

C. Alternatives

This section summarizes the detailed assessment of alternatives presented in SEIR Appendix 1. Section C is organized as follows: Section C.1 is an overview of the alternatives screening process; Section C.2 describes the methodology used for alternatives evaluation; Section C.3 presents a summary of which alternatives have been selected for full SEIR analysis and which have been eliminated based on CEQA criteria; Section C.4 describes the retained alternatives; and Section C.5 presents descriptions of each alternative that was eliminated from SEIR analysis and explains why each was eliminated. Section C.6 describes the No Project Alternative.

C.1 Alternatives Development and Screening Process

One of the most important aspects of the environmental review process is the identification and assessment of reasonable alternatives that would avoid or minimize the impacts of a Proposed Project. In addition to mandating consideration of the No Project Alternative, CEQA Guidelines (Section 15126.6(d)) emphasize the selection of a reasonable range of technically feasible alternatives and adequate assessment of these alternatives to allow for a comparative analysis for consideration by decision-makers. CEQA Guidelines state that the discussion of alternatives shall focus on alternatives capable of eliminating or reducing significant adverse environmental effects of a Proposed Project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. However, CEQA Guidelines declare that an EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote or speculative.

The proposed CRS Project is described in detail in Section B of this SEIR. Appendix 1 describes the alternatives screening analysis that has been conducted for the Proposed Project and provides a record of the screening criteria and results that were reached regarding alternatives carried forward for full EIR analysis and alternatives eliminated. Appendix 1 documents: (1) the range of alternatives that was suggested and evaluated; (2) the approach and methods used to screen the feasibility of these alternatives according to guidelines established under CEQA; and (3) the results of the alternatives screening. For alternatives that were eliminated from EIR consideration, Appendix 1 explains in detail the rationale for elimination. This section summarizes those conclusions.

Alternatives were developed by the CPUC, BLM and SEIR preparers, with input from other public agencies and the general public. In total, the alternatives screening process has culminated in the identification and preliminary screening of eight potential alternatives. These alternatives include various locations for the CRS substation as well as rotated configurations on the proposed site and installation of a sand shield to reduce or avoid biological resources impacts within the sand transport corridor.

C.2 Alternatives Screening Methodology

The evaluation of the alternatives used a screening process that consisted of three steps:

- Step 1:** Clearly define each alternative to allow comparative evaluation
- Step 2:** Evaluate each alternative in comparison with the Proposed Project, using CEQA criteria (defined below)
- Step 3:** Based on the results of Step 2, determine the suitability of the each alternative for full analysis in the SEIR. If the alternative is unsuitable, eliminate it from further consideration.

C.2.1 CEQA Requirements for Alternatives

After completion of the steps defined above, the advantages and disadvantages of the alternatives are carefully weighed with respect to CEQA criteria for consideration of alternatives. CEQA provides guidance on selecting a reasonable range of alternatives for evaluation in an EIR. This alternatives screening and evaluation process satisfies State requirements, which are described below.

C.2.1.1 CEQA Guidelines

An important aspect of EIR preparation is the identification and assessment of reasonable alternatives that have the potential for avoiding or minimizing the impacts of a Proposed Project. In addition to mandating consideration of the No Project Alternative, the State CEQA Guidelines (Section 15126.6(e)) emphasize the selection of a reasonable range of feasible alternatives and adequate assessment of these alternatives to allow for a comparative analysis for consideration by decision-makers. The State CEQA Guidelines (Section 15126.6(a)) state that:

An EIR shall describe a reasonable range of alternatives to the project, or to the location of the 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. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decisionmaking and public participation.

In order to comply with CEQA's requirements, each alternative that has been suggested or developed for this project has been evaluated in three ways:

- Does the alternative accomplish all or most of the basic project objectives?
- Is the alternative potentially feasible (from economic, environmental, legal, social, technological standpoints)?
- Does the alternative avoid or substantially lessen any significant effects of the Proposed Project (including consideration of whether the alternative itself could create significant effects potentially greater than those of the Proposed Project)?

Each of these bullets is described in more detail in the following sections.

C.2.1.2 Consistency with Project Objectives

The State CEQA Guidelines require the consideration of alternatives capable of eliminating or reducing significant environmental effects "even if these alternatives would impede to some degree the attainment of project objectives" (Section 15126.6(b)). Therefore, each alternative must meet most, but not all, of the project objectives.

