3.0 Description of Alternatives

This chapter describes the alternatives screening process and introduces and describes alternatives to the proposed projects. The discussion in Chapter 5, "Comparison of Alternatives," compares the environmental advantages and disadvantages of the proposed projects with those of the alternatives retained for consideration in this Environmental Impact Report (EIR). An Environmentally Superior

3.1 CEQA Requirements

Alternative is identified in Chapter 5.

Provisions of the California Environmental Quality Act (CEQA) Guidelines (Section 15126.6) addressing project alternatives in an EIR include the following:

• The range of alternatives required in an EIR is governed by a "rule of reason." Therefore, the EIR must evaluate only those alternatives necessary to permit a reasonable choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of a proposed project.

 • The No Project Alternative shall be evaluated, along with its impacts. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the effects of approving the proposed project with the effects of not approving the proposed project.

An EIR does not need to consider an alternative whose effects cannot reasonably be ascertained and whose implementation is remote and speculative.

Each alternative screened for the proposed projects was evaluated as to the following:

• Whether the alternative would meet most of the basic project objectives;

• Whether the alternative would be feasible from legal, regulatory, and technical perspectives; and

 • Whether the alternative would avoid or substantially lessen a significant impact of the proposed project, which includes an evaluation of whether the alternative would result in significant effects that would be potentially larger than the significant effects of the proposed project.

3.2 Alternatives Development and Screening Process

3.2.1 Overview

The Alternatives Screening Report (Appendix D) documents the alternatives development and screening analysis conducted to determine the range of alternatives for consideration in this EIR. It documents the criteria used to evaluate and select an alternative for further analysis, including their feasibility, the extent to which they would meet most of the basic objectives of the Valley–Ivyglen Project or Alberhill Project, respectively, and their potential to avoid or substantially lessen any of the significant effects of the Valley–Ivyglen Project or Alberhill Project, respectively. The Alternatives Screening Report provides a complete description of each alternative considered during screening, including figures, and discusses why each alternative was either eliminated from further consideration or retained for further consideration in this EIR. The alternatives reviewed for the Valley–Ivyglen Project included alternative subtransmission

line routes, alternative structure types, and alternative construction methods. The alternatives reviewed for

the Alberhill Project included alternative substation sites, alternative transmission line and subtransmission line routes, reduced footprint alternatives, and alternative construction methods.

The application for the proposed Alberhill Project is for a Certificate of Public Convenience and Necessity; therefore, this permit requires the California Public Utilities Commission (CPUC) to consider cost-effective alternatives to transmission facilities (sometimes referred to as non-wire alternatives) that meet the need for an efficient, reliable, and affordable supply of electricity. Non-wire alternatives for the Alberhill Project were evaluated in the Alternatives Screening Report; however, none of the non-wire alternatives were retained for further consideration in this EIR.¹

3.2.2 Alternatives Screening Methodology and Criteria

Each potential alternative to the proposed projects was screened using a three-step process:

Step 1: Clarify the description of the alternative to allow for comparative evaluation.

Step 2: Evaluate the suitability of each alternative for full analysis in the EIR by comparing it with the proposed project and with respect to the CEQA criteria for alternatives.

Step 3: If the alternative is determined unsuitable, eliminate it from further consideration. If the alternative is determined suitable, retain it for consideration in the EIR.

The method used to evaluate the suitability of each alternative, as detailed in Step 2 above, involves the following criteria (CEQA Guidelines Section 15126.6):

II. Would the alternative be feasible (from an economic, legal, and technological perspective)?

I. Would the alternative accomplish most of the basic project objectives?

III. Would the alternative avoid or substantially lessen any significant effects of the proposed project (including consideration of whether the alternative itself could create significant effects

The Alternatives Screening Report (Appendix D) provides more information about the alternatives screening methodology and criteria. The Alternatives Screening Report details these steps and how they

were completed to result in selection of alternatives carried forward for analysis in the EIR.

3.2.3 Alternatives Considered in the Screening Report

potentially greater than those of the proposed project)?

Some of the alternatives considered during the screening process were presented in the Proponent's Environmental Assessment and others were suggested by the public during scoping or identified by the CPUC's Energy Division as a result of the agency's independent review. In total, the Alternatives Screening Report considered 14 alternatives for the proposed Valley–Ivyglen Project and retained 9 of those alternatives for consideration in the EIR. The Alternatives Screening Report considered 33

alternatives for the Alberhill Project and retained 5 of those alternatives for consideration in the EIR.

The Alternatives Screening Report was drafted using preliminary information for the project. As a result, the conclusions made in the EIR have affected the suitability of alternatives that were previously retained

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¹ The applicant filed an application for a Permit to Construct for the proposed Valley–Ivyglen Project; therefore, the California Public Utilities Code Section 1002.3 requirements do not apply to the Valley–Ivyglen Project.

in the Alternatives Screening Report. Alternatives that were retained based on preliminary information in the Alternatives Screening Report, but are no longer suitable for full analysis in the EIR, are detailed in Table 3-1. The alternatives that remain retained for further consideration in this EIR are described in Sections 3.3 and 3.4.

