would result in no impacts to aesthetics, agriculture, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, and transportation, tribal cultural resources, utilities and service systems, and wildfire.

Under the No Project Alternative, if the project were not constructed, a future applicant may apply to construct a solar project in this location on federally owned land. The BLM issued a Record of Decision to approve the project and associated amendment to the CDCA Plan in March 2016 (BLM 2016). If a different solar project were to be constructed in these locations, the impacts of the other solar projects would be similar or the same as those identified for the project in Chapter 3 of this EIR.

4.5 VISUAL BUFFER ALTERNATIVE

4.5.1 Description and Setting

As described in Chapter 3.1, Aesthetics, the project would result in significant impacts to the visual character and quality of public views of the site and its surroundings. This is due to the size and scale of the project, the limited vegetation along I-15, and the location of the project within an alluvial valley surrounded by mountainous terrain.

The Visual Buffer Alternative would include a 500-foot setback between the proposed solar facility and I-15. The buffer area would remain in its current undeveloped condition. The PV modules within the buffer would be shifted to the southwest and south within the project boundary. The battery energy storage system, switchyard, overhead and underground lines and other project components would be the same as the project. The length of construction may be slightly reduced under this Alternative, but the daily construction would remain the same as the proposed project.

4.5.2 Comparison of the Effects of the Visual Buffer Alternative to the Proposed Project

The Visual Buffer Alternative would be within the same project boundary and retain the Rasor Road access road and location of the gen-tie line. It would retain the same megawatts as the project so would use a similar amount of construction workforce and water, as well as the same construction fleet.

For the following resources, impacts are primarily associated with ground disturbance or with workforce use. As the Visual Buffer Alternative would disturb essentially the same amount of undeveloped land, in the same vicinity as the project, and use the same access road to reach the project, the following impacts would be essentially the same with incorporation of the APMs as would be in the project:

- Air Quality
- Energy
- Geology and Soils
- Hazards and hazardous materials
- Hydrology and water quality
- Noise

- Public services
- Recreation
- Transportation
- Tribal cultural resources
- Utilities and service systems
- Wildfire

• Population and housing

Aesthetics

The Visual Buffer Alternative would increase the project fenceline setback from 1-15 to reduce the immediately adjacent views from I-15. As experienced from I-15 under this alternative, the solar arrays would range up to 0.5 mile to the east and would be visually noticeable within the predominantly natural-appearing, rural desert landscape. However, because of the setback, more vegetation and terrain would screen the facilities and the distance would reduce the views into the project themselves. While portions of the low-profile solar arrays would be visible as a linear, horizontal, medium- to dark-gray areal mass

on the valley floor, the low profile of the solar arrays, combined with the degree of topographical change, increased distance, and atmospheric conditions between these sites and the project viewers indicate that viewers would have reduced views of the project.

Similar to the proposed project, the Visual Buffer Alternative would introduce elements and patterns that are not currently found in the viewshed, resulting in moderate visual contrast from I-15. The existing high visual quality visual character as seen from these viewpoints would be degraded, and the existing rural and open space would be replaced with an inherent semi-industrial, utilitarian landscape character. Proposed screen planting and the visual buffer would partially reduce this impact; however, it would provide little benefit as seen from mid- to long-range views due to view angle and distance. The elevated viewpoints from Rasor Road and the Rasor OHV would have a moderate visual contrast due to the topography.

Combining the equally weighted moderate visual contrast, subordinate to codominant project dominance, and low to moderate view blockage results in a moderate rating for overall visual change, which in the context of the existing landscape's moderate to high visual sensitivity, would reduce the impacts of the project. The Visual Buffer Alternative would reduce impacts to existing visual character from I-15 but would not reduce impacts from the western Soda Mountains and Rasor OHV Area. Implementation of APM AES-1 (Siting and Design), APM AES-2 (Construction), and APM AES-3 (Operation and Maintenance) would reduce the visual contrast associated with visually discordant structural features, dark colors, glare (from large structures, buildings, and solar arrays) and unharmonious lines anticipated under this alternative to less than significant. Therefore, under the Visual Buffer Alternative, impacts to visual character and quality of public views would be less than significant.

Biological Resources

The Visual Buffer Alternative would extend solar panel arrays into unused land to the south and southeast within the project boundary to have sufficient acreage to meet the objectives. Vegetation within the southeastern portion of the study area and within the sandy wash outside of the project site consisted primarily of creosote bush (*Larrea tridentata*). Although previous surveys showed suitable habitat for Mojave fringe-toed lizards within an ephemeral wash overlapping the southeastern project boundary, the current project boundary does not overlap the ephemeral wash. During the 2023 surveys, it was confirmed that there is no suitable habitat present within the southeastern portion of the study area due to the lack of windblown sands. Therefore, impacts of the Visual Buffer Alternative to Mojave fringe-toed lizards would remain consistent with the proposed project.

Overall, the Visual Buffer Alternative would have similar impacts to biological resources compared with the proposed project, but they would remain less than significant with implementation of mitigation (MM BIO-1 through BIO-27) and incorporation of relevant APMs (APM BIO-1 through APM BIO-37).

Cultural Resources

The Visual Buffer Alternative would extend solar panel arrays into unused land to the south and southeast within the project boundary to have sufficient acreage to meet the objectives. The majority of the project site was previously subject to intensive-level Class III archaeological surveys in 2009 and 2013; therefore, SWCA completed a reconnaissance survey to relocate and assess the condition of the cultural resources previously identified within the project site (Appendix F). SWCA conducted fieldwork to locate and assess the condition of two previously recorded sites that intersects the project site and the 38 previously recorded isolated finds that intersect the site SWCA was able to locate the previously recorded Arrowhead Trail Highway (P-36-007689) and historic temporary tent camp (P-36-020720), along with two of the 38 previously recorded isolated finds. The Arrowhead Trail Highway (P-36-007689) was previously evaluated as historically significant; however, the segment that intersects the project site lacks

sufficient integrity to convey its significance and is a non-contributing element. Site P-36-02720 lacks sufficient integrity due to physical deterioration and modern impacts and contains little informational value. Therefore, the previously recorded isolates, the historic-era site, and the segment of Arrowhead Trail Highway that transects the project site are not historical resources for the purposes of CEQA.

Therefore, the Visual Buffer Alternative would have similar impacts to cultural resources compared with the proposed project, but they would remain less than significant with implementation of APM CUL-1 through APM CUL-3.