SCE's stated objectives of constructing the expanded Colorado Rivers Substation are defined in detail in Section A.1.3. The objectives are to:

- Provide transmission access to potential future renewable resources in the Blythe area;
- Help enable California to meet its renewable energy goals; and
- Complete substation construction in a timely fashion to interconnect with generation-tie lines from the two approved solar power projects (Blythe Solar Power Project and Genesis Solar Energy Project) by the Large Generator Interconnection Agreements (LGIA) target dates.

C.2.1.3 Feasibility

The State CEQA Guidelines (Section 15364) define feasibility as:

... capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

The alternatives screening analysis is largely governed by what CEQA terms the “rule of reason,” meaning that the analysis should remain focused, not on every possible eventuality, but rather on the alternatives necessary to permit a reasoned choice. Further, the EIR must fully analyze those alternatives that are potentially feasible, while still meeting most of the project objectives.

According to the State CEQA Guidelines (Section 15126.6(f)(1)), among the factors that may be taken into account when addressing the feasibility of alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or other regulatory limitations, jurisdictional boundaries, and proponent’s control over alternative sites in determining the range of alternatives to be evaluated in the EIR. For the screening analysis, the feasibility of potential alternatives was assessed taking the following factors into consideration:

- **Economic Feasibility.** Is the alternative so costly that implementation would be prohibitive? The State CEQA Guidelines require consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may “impede to some degree the attainment of project objectives or would be more costly” (Guidelines Section 16126.6(b)). The Court of Appeals added in *Goleta Valley v. Board of Supervisors* (2nd Dist. 1988) 197 Cal.App.3d, p. 1181 (see also *Kings County Farm Bureau v. City of Hanford* (5th Dist. 1990) 221 Cal.App.3d 692, 736 [270 Cal. Rptr. 650]): “[t]he fact that an alternative may be more expensive or less profitable is not sufficient to show that the alternative is financially infeasible. What is required is evidence that the additional costs or lost profitability are sufficiently severe as to render it impractical to proceed with project.”
- **Environmental Feasibility.** Would implementation of the alternative cause substantially greater environmental damage than the Proposed Project, thereby making the alternative clearly inferior from an environmental standpoint? This issue is primarily addressed in terms of the alternative’s potential to eliminate significant effects of the Proposed Project.
- **Legal and Regulatory Feasibility.** Does the alternative have the potential to avoid lands that have legal protection that may prohibit or substantially limit the feasibility of permitting a high voltage transmission substation? Do regulatory restrictions substantially limit the likelihood of successful permitting of a high-voltage transmission substation in a timely manner? Is the alternative consistent with regulatory standards for transmission system design, operation, and maintenance?

Lands that are afforded legal protections that would prohibit the construction of the project, or require an act of Congress for permitting, are considered less feasible locations for the project. These land use designations include wilderness areas, wilderness study areas, restricted military bases, airports and Indian reservations. Information on potential legal constraints of each alternative has been compiled from laws, regulations, and local jurisdictions, as well as a review of federal, State, and local agency land management plans and policies.

- **Social Feasibility.** Would the alternative cause significant damage to the socioeconomic structure of the community and be inconsistent with important community values and needs? Similar to the environmental feasibility addressed above, this subject is primarily considered in consideration of significant environmental effects.

- **Technical Feasibility.** Is the alternative feasible from a technological perspective, considering available technology? Are there any construction, operation, or maintenance constraints that cannot be overcome?

C.2.1.4 Potential to Eliminate Significant Environmental Effects

A key CEQA requirement for an alternative is that it must have the potential to “avoid or substantially lessen any of the significant effects of the project” (State CEQA Guidelines Section 16126.6(a)). If an alternative is identified that clearly does not have the potential to provide an overall environmental advantage as compared to the Proposed Project, it is usually eliminated from further consideration. At the screening stage, it is not possible to evaluate all of the impacts of the alternatives in comparison to the Proposed Project with absolute certainty, nor is it possible to quantify impacts. However, it is possible to identify elements of an alternative that are likely to be the sources of impact and to relate them, to the extent possible, to general conditions in the subject area.

As described in the Geomorphic Assessment and Sand Transport Impacts Analysis of the Colorado River Substation (Appendix 3; ESA PWA, 2010), construction of the proposed expanded CRS would cause 90 acres of direct disturbance impacts, as well as a reduction of sand transported to 1,365 acres downwind (east) of the Proposed Project area (see Figure D.2-1 in the SEIR). This resultant deflation would ultimately eliminate 1,365 acres of Mojave fringe-toed lizard (MFTL)¹ sand dune habitat that comprises the eastern-most extent of the Chuckwalla sand transport corridor and would result in a significant and unmitigable impact.