3.3 Valley-Ivyglen Alternatives Evaluated in this EIR

 This section describes the Valley–Ivyglen Project alternatives retained for consideration in this EIR. Each of the following alternatives is potentially feasible, would reduce a potentially significant environmental effect of the proposed Valley–Ivyglen Project (see Table ES-1), and would meet most of the basic objectives of the Valley–Ivyglen Project as further discussed in this section and the Alternatives Screening Report (Appendix D).

The alternatives to the Valley–Ivyglen Project retained for consideration in this EIR are:

- VIG Alternative A Campbell Ranch Road (115-kV Segment VIG8)
- VIG Alternative B1 Underground along Santiago Canyon Road (115-kV Segment VIG8)
- VIG Alternative B2 Santiago Canyon Road Underground and Overhead
 - VIG Alternative C Underground along Temescal Canyon Road and Horsethief Canyon Road (115-kilovolt [kV] Segment VIG6)
 - VIG Alternative M Underground along the Entire Proposed Project Alignment
 - VIG No Project Alternative

Evaluation of the VIG No Project Alternative is required by CEQA Guidelines Section 15126.6(e).

3.3.1 VIG Alternative A – Campbell Ranch Road (115-kV Segment VIG8)

Under this alternative, 115-kV Segment VIG8 would be installed in approximately 12,100 feet of new underground conduit along the west side of De Palma Road and Campbell Ranch Road (Figure 3-1). This alternative would begin approximately 1,800 feet east of the intersection of De Palma Road and Santiago Canyon Road at proposed Structure VIG566. Under this alternative, proposed Structure VIG566 would be a lightweight steel (LWS) pole rather than a TSP because an I-15 crossing at this location would not be required. The proposed overhead line would continue north along De Palma Road for approximately 600 1,000 feet on TSPs and LWS poles, and then descend to an underground position. The alternative would proceed north in a new underground conduit along De Palma Road and Campbell Ranch Road to Temescal Canyon Road. The installation would generally follow the proposed fiber optic line route for 115-kV Segment VIG8, but would be on the west side of Campbell Ranch Road and De Palma Road instead of the east side. VIG Alternative A would be installed as proposed from the intersection of Campbell Ranch Road and Temescal Canyon Road west into Ivyglen Substation. This alternative would require approximately 12,100 feet of duct bank, 10 vaults, two TSP risers, one LWS pole, and 2 TSPs. and the replacement of approximately seven existing wood poles with seven TSPs.

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Table 3-1 Alternatives Retained in Alternative Screening Report that are No Longer Suitable for Analysis in EIR

Alternative	Alternatives Screening Report Conclusion	EIR Conclusion	
Valley-lvyglen Project			
VIG Alternative E– Temescal Canyon Road and Lake Street Routing Alternative (115-kV Segment VIG5)	RETAINED. The alternative would reduce an aesthetic impact to I-15 by reducing the number of aboveground structures visible from I-15. This alternative would reduce impacts on air quality and air traffic as the amount of ground disturbance and use of helicopters would decrease.	ELIMINATED. VIG Alternative E would be feasible and would meet the project objectives. The EIR concludes that the visual impacts to I-15 during operation and maintenance would be less than significant. Air quality impacts are measured against a daily significance criterion. The reduction of three structures along 115-kV Segment VIG5 would not substantially reduce the impacts on air quality or air traffic relative to the proposed project given the substantial amount of ground disturbance and helicopter use that would still remain. VIG Alternative E would not substantially reduce significant impacts from fire hazard impacts relative to the proposed project given a substantial amount of the project would be located in a very high fire hazard severity zone.	
VIG Alternative F–East Side of SR-74 to Wasson Canyon road (115-kV Segment VIG2)	RETAINED. VIG Alternative F would be feasible and would meet the project objectives. The alternative would reduce visual impacts along SR-74 by eliminating the 11 overhead crossings and 14 structures from the alignment. The alternative would reduce the amount of subtransmission line located in a very high fire hazard severity zone.	ELIMINATED. VIG Alternative F would be feasible and would meet the project objectives. The significant impact to SR-74 results from the presence of 115-kV Segment VIG2 adjacent to SR-74. The EIR did not identify a significant impact on aesthetics from the overhead crossings along SR-74 and removal of approximately 10 percent of the structures along 115-kV VIG2 (SR-74) would not result in a substantial reduction in aesthetic impacts. VIG Alternative F would not substantially reduce significant impacts from fire hazard impacts relative to the proposed project given a substantial amount of the project would be located in a very high fire hazard severity zone.	
VIG Alternative G– Setback along SR-74 (115-kv Segment VIG2)	RETAINED. VIG Alternative G would be feasible and would meet the project objectives. The alternative would reduce conflicts with Riverside County General Plan Policy LU 13.4 and would reduce aesthetic impacts on SR-74 during operation and maintenance.	ELIMINATED. VIG Alternative G would be feasible and would meet the project objectives. The EIR did not identify a significant impact on land use related to Riverside County General Plan Policy LU 13.4. VIG Alternative G would remain visible to motorist traveling along SR-74; therefore, this alternative would not substantially reduce impacts on aesthetics.	

