6.1 INTRODUCTION

This chapter summarizes and compares the environmental advantages and disadvantages of the Revised Project and the alternatives evaluated in this Subsequent EIR. The comparison is based on the assessment of environmental impacts of the Revised Project and each alternative, as identified in Chapter 4: Environmental Analysis. Chapter 3: Alternatives introduces and describes the alternatives considered in this Subsequent EIR and includes figures of all alternatives that have been retained for analysis.

This Section is organized as follows:

- Section 6.2 presents the regulatory requirements for alternatives comparison and summarizes the Environmentally Superior Alternative.
- Section 6.3 presents the methodology used for comparing alternatives.
- Section 6.4 presents a comparison of the environmental impacts from the Revised Project and alternatives within the area of comparison.
- Section 6.5 identifies the Environmentally Superior Alternative based on the impacts from implementing each Alternative. This section also includes a comparison of the No Project Alternative and the Environmentally Superior Alternative.

6.2 CEQA REQUIREMENTS FOR ALTERNATIVES COMPARISON

CEQA Guidelines Section 15126.6(d) requires the following for alternatives analysis and comparison:

The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

This comparison does not consider the beneficial impacts of any alternative above and beyond its ability to reduce or avoid significant effects of the Revised Project. These requirements are set forth in CEQA Guidelines Section 15126.4(a)(4).

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If the Environmentally Superior Alternative is the No Project Alternative, CEQA Guidelines Section 15126.6(e)(2) requires identification of an environmentally superior alternative among the other alternatives.

6.2.1 Conclusion Regarding Environmentally Superior Alternative

In this section, the CPUC has identified the Environmentally Superior Alternative, as required by CEQA Guidelines Sections 15126.6(d) and (e)(2). The results of the comparisons of alternatives are presented in ranked order below, with the Environmentally Superior Alternative shown first and the least environmentally preferable alternative shown last. The rationale for these conclusions is presented in Section 6.5.

- 1. The No Project Alternative
- 2. Alternative 1 Bellegrave Pats Ranch Road Underground with Revised Project in remaining segments
- 3. Alternative 2 Limonite Wineville Underground with Revised Project in remaining segments
- 4. Combination of Alternative 3 and Alternative 4 with Revised Project in remaining segments
- 5. Alternative 4 Wineville Landon Road Underground with Revised Project in remaining segments
- 6. Alternative 3 Northern Riser Pole Relocation Underground at Limonite Avenue with Revised Project in remaining segments
- 7. The Revised Project

When considering the relative importance of impacts and ranking of alternatives, long-term impacts are considered more important than short-term impacts, since the consequences are generally considered to be more profound for the environment. Long-term impacts are given more weight when identifying the Environmentally Superior Alternative. Projects were ranked by long-term impacts first then short-term impacts were considered to enable differentiation where necessary.

The No Project Alternative is the Environmentally Superior Alternative because it would avoid the significant Revised Project impacts on aesthetics, agricultural resources, noise and traffic. The No Project Alternative could result in a significant and unavoidable impacts on air quality (Air Quality-b, and Air Quality-c).

Because the Environmentally Superior Alternative is the No Project Alterative, CEQA requires identification of an environmentally superior alternative among the remaining alternatives. Alternative 1 – Bellegrave - Pats Ranch Road Underground is the next environmentally superior alterative. Alterative 1 would avoid all long-term significant and unavoidable impacts on aesthetics and important farmland by locating the transmission line underground in Pats Ranch Road. Alternative 1 would also have fewer significant and unavoidable impacts than other alternatives. Alternative 1 would not avoid significant and unavoidable temporary

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construction-related noise and traffic impacts; however, these impacts would be short-term and would cease after construction is complete in an area.

6.3 ALTERNATIVES COMPARISON METHODOLOGY

The following methodology was used to compare alternatives in this Subsequent EIR:

Step 1: Identify Alternatives.

Thirty alternatives to the Revised Project were developed and evaluated. Alternatives were screened for their potential to meet all or some of the objectives and reduce significant impacts associated with Revised Project. The full set of alternatives and the screening method is described in Chapter 3: Alternatives. The Alternatives Screening Report is included in Appendix C and provides a detailed screening analysis of each of the 30 alternatives. Four alternatives were found to meet project objectives, feasibility criteria, and potentially reduce environmental impacts. These four alternatives were carried forward for analysis in the Subsequent EIR. As required by CEQA, a No Project Alternative was also identified and is described in Chapter 3: Alternatives.