In addition, there would be three potential significant and unavoidable cultural resources impacts to: known historic properties; unknown significant buried prehistoric and historical archaeological sites or buried Native American human remains; and Traditional Cultural Properties.

C.2.2 Other Considerations for Alternatives

The final project decision by the CPUC will be guided by the Public Utilities Code in addition to the requirements of CEQA. The Public Utilities Code in Section 1002 states that:

Section 1002. (a) The commission, as a basis for granting any certificate pursuant to Section 1001 shall give consideration to the following factors:

(1) Community values.

(2) Recreational and park areas.

(3) Historical and aesthetic values.

(4) Influence on environment, except that in the case of any line, plant, or system or extension thereof located in another state which will be subject to environmental impact review pursuant to the National Environmental Policy Act of 1969 (Chapter 55 (commencing with Section 4321) of Title 42 of the United States Code) or similar state laws in the other state, the commission shall not consider influence on the environment unless any emissions or discharges therefrom would have a significant influence on the environment of this state.

¹ MFTL is not a “listed” species, but is a California Department of Fish and Game “species of concern” and a BLM sensitive species.

C.2.3 Agency Review Processes

The Proposed Project would be located on public lands managed by the BLM land and it could affect routes of gen-tie lines approved by the CEC. Therefore, those agencies would need to be involved in approvals of any alternatives that may ultimately be approved.

BLM Process. SCE requires a Right-of-Way Grant Permit from BLM to construct the Proposed Project. Prior to granting the ROW permit, BLM must comply with the National Environmental Policy Act (NEPA). The BLM plans to issue the Record of Decision (ROD) for the DPV2 project after the Final Supplemental EIR is published. The ROD will approve the 500 kV transmission line (Colorado River to Devers Substation and Devers to Valley Substations), as well as the expanded Colorado River Substation, or an alternative substation site. The BLM process is described in more detail in Section A.3.2.

California Energy Commission Process. The CEC approved the BSPP and GSEP projects on September 15 and September 29, 2010, respectively. The approvals included 220 kV generation-tie (gen-tie) transmission lines that would connect the solar projects to the CRS. If an alternative considered herein is implemented and the approved gen-tie routes require modification, then the revised gen-tie routes would need to be reviewed by the CEC per California Code of Regulations (CCR) Title 20, Section 1769 (Post Certification Amendments and Change). These regulations define the process for evaluation of a petition for modification, which allows consideration in either a formal process (requiring approval by the full Commission) or a staff-level process, which could occur more quickly. The CEC process is described in detail in Section A.3.3.

C.3 Summary of Screening Results

Alternatives are listed below according to the determination made for analysis. Alternatives considered included site alternatives, rotated configuration of the proposed substation, installation of a sand shield, and the No Project Alternative.

C.3.1 Alternatives Fully Analyzed in the SEIR

The substation site alternatives listed below have been chosen for detailed analysis in Section D of this SEIR through the alternative screening process, and each of these alternatives is evaluated by environmental issue area. The alternatives are illustrated on Figure C-1 and the No Project Alternative is described in Section C.6.

- Partial Avoidance Alternative
- Avoidance Alternative #1
- Avoidance Alternative #2
- Avoidance Alternative #3
- Southern Alternative
- No Project Alternative

C.3.2 Alternatives Eliminated from Full Consideration in the SEIR

The alternatives listed below were eliminated from detailed evaluation in the SEIR; they are described and the reasons for their elimination are presented in Section C.5 below.

- Original Midpoint Substation Alternative (see Figure C-1)
- Sand Shield Alternative (see Figure Ap.1-10 in Appendix 1)
- Rotation and Shield Alternative (see Figure Ap.1-10 in Appendix 1)

Additional design options for the proposed substation (e.g., chain link fence) and potential performance standards for mitigation are discussed and evaluated in Section D.2 (Biological Resources) of the SEIR.

C.4 Alternatives Evaluated in this EIR/EIS

C.4.1 Introduction

As discussed in Section C.2, alternatives were assessed for their feasibility, their ability to reasonably achieve the project objectives, and their potential for reducing the significant environmental impacts of the Proposed Project. Based on these screening criteria, the alternatives described in this section were selected for detailed analysis within this Supplemental EIR.