Table 3-1 Alternatives Retained in Alternative Screening Report that are No Longer Suitable for Analysis in EIR

Table 3-1 Alternatives Retained in Alternative Screening Report that are no Longer Suitable for Analysis in Elk			
Alternative	Alternatives Screening Report Conclusion	EIR Conclusion	
Alberhill Project			
ASP Alternative A—Lee Lake Substation Site (All Gas-Insulated Switchgear)	RETAINED. ASP Alternative A would be feasible and would meet the project objectives. The smaller substation proposed under ASP Alternative A (22.2 acres rather than the proposed 34 acres) would require less ground disturbance, which would result in reduced effects on air quality from fugitive dust and vehicle and equipment emissions. This alternative and the TE/VS Project would use the same 500-kV transmission lines to connect to the Serrano–Valley 500-kV Transmission Line, resulting in reduced cumulative effects on air quality from the construction of duplicate 500-kV transmission lines. In addition, ASP Alternative A may reduce cumulative visual effects on I-15, which is an eligible State Scenic Highway (Caltrans 2011) by reducing the amount of transmission lines visible to motorists and other sensitive viewer groups.	ELIMINATED. ASP Alternative A would be feasible and would meet the project objectives. However, air quality impacts are measured against a daily significance criterion. This alternative would not change the rate of construction and would therefore not reduce a significant air quality impact. Additionally, although the substation under ASP Alternative A would be approximately 35 percent smaller than the proposed Alberhill Substation, the 500-kV lines would each be approximately 1 mile (or 50 percent) longer than the proposed 500-kV lines and would require the use of helicopters due to the terrain. Therefore, ASP Alternative A would not substantially reduce impacts on air quality. The California Public Utilities Commission application status for the TE/VS project is not currently active. Additionally, the California Independent System Operator did not identify a need for the TE/VS project within the 2014-2015 planning cycle (California Independent System Operator 2015). The potential for the construction schedules for the Alberhill Project and the TE/VS project to overlap is unlikely. Therefore, ASP Alternative A would not reduce a significant cumulative impact on air quality or aesthetics created by the TE/VS project and the	
ASP Alternative C- Reduced Capacity Alberhill Substation (One Fewer Transformer)	RETAINED. ASP Alternative C would be feasible, meet the project objectives. The alternative would reduce effects on air quality and aesthetics and from the risk of accident conditions involving the release of hazardous materials as a result of the reduced substation size.	proposed project. ELIMINATED. The substation under this alternative would be located in the same location as the proposed Alberhill Substation and would only be approximately 1 acre smaller. The difference of one acre in the substation size would not substantially reduce any environmental impacts.	
ASP Alternative X— Underground 115-kV Segment ASP6 Between Craig Avenue and Beth Drive	RETAINED. ASP Alternative X would be feasible and would meet the project objectives. The alternative would reduce visual impacts between Craig Avenue and Beth Drive.	ELIMINATED. This alternative would be incorporated into the Alberhill Project and any alternatives as a mitigation measure. The analysis of this alternative would not result in decreased impacts when compared to the Alberhill Project with mitigation. Therefore, this alternative is considered a design modification rather than an alternative and not brought forward for evaluation as an alternative in this EIR.	

Key:

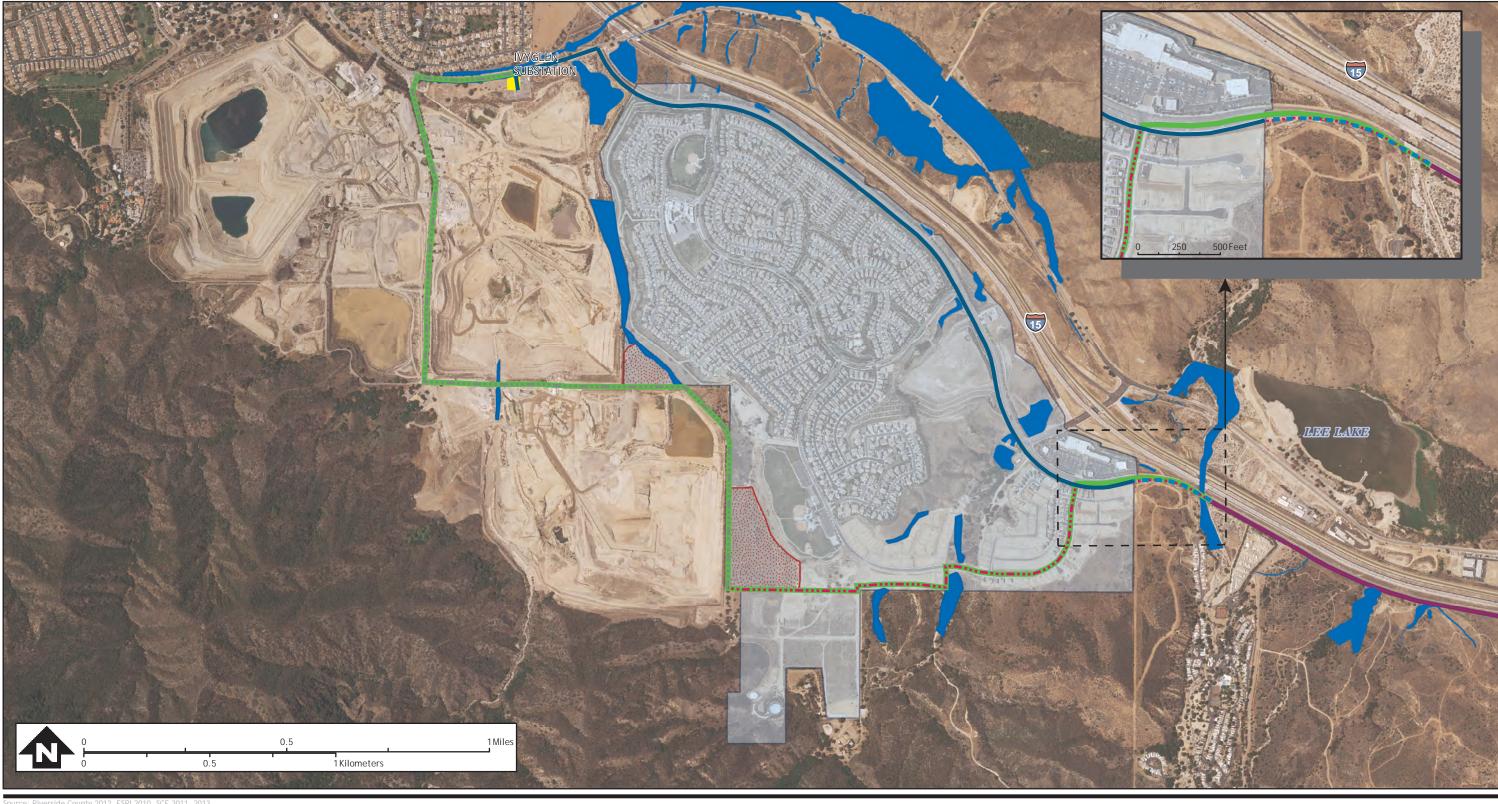
EIR = Environmental Impact Report

I-15 = Interstate 15

kV = kilovolt

SR-74 = State Route 74

TE/VS = Talega-Escondido/Valley-Serrano



Proposed Valley Ivyglen Project

115-kV Segment VIG 7
Existing Substations
Jurisdictional Wash

VIG Alternative ASegment 8 OverheadSegment 8 Underground

VIG Alternative B1

Alternative B1 Underground

VIG Alternative B2
---- Segment 8 Overhead
---- Segment 8 Underground
---- Potential Vernal Pool Habiat
---- Sycamore Creek Specific Plan

Figure 3-1

VIG Alternatives A, B1, and B2

Alberhill and Valley-Ivyglen Projects

Riverside County, California

3.3.2 VIG Alternative B1 – Underground along Santiago Canyon Road (115-kV Segment VIG8)

 Under this alternative, 115-kV Segment VIG8 would be installed in approximately 3.5 miles of new underground conduit and approximately 15-20 12 vaults along De Palma Road, Santiago Canyon Road, and Maitri Road, as well as an unnamed road (Figure 3-1). A TSP riser would be installed at the beginning and end of the underground conduit installation. This alternative would begin approximately 1,800 feet east of the intersection of De Palma Road and Santiago Canyon Road, where the proposed overhead line would descend to an underground position and proceed north in a new underground conduit along De Palma Road to Santiago Canyon Road. The alignment would continue southwest along Santiago Canyon Road approximately 2,500 feet to an existing (unnamed) road. The alignment would then turn south along unnamed road for approximately 275 feet and then continue west for approximately 3,000 feet and then north for approximately 2,000 feet. The alignment would then angle to the northwest for approximately 800 feet before turning west on Maitri Road. The alignment would then follow Maitri Road to Temescal Canyon Road. From there it would continue east on Temescal Canyon Road to Ivyglen Substation.