Step 2: Determine Environmental Impacts.

The environmental impacts of the Revised Project and alternatives are discussed in Chapter 4: Environmental Analysis. The significant and unavoidable impacts that would result from the Revised Project, and those that would be created and/or eliminated by each alternative, are summarized and compared in Section 6.4. For each alternative, an "area of comparison" was developed that ensures only those impacts of the Revised Project, which are affected by the alternative were compared.

Step 3: Compare the Revised Project and Alternatives.

Any specific alternative replaces only a portion of the Revised Project and would require combining with the remaining unaffected segments of the Revised Project and/or other alternatives to form a complete alternative route. Section 6.5 compares the environmental impacts of the Revised Project with the environmental impacts of each alternative plus the unaffected segments of Revised Project to determine the Environmentally Superior Alternative. Section 6.5 then compares the Environmentally Superior Alternative with the no Project Alternative to determine whether the No Project Alternative is the Environmentally Superior Alternative.

Determining an Environmentally Superior Alternative requires balancing many environmental factors. When considering the relative importance of impacts and ranking of alternatives, long-term impacts are considered more important than short term impacts, since the consequences are generally considered to be more profound for the environment. Therefore, long-term impacts are given more weight when identifying the Environmentally Superior Alternative.

To identify the Environmentally Superior Alternative, the impacts in each resource area were ranked by long term impacts first then short-term impacts were considered to enable differentiation where necessary. Section 6.5 provides a comparison between alternatives and the Revised Project; the ranking of each alternative is summarized in Table 6.5-2. The alternatives were ranked according to the magnitude of significant environmental impacts where the highest ranked alternative (i.e., #1) has the least severe significant environmental impacts and the lowest ranked alternative has the most severe significant environmental impacts. Alternatives were initially ranked by long-term impacts and then short-term construction impacts were considered to differentiate between alternatives where necessary.

Although this Subsequent EIR identifies an Environmentally Superior Alternative, the CPUC could choose to balance the importance of each impact area differently and reach a different conclusion during the project approval process. The CPUC may, therefore, choose to make a finding based on substantial evidence, that another alternative is superior.

6.4 EVALUATION OF PROJECT ALTERNATIVES

Four alternatives, in addition to the No Project Alternative, were identified for evaluation in this Subsequent EIR. For each area of the Revised Project where an alternative is considered, the comparison begins with a summary of the significant impacts that cannot be mitigated. The environmental impact conclusions for the Revised Project and each alternative is then compared and ranked in a table. Based on this comparison, an overall conclusion is made about each alternative and states whether it is environmentally superior to the Revised Project.

6.4.1 Revised Project

The Revised Project would result in five significant and unavoidable impacts on aesthetics, agricultural resources, noise, and transportation and traffic. The Revised Project significant and unavoidable impacts are summarized below in Table 6.4-1. The Revised Project would also result in impacts on nine environmental resource topics that are less than significant or less than significant following implementation of mitigation. The Revised Project would result in no impact on land use, mineral resources and population and housing.

Table 6.4-1 Summary of Significant and Unavoidable Impacts of the Revised Project

Resource Topic	Unavoidable Impact
Impact Aesthetics-c: Would the project	Views from local roadways; parks and recreational
substantially degrade the existing visual	areas, including Goose Creek Golf Club; and local
character or quality of the site and its	residences would be significantly affected by riser
surroundings?	poles and poles in agricultural land.

Resource Topic	Unavoidable Impact
Impact Agriculture-a: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	Installation of the northern riser tower in prime farmland north of Limonite Road would result in a significant impact due to the Riverside County 'no loss' threshold for important farmland.
Impact Noise-d: Would the alternative result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Impacts of underground construction on Pats Ranch Road mostly south of Limonite Avenue, and along 68th Street would occur adjacent sensitive receptors and residences.
Impact Traffic-a: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, takin into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Level of Service (LOS) for Limonite Avenue West of Pats Ranch Road and I-15 would be impacted by construction activities that require road closure.
Impact Traffic-b: Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Mitigation would limit road closures to off-peak periods and ensure the that LOS is maintained during peak periods. However, detoured traffic around a road closure on