C.4.2 Partial Avoidance Alternative

Detailed discussion of this alternative is presented in Appendix 1, Section 4.2. Appendix 1 also presents a map of the alternative area.

Description

As shown on Figure C-1, the Partial Avoidance Alternative is the closest alternative to the proposed CRS site. It was developed because of its proximity to the proposed substation site, because it would minimize the modifications to approved gen-tie line routes, and because the substation would remain entirely on BLM land. However, the gen-tie lines and/or DPV1 interconnection may need to be located on private land to the southeast of the alternative site. This alternative would reduce the affected MFTL habitat acreage by 35 percent (from 90 to 80 acres of direct impacts and from 1,365 to 855 acres of indirect impact).

Rationale for Full Analysis

- **Reduced Environmental Impacts:** Impacts to desert tortoise would be greater at the Partial Avoidance Alternative than at the proposed CRS location, but would be less than significant with standard mitigation. The alternative would reduce both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat as well as impacts to ribbed cryptantha and Harwood's eriastrum. Fewer total documented cultural resources would also be impacted as well.
- **Feasibility:** The Partial Avoidance Alternative is feasible since, given its close proximity to the proposed substation site it could likely be constructed and permitted. Approval from BLM would occur through its ROD and from the CEC through its application modification process (likely through the staff-approved process, or possibly through the Commission approved modification process).
- **Project Objectives:** The first two project objectives would be met by this and all alternatives. The third project objective, requiring an online date by the end of 2013, could be affected by several processes, but the one with most potential for creating a delayed online date is landowner negotiations for property rights for the transmission interconnections. Land acquisition could require time-consuming eminent domain proceedings. For the gen-tie lines, the solar developers do not have eminent domain rights. If the gen-tie lines cannot be installed on lands for which SCE has obtained rights and the affected property owners are not cooperative, then rerouting of the gen-tie lines may be necessary to avoid the private parcels, which may also result in schedule delays. In light of information provided by SCE regarding contact with the owners of the private lands on which it would be located (see Response to Comment D01-15 in Section I), it is unlikely that construction of ~~It is uncertain whether~~ the Partial Avoidance Alternative could meet the third objective related to meeting SCE's online date.

The Partial Avoidance Alternative is carried forward for analysis because it has the potential to reduce environmental impacts, it is feasible, and it would meet most (two of three) project objectives.

Figure C-1. Colorado River Substation Alternatives

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C.4.3 Avoidance Alternative #1

Detailed discussion of this alternative is presented in Appendix 1, Section 4.3. Appendix 1 also includes a map of the alternative area.

Description

As shown in Figure C-1, Avoidance Alternative #1 would completely avoid direct effects on the sand transport corridor, while moving the substation as little as possible from the proposed site. The center of the site would be located approximately 0.9 miles (5,000 feet) southeast of the proposed CRS. The alternative would remain north of the DPV2 transmission corridor. It would be located on both public (BLM) and private land, and was considered because it would be entirely outside of the active sand transport corridor. However, the connecting transmission and gen-tie lines would cross through the sand corridor on the northwest and north sides of the alternative site.

Rationale for Full Analysis

- **Reduced Environmental Impacts:** Impacts to desert tortoise would be greater at the Avoidance Alternative #1 than at the proposed CRS location, but would be less than significant with standard mitigation. The alternative would reduce both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat as well as impacts to ribbed cryptantha and Harwood's eriastrum. Fewer total documented cultural resources would also be impacted; however, a greater number of them have not been formally evaluated for eligibility for listing on the NRHP or the CRHR.
- **Feasibility:** Avoidance Alternative #1 is considered to be technically feasible since there are no site constraints and there is a viable design. There are no regulatory obstructions to permitting at the alternative site. Approval from BLM would occur through its ROD and from the CEC through its application modification process (likely through the staff-approved process, or possibly through the Commission approved modification process). There would be potential legal feasibility issues with the reservation rights on the energy company parcel, because approval would be required by the Palo Verde Land and Water Company.
- **Project Objectives:** The first two project objectives would be met by this and all alternatives. The third project objective, requiring an online date by the end of 2013, could be affected by several processes, but the one with most potential for creating a delayed online date is land owner negotiations for property rights for the transmission interconnections. Land acquisition could require time-consuming eminent domain proceedings. For the gen-tie lines, the solar developers do not have eminent domain rights. If the gen-tie lines cannot be installed on lands for which SCE has obtained rights and the affected property owners are not cooperative, then rerouting of the gen-tie lines may be necessary to avoid the private parcels, which may also result in schedule delays. In light of information provided by SCE regarding contact with the owners of the private lands on which it would be located (see Response to Comment D01-15 in Section I), it is unlikely that construction of it is uncertain whether Avoidance Alternative #1 could meet the third objective related to meeting SCE's online date.