3.3.3 VIG Alternative B2 – Santiago Canyon Road Underground and Overhead (115-kV Segment VIG8)

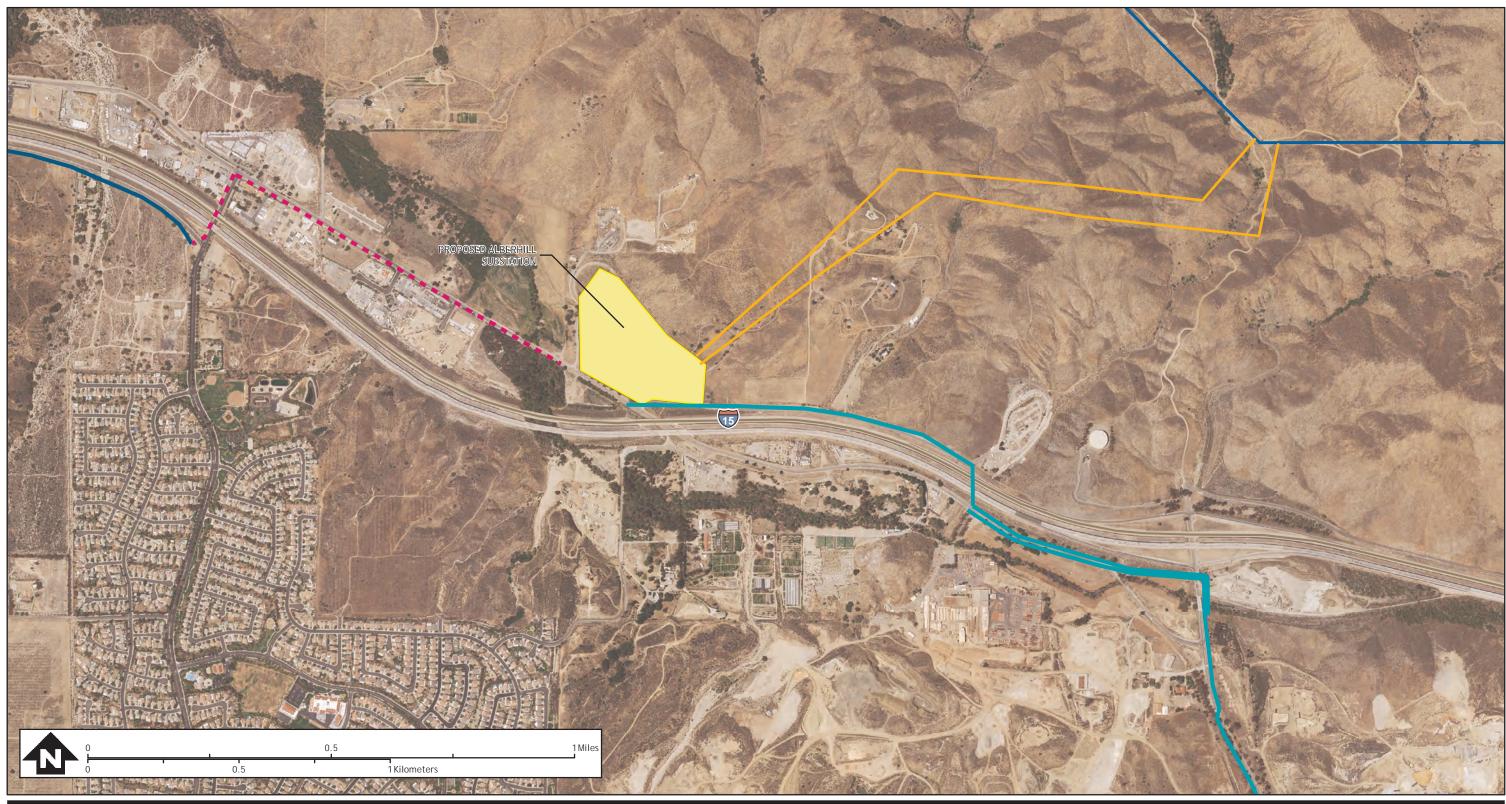
Under this alternative, 115-kV Segment VIG8 would be installed on new poles and in new underground conduit for approximately 3.5 miles along De Palma Road, Santiago Canyon Road, and Maitri Road, as well as an unnamed road (Figure 3-1). This alternative would require approximately 1.5 miles of new underground duct bank, five vaults, two TSP risers, 60 to 65 LWS poles ranging in height between 75 and 95 feet, and 8 to 10 TSPs ranging in height between 70 and 85 feet.

This alternative would begin approximately 1,800 feet east of the intersection of De Palma Road and Santiago Canyon Road, where the proposed overhead line would descend to an underground position and proceed north in new underground conduit along De Palma Road to Santiago Canyon Road. The alignment would continue southwest along Santiago Canyon Road approximately 2,500 feet to an existing unnamed road. The alignment would then turn south along the unnamed road for approximately 275 feet and rise to an overhead position. The alternative would then proceed west. The alignment would continue west for approximately 3,000 feet and then turn north for approximately 2,000 feet. The alignment would then angle northwest for approximately 800 feet before turning west on Maitri Road. The alignment would then follow Maitri Road to Temescal Canyon Road. From there, it would continue east on Temescal Canyon Road to Ivyglen Substation.

3.3.4 VIG Alternative C – Underground along Temescal Canyon Road and Horsethief Canyon Road (115-kV Segment VIG6)

Under VIG Alternative C, a section of 115-kV Segment VIG6 along Temescal Canyon Road (approximately 1 mile) from Concordia Ranch RoadLove Lane to Horsethief Road and then south on Horsethief Road to De Palma Road would be installed underground in a new conduit (see Figure 3-2). The The existing wood poles along this segment would be removed and the new underground conduit would be capable of supporting two 115-kV_ericuits (the Valley Elsinore Fogarty Ivyglen 115-kV line and proposed Valley Ivyglen 115-kV line). 115-kV Segment VIG6, instead of continuing west on Hostetter Road from Temescal Canyon Road, would continue north on Temescal Canyon Road, over I-15, to connect to the VIG Alternative C alignment of 115-kV VIG6. VIG Alternative C would require approximately 25 fewer LWS poles, 12 fewer TSPs, and three fewer guy poles than the proposed Valley–Ivyglen Project.