Avoidance Alternative #1 is carried forward for analysis because it has the potential to reduce environmental impacts, it is feasible, and it would meet most (two of three) project objectives.

C.4.4 Avoidance Alternative #2

Detailed discussion of this alternative is presented in Appendix 1, Section 4.4. Appendix 1 also presents a map of the alternative area.

Description

As shown in Figure C-1, Avoidance Alternative #2 substation would be entirely on private land. However, the SCE transmission lines looping into the substation and gen-tie lines would likely be located on both private and public lands. The substation would be located approximately 1.2 miles (6,500 feet) southeast of the proposed CRS. The alternative would remain north of the DPV2 transmission corridor and would be entirely outside of the active sand transport corridor. However, the connecting transmission and gen-tie lines may cross through the sand corridor on the northwest and north sides of the alternative site.

Rationale for Full Analysis

- **Environmental Impacts:** Impacts to desert tortoise would be greater at the Avoidance Alternative #2 than at the proposed CRS location, but would be less than significant with standard mitigation. The alternative would reduce both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat as well as impacts to ribbed cryptantha and Harwood's eriastrum. Fewer total documented cultural resources would also be impacted as well.
- **Feasibility:** Avoidance Alternative #2 is technically feasible since there is a viable design and no site constraints, and there are no regulatory obstructions to permitting at the alternative site. Approval from BLM would occur through its ROD and from the CEC through its application modification process (likely through the staff-approved process, or possibly through the Commission approved modification process). There would be potential legal feasibility issues with the reservation rights on the energy company parcel, because approval would be required by the Palo Verde Land and Water Company.
- **Project Objectives:** The first two project objectives would be met by this and all alternatives. The third project objective, requiring an online date by the end of 2013, could be affected by several processes, but the one with most potential for creating a delayed online date is land owner negotiations for property rights for the transmission interconnections. Land acquisition could require time-consuming eminent domain proceedings. For the gen-tie lines, the solar developers do not have eminent domain rights. If the gen-tie lines cannot be installed on lands for which SCE has obtained rights and the affected property owners are not cooperative, then rerouting of the gen-tie lines may be necessary to avoid the private parcels, which may also result in schedule delays. In light of information provided by SCE regarding contact with the owners of the private lands on which it would be located (see Response to Comment D01-15 in Section I), it is unlikely that construction of it is uncertain whether Avoidance Alternative #2 could meet the third objective related to meeting SCE's online date.

Avoidance Alternative #2 is carried forward for analysis because it has the potential to reduce environmental impacts, it is feasible, and it would meet most (two of three) project objectives.

C.4.5 Avoidance Alternative #3

Detailed discussion of this alternative is presented in Appendix 1, Section 4.5. Appendix 1 also presents a map of the alternative area.

Description

Figure C-1 illustrates the location of Avoidance Alternative #3, which would be located almost 1.9 miles (10,000 feet) southeast of the proposed CRS. It would be entirely out of the sand transport corridor. The substation would be on BLM land, but the gen-ties and transmission line interconnections would likely need to cross both public and private land on the northwest and southeast sides of the alternative site.

Rationale for Full Analysis

- **Environmental Impacts:** Impacts to desert tortoise would be greater at the Avoidance Alternative #3 than at the proposed CRS location, but would be less than significant with standard mitigation. The alternative would reduce both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat as well as impacts to ribbed cryptantha and Harwood's eriastrum. There is the potential for more cultural resources to be impacted at the Avoidance Alternative #3 due to a greater number of known resources.
- **Feasibility:** Avoidance Alternative #3 is technically feasible since there is a viable design and there are no regulatory obstructions to permitting at the alternative site. It would likely be approved through BLM's ROD and with the CEC's application modification process (likely through the staff-approved process, or possibly through the Commission approved modification process).
- **Project Objectives:** The first two project objectives would be met by this and all alternatives. The third project objective, requiring an online date by the end of 2013, could be affected by several processes, but the one with most potential for creating a delayed online date is land owner negotiations for property rights for the transmission interconnections. Land acquisition could require time-consuming eminent domain proceedings. For the gen-tie lines, the solar developers do not have eminent domain rights. If the gen-tie lines cannot be installed on lands for which SCE has obtained rights and the affected property owners are not cooperative, then rerouting of the gen-tie lines may be necessary to avoid the private parcels, which may also result in schedule delays. It is uncertain whether Avoidance Alternative #3 could meet the third objective related to meeting SCE's online date.