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Proposed 500-kV transmission lines 500-kV Serrano Valley Transmission Line

-- Segment 6 (Temescal Canyon Rd) Underground

115 kV Segment VIG5

115 kV Segment VIG7

Proposed Alberhill Substation

VIG Alternative C

Figure 3-2

VIG Alternative C

Alberhill and Valley-Ivyglen Projects Riverside County, California

<u>The The proposed Valley-Ivyglen Substation, 500-kV transmission lines,</u> remaining sections of 115-kV Segment VIG6, and other 115-kV segments would be the same as those for the proposed Valley-Ivyglen Project.

3.3.5 VIG Alternative M – Underground along the Entire Proposed Project Alignment

Under VIG Alternative M the entire subtransmission line would be installed within new underground conduit along the proposed project alignment.

3.3.6 VIG No Project Alternative

 The VIG No Project Alternative is the circumstance under which the Valley-Ivyglen Project does not proceed (CEQA Guidelines Section 15126.6(e)(3)(B)). The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the effects of approving versus not approving the proposed project. The No Project Alternative for the Valley–Ivyglen Project scenario includes:

1. No construction of the Valley-Ivyglen Project

2. No construction of the Alberhill Project as proposed ²

3.3.6.1 Environmental Baseline

The environmental baseline for the VIG No Project Alternative is provided in each resource section of Chapter 4 of this EIR.

3.3.6.2 Reasonably Foreseeable Future Actions or Events

 If construction and operation of the proposed Valley–Ivyglen Project does not occur, projected electrical demand within the Electrical Needs Area (Figure 1-1) may exceed the operating limits of existing subtransmission facilities; a direct connection between the Valley Substation and the Ivyglen Substation would not be constructed; system reliability within the Electrical Needs Area would not be increased; operational and maintenance flexibility on subtransmission lines would not be improved; and the project needs would not be met in a cost efficient manner or while minimizing environmental impacts. None of the proposed Valley–Ivyglen Project objectives would be achieved under No Project Scenario A.

The following events are anticipated with respect to the proposed Valley–Ivyglen Project under No Project Scenario A:

- The Valley–Elsinore–Fogarty–Ivyglen-115-kV Subtransmission Line may exceed designed operating limits as early as 2016 (Table 1-2);
- Ivyglen and Fogarty substations would continue to operate with a single line of service that originates at Valley Substation;

The proposed Alberhill Project's 115-kV Segment ASP2 as described in Chapter 2, "Project Description," is wholly dependent on structures installed as part of the proposed Valley–Ivyglen Project. Should the CPUC decide not to grant the PTC for the Valley–Ivyglen Project with 115-kV Segments VIG4 and VIG5 as proposed, it would be infeasible to construct the Alberhill Project as proposed. Additional CEQA review would be required in this situation should the applicant pursue approval of an iteration of the Alberhill Project that does not rely on construction of the Valley–Ivyglen Project as proposed.

- The Electrical Needs Area may experience 115-kV system overloads resulting from the loss of a single 115-kV element; and
- Flexibility on 115-kV facilities that allows the applicant to avoid interruption of service during maintenance activities would not be improved.

3.4 Alberhill Project Alternatives Evaluated in this EIR

This section describes the Alberhill Project alternatives retained for consideration in this EIR. Each of the following alternatives is potentially feasible, would reduce a potentially significant environmental effect of the proposed Alberhill Project, and would meet most of the basic objectives of the proposed Alberhill Project as further discussed in this section and the Alternatives Screening Report (Appendix D).

The alternatives to the Alberhill Project retained for consideration in this EIR are:

- ASP Alternative B—All Gas-Insulated Switchgear at Proposed Alberhill Substation Site
- ASP Alternative DD—Serrano Commerce Center Substation Site
- ASP No Project Alternative

These alternatives are shown in Figure 3-2. Evaluation of the ASP No Project Alternative is required by CEQA Guidelines Section 15126.6(e).

3.4.1 ASP Alternative B—All Gas-Insulated Switchgear at Proposed Alberhill Substation Site

Under this alternative, a 500/115-kV substation with all gas-insulated switchgear for an ultimate build out of three transformers and one spare would be constructed at the proposed Alberhill Substation site. The amount of sulfur hexafluoride (SF₆) required for the proposed Alberhill Substation would be 51,200 pounds. Under this alternative, the applicant estimates that 65,000 pounds of SF₆ would be required. Hence, an increase of 13,800 pounds of SF₆ would be required for operation of the proposed Alberhill Substation under ASP Alternative B. This alternative would require an approximate 22.2-acre site. The transmission and subtransmission lines for this alternative would be the same as those for the proposed Alberhill Project.

3.4.2 ASP Alternative DD—Serrano Commerce Center Substation Site

Under this alternative, the Alberhill System Project would be built and operated as proposed, except the 500-kV switchrack would be all open air and the microwave antenna tower would be approximately 120-feet to 195-feet tall, and Alberhill Substation would be constructed in the area covered by Riverside County Specific Plan No. 353 (Figure 3-3). The initial build of the Alberhill Substation would connect the 500-kV transmission lines—would extend from the Alberhill Substation directly north to tie into the existing Serrano–Valley 500-kV transmission line. Up to five 500-kV Transmission Lines, including a future generation interconnection, may connect to the final build of the substation. Approximately 0.5 Approximately 0.25 mile of new access roads would be required for the 500-kV transmission lines under ASP Alternative DD.

115-kV Segment ASP1 and ASP1.5 would not be built as proposed. 115 kV Segment ASP1.5 would be expanded to approximately 2 to 4 miles for pole replacement to accommodate a double-circuit configuration along the existing Fogarty–Ivyglen 115-kV Subtransmission line. ASP Alternative DD would construct 115-kV Segment ASP2 aboveground along the path of 115-kV Segments VIG6 and VIG7, requiring taller poles (minimum 10 feet) to accommodate a double-circuit. instead of crossing I-15. This alternative would result in three circuits along Temescal Canyon Road, therefore poles would be located on

both sides of Temescal Canyon Road for approximately 2,000 feet near the Indian Truck Trail intersection. 115-kV Segment ASP2 would be placed below ground with 115-kV Segment VIG8_to_115-kV Segment ASP2 would transition to an aboveground power line and would be constructed to follow the planned extension of Temescal Canyon Road, as proposed in Specific Plan No. 353, where it would transition to an aboveground single-circuit power line 353, to the Alberhill Substation site. In addition to ASP2, four new approximately 1.3-mile 115-kV subtransmission lines (one double-circuit and two single-circuit power lines) would extend above ground near the planned extension of Temescal Canyon Road to the Alberhill Substation site. New fiber optic cable would be installed along one of the four 115-kV power lines from the planned extension of Temescal Canyon Road to the Alberhill Substation site. Approximately 2 miles of No new access roads would be required for the 115-kV lines under ASP Alternative DD. Up to 10 115-kV subtransmission lines may ultimately extend from the substation, as needed.

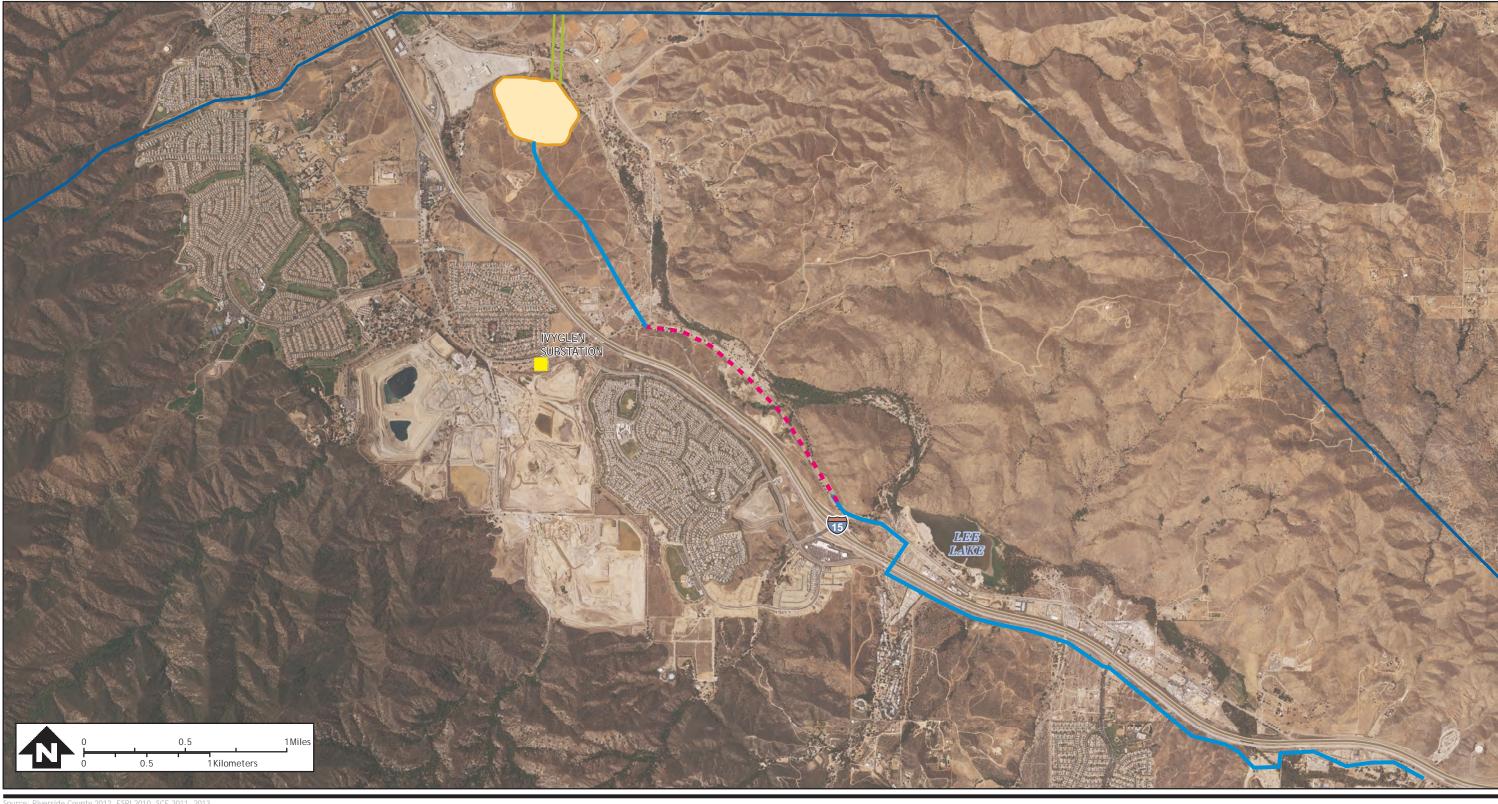
Two additional staging areas would be required near the alternative substation site; one would be located on the west side of Temescal Canyon Road, approximately 800 feet north of Dawson Canyon Road and one would be located on the southwest side of Mayhew Road and Orange Grove Place.