Avoidance Alternative #3 is carried forward for analysis because it has the potential to reduce environmental impacts, it is feasible, and it would meet most (two of three) project objectives.

C.4.6 Southern Alternative

Detailed discussion of this alternative is presented in Appendix 1, Section 4.6. Appendix 1 also presents a map of the alternative area.

Description

Figure C-1 illustrates the location of the Southern Alternative, which was designed to remain entirely on public (BLM) land and be outside of the active sand transport corridor. The Southern Alternative would shift the site approximately 4,000 feet (0.75 miles) south of the proposed CRS. SCE has stated in its comment letter on the Draft SEIR (Comment Letter D01) that its engineers have determined that practically the exact same substation layout already completed for the proposed CRS location could also be used at the Southern Alternative location.

In order to avoid direct effects on the sand transport corridor, the substation would be separated from the DPV1 transmission line by about 1,300 feet. Due to this separation, the connecting transmission and gen-tie lines would cross through BLM land within the sand corridor between the alternative substation

site and the transmission corridor. However, to minimize sand corridor and ground disturbance, SCE has preliminarily designed the routes for DPV1 and DPV2 500 kV lines to be as perpendicular to the sand corridor boundary as possible. This routing would also leave room for the 230 kV gen-tie lines to connect into the substation from the north.

Rationale for Full Analysis

- **Environmental Impacts:** Impacts to desert tortoise and desert kit fox could be greater at the Southern Alternative than at the proposed CRS location, but would be less than significant with standard mitigation. The alternative would reduce both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat as well as impacts to ribbed cryptantha and Harwood's eriastrum. There is the potential for more cultural resources to be impacted at the Southern Alternative due to a greater number of known resources.
- **Feasibility:** The Southern Alternative is likely to be technically feasible since there are no site constraints and there is a viable design. There are no land encumbrances. It could likely be constructed and there are no regulatory obstructions to permitting at the alternative site. It would likely be approved through BLM's ROD and with the CEC's application modification process (likely through the staff-approved process, or possibly through the Commission approved modification process).
- **Project Objectives:** The first two project objectives would be met by this and all alternatives. The third project objective, requiring an online date by the end of 2013, could be affected by several processes, but because this site would not require acquisition of rights to private land, the Southern Alternative would be unaffected by the potential land acquisition delays that could affect the Partial Avoidance Alternative and the three Avoidance Alternatives. The only remaining uncertainty is whether the Southern Alternative could meet the third objective related to meeting SCE's online date, and with no private lands to acquire, this would be much more likely at this site than the other alternatives.

The Southern Alternative is carried forward for analysis because it has the potential to reduce environmental impacts, it is feasible, and it would likely meet all project objectives.

C.5 Alternatives Eliminated from Consideration

C.5.1 Original Midpoint Substation Alternative

Detailed discussion of this potential alternative is presented in Appendix 1, Section 4.7. Appendix 1 also presents a map of the alternative area.

Description

This alternative would include construction of the 90-acre expanded CRS at the location of the originally proposed SCE Midpoint Substation (see Figure C-1). The original 44-acre area (approximately 1,000 feet by 1,900 feet) was described as the SCE Midpoint Substation and evaluated for every issue area in the DPV2 Final EIR/EIS. This alternative would be located approximately 10 miles southwest of Blythe, California, adjacent to SCE's DPV1 ROW. The site is located on public (BLM) land immediately west of Imperial Irrigation District's Blythe-Niland 161 kV transmission line and Western Area Power Administration's Blythe-Knob 161 kV transmission line. It would be approximately 4.5 miles southeast of the proposed CRS along the DPV2 corridor. It is likely that the gen-tie lines and transmission interconnections could be routed to remain entirely within designated utility corridors when on public (BLM) land, but portions of the gen-tie routes would cross private lands between the currently proposed CRS and the Original Midpoint Substation Alternative.

Rationale for Elimination

- **Environmental Impacts:** The impacts to cultural resources would be substantially more severe at this site. Impacts to desert tortoise and cultural resources would be greater at the Original Midpoint Substation Alternative than at the proposed CRS location, but these impacts would be less than significant with standard mitigation. The alternative would reduce both direct and indirect impacts to Mojave fringe-toed lizard sand dune habitat as well as impacts to ribbed cryptantha and Harwood's eriastrum.
- **Feasibility:** The Original Midpoint Substation Alternative is likely to be technically and legally feasible since it could likely be constructed.
- **Project Objectives:** The first two project objectives would be met by this and all alternatives. The third project objective, requiring an online date by the end of 2013, could be affected by several processes, with the most significant being the requirement for extended additional gen-ties to reach this alternative site. Even if the CEC and BLM could approve the gen-tie line modifications in a timely manner, it appears that acquisition of rights across private lands would also be required, which could require substantial additional time. The solar generators do not have eminent domain rights, so lands owned by uncooperative sellers could not be acquired through court proceedings and revised routes would have to be developed, if possible, to avoid any unwilling sellers.

The ~~Southern~~ Original Midpoint Substation Alternative would meet two of three project objectives. It is eliminated from analysis because it has the potential to increase cultural resources impacts, and because of the additional time that could be required to permit and acquire land for gen-tie lines.

C.5.2 Sand Shield Alternative

Detailed discussion of this potential alternative is presented in Appendix 1, Section 4.8. Appendix 1 also presents a map of the alternative area.

Description

The Sand Shield Alternative would add a pointy sand deflector wall/shield to the western (upwind) side of the substation, which would encourage sand to pass around the substation boundary wall. This alternative would result in a 120-acre substation footprint and 1,280 acres of indirect impacts to downwind sand dune habitat.

Rationale for Elimination

- **Environmental Impacts.** Although indirect impacts to downwind sand dune habitat would be reduced from 1,365 acres to 1,280 acres, the Sand Shield Alternative would increase the size of the substation, the amount of ground disturbance and direct sand dune impacts of the CRS by 30 acres (30 percent). Additional construction associated with installation of the sand shield would also increase the duration of construction and associated short-term impacts as well.
- **Project Objectives and Feasibility:** This alternative would meet all project objectives and would be potentially feasible.

This alternative would meet all project objectives and would be potentially feasible. Although indirect impacts to downwind sand dune habitat would be reduced from 1,365 acres to 1,280 acres, the Sand Shield Alternative would increase the size of the substation, which increases the amount of ground disturbance and direct sand dune impacts of the CRS by 30 acres (30 percent). Additional construction

associated with installation of the sand shield would also increase the duration of construction and associated short-term impacts as well.

C.5.3 Rotation and Shield Alternative

Detailed discussion of this potential alternative is presented in Appendix 1, Section 4.9. Appendix 1 also presents a map of the alternative area.

Description

This alternative would rotate the CRS layout 90 degrees clockwise so that the length of the substation would extend east-west instead of north-south, and its shorter fence line (approximately 1,530 feet long) would face the prevailing wind and the active sand transport corridor. There would be an option to add a V-shaped sand deflector wall/shield to the western (upwind) side, which would encourage sand to pass around the substation boundary wall.

The rotated substation layout would result in the same direct acreage impacts as the proposed CRS. Installation of a sand shield would increase the direct footprint of the substation site to 120 acres. Indirect impacts to downwind sand dune habitat would be 1,193 acres with the rotated substation and 1,010 acres with the rotated substation and installation of the sand shield.

Rationale for Elimination

- **Environmental Impacts.** Although indirect impacts to downwind sand dune habitat would be reduced from 1,365 acres to 1,280 acres, the Sand Shield Alternative would increase the size of the substation, which increases the amount of ground disturbance and direct sand dune impacts of the CRS by 30 acres (30 percent). Additional construction associated with installation of the sand shield would also increase the duration of construction and associated short-term impacts as well.
- **Project Objectives and Feasibility:** This alternative would meet all project objectives and would be potentially feasible.

The Rotation and Shield Alternative would meet all project objectives and would be potentially feasible. Although technically feasible, rotation of the CRS site would create new engineering requirements compared to the proposed CRS, because the substation equipment layout would need to be adjusted. Although indirect impacts to downwind sand dune habitat would be reduced from 1,365 acres to 1,193 acres with the rotated substation or 1,010 acres with the rotated substation and the sand shield, the Rotation and Shield Alternative would increase the amount of ground disturbance and direct sand dune impacts of the CRS by 30 acres (30 percent) if the sand shield is installed. Additional construction associated with installation of the sand shield would also increase the duration of construction and associated short-term impacts as well. Therefore, the Rotation and Shield Alternative was eliminated from consideration.