A water line would be extended from Temescal Canyon Road to the Alberhill Substation site.

Prior to construction, SCE would select a nearby 12-kV distribution circuit to serve as the temporary power source during construction activities at the Alberhill Substation site. The wood poles installed for temporary power would be approximately 40-50 feet tall. It is estimated that 30 wood poles would extend from a nearby 12-kV distribution circuit to the substation construction site. Temporary power would be in place for the duration of construction at the substation site.

This alterantive would require approximately 1,700-1,870 feet of duct bank, 5-6 vaults, 3-4 TSP risers, 63-70 LWS poles, 57-63 TSPs, 4 wood pole removals, 8 LSTs, and 2 LST removals."

- 28 The applicant has indicated there may not be a clear line-of-sight to Santiago Peak from the ASP
- 29 Alternative DD substation location and that construction of a new 185-foot-tall tower installed at Johnstone
- 30 Peak Communications in the Angeles National Forest site may be required.



Existing Substations

500-kV Serrano Valley
Transmission Line

ASP Alternative DD

Alternative Substation
115kV Aboveground
115kV Underground
500-kV Lines

Figure 3-3

ASP Alternative DD

Alberhill and Valley-Ivyglen Projects
Riverside County, California

3.4.5 ASP No Project Alternative

The ASP No Project Alternative is the circumstance under which the proposed project does not proceed (CEQA Guidelines Section 15126.6(e)(3)(B)). The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the effects of approving versus not approving the proposed project. The No Project Alternative for the Alberhill Project scenario includes:

- 1. Construction of the Valley–Ivyglen Project¹
 - 2. No construction of the Alberhill Project
 - 3. SCE would modify their planning approach and operating procedures so that the C-Section transformer at the Valley Substation would provide additional power transfer capability and mitigate potential overload conditions on D-Section transformers.

Currently, SCE sets the circuit breaker at the Valley Substation between the C-Section and D-Section transformers at the "normal open" position. Under the No Project Alternative, the circuit breaker settings and operating procedures would be modified so that the circuit breaker between these transformers is closed when D-Section transformers are overloaded. In the short-term, the C-Section transformer would provide additional power transfer capability and would mitigate potential overload conditions on D-Section transformers. However, this alternative would not meet the forecasted electrical capacity needs of the proposed project in the long-term.

3.4.5.1 Environmental Baseline

As described in the introduction to Chapter 4, "Environmental Analysis," the baseline for most of the Alberhill Project consists of the existing environmental conditions in the project area, which are described in each resource section of Chapter 4 of this EIR. For 115-kV Segment ASP2, the baseline physical conditions are the existing environmental conditions in the project area at the time of the publication of the Notice of Preparation plus 115-kV Segments VIG4 and VIG5 of the Valley-Ivyglen Project.

3.4.5.2 Reasonably Foreseeable Future Actions or Events

If construction and operation of the proposed Alberhill Project does not occur, projected electrical demand that would exceed the operating limit of the two load-serving Valley South 115-kV System transformers would not be relieved; a new 500/115-kV substation would not be constructed within the *Electrical Needs Area*; and system ties between a new 115-kV System and the Valley South 115-kV System would not be maintained. None of the proposed Alberhill Project objectives would be achieved.

Under this scenario, the following specific events are anticipated with respect to the proposed Alberhill Project:

- The two 560-megavolt-ampere transformers that serve the Valley South 115-kV System may overload as early as summer 2019 (Table 1-1);
- The Valley South 115-kV System may experience overloading that results in an electrical shortage within the Electrical Needs Area and blackout:

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The Electrical Needs Area for the proposed Alberhill Project is defined in Section 1.1 and shown in Figure 1-1.

- Valley Substation would continue to be the only 500/115-kV substation serving electrical demand in the *San Jacinto Region* of southwestern Riverside County—an area encompassing roughly 1,260 square miles and serving approximately 325,000 metered customers;
- The stand-by spare 560-megavolt-ampere 500/115-kV transformer, which was installed at the Valley Substation in 2011 to provide back-up transformer capacity in the event of transformer failure at Valley Substation, may be put into service.

3.5 References

- California Department of Transportation (Caltrans). 2011. California Scenic Highway Mapping System. Updated September 7, 2011. Riverside County. http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed October 15, 2014.
- California Independent System Operator. 2015. 2014-2015 Transmission Plan. Prepared by Infrastructure Development. Approved by ISO Board of Governors. March 27

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