C.6 No Project Alternative

CEQA requires an evaluation of a No Project Alternative in order for decision-makers to compare the impacts of approving the project with the impacts of not approving the project. Section C.6.1 describes the issues that affect the No Project Alternative, and Section C.6.2 describes what could occur in the No Project Alternative. The environmental effects of not approving the project are evaluated in each issue area's analysis in Section D.

C.6.1 Background

Consideration of the No Project Alternative is required by Section 15126.6(e) of the CEQA Guidelines. The analysis of the No Project Alternative must discuss the existing conditions at the time the Notice of Preparation was published (October 21, 2005), as well as: “what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services” [CEQA Guidelines § 15126.6 (e)(2)]. The requirements also specify that: “If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed” [CEQA Guidelines § 15126.6 (e)(3)(B)].

C.6.2 No Project Alternative Scenario

The No Project Alternative scenario is the circumstance under which the Proposed Project does not proceed. (CEQA Guidelines § 15126.6(e)(3)(B).) The analysis of the No Project Alternative compares the environmental effects of the property remaining in its existing state, against environmental effects which would occur if the Proposed Project is approved. Here, under existing conditions, the Colorado River Substation would be constructed as approved by the CPUC in the 2006 and 2009 Decisions, as a 40-acre 500 kV substation. The expansion to 90 acres, and the addition of the 220 kV facilities to interconnect solar projects would not occur. Thus, the “No Project” analysis compares the environmental effects of constructing the Colorado River Substation as previously approved against environmental effects which would occur if the proposed expansion is approved. The environmental effects of constructing the substation as previously approved are described in Section D of the original DPV2 EIR/EIS (CPUC/BLM, 2006).

When disapproval of the Proposed Project would result in predictable actions by others, such as the proposal of some other project, the No Project analysis must address this “no project” consequence. (CEQA Guidelines § 15126.6(e)(3)(B).) As discussed in more detail in Section A, SCE is constructing the expanded Colorado River Substation to provide transmission access to potential future renewable resources in the Blythe area, in order to help enable California to meet its renewable energy goals. If the substation is not expanded, it would not be capable of interconnecting gen-tie lines at 220 kV; it could accept only 500 kV lines. The solar developers with approved gen-ties to the CRS would be able to interconnect at the CRS only at the 500 kV level. It is likely that under this scenario, the solar developers would modify their approved projects to first construct a new 230/500 kV substation on the solar generation site or at another substation, and then construct 500 kV (rather than 230 kV) gen-tie lines into the CRS.

Thus, disapproval of the Proposed Project would likely lead SCE and/or the solar project developers to pursue other actions to achieve the objectives of the Proposed Project. The events or actions that are reasonably expected to occur in the foreseeable future without the CRS expansion include the following:

- The approved 500 kV transmission from Colorado River Substation to Devers Substation would be constructed as already approved by the CPUC (and as anticipated to be approved by the BLM).
- The approved solar power projects (BSPP and GESP) would have substantial delays in their online dates because their projects would have to be re-designed and the changes re-evaluated under CEQA and NEPA due to the need for substantially larger and more inefficient infrastructure. Specifically:
 - The BSPP project would likely have to be re-designed to incorporate a larger on-site substation and a 500 kV gen-tie line, rather than a 230 kV gen-tie line to the expanded CRS substation, in order for BSPP to interconnect to the regional transmission system. The additional cost of this larger substation and the delays associated with CEQA and NEPA review of the changes may affect the financial viability of the project and its ability to qualify for financing.

- The approved GSEP project would use an existing 230 kV transmission line along much of the route between the Genesis solar project site and the CRS. In the No Project scenario, both a larger on-site substation and a new, additional 500 kV line would have to be installed (rather than the current approved plan, which would require only installation of a second circuit onto existing 230 kV towers). Additional environmental review would be required by the BLM and CEC to evaluate these modifications under CEQA and NEPA. An expanded right-of-way would be required for the additional 500 kV line.
- SCE, Western Area Power Administration, or the solar generators may pursue the expansion of an existing substation in the Blythe area (the Buck and Blythe Substations are located near the Blythe power plant). This expanded substation could transform the gen-tie lines from 230 to 500 kV, and then a new 500 kV line would be constructed to the CRS. The substation expansion and the revised transmission line route and size would require NEPA and CEQA analysis to define impacts and mitigation.

The impacts that could result from these three possible actions are addressed under each discipline in Section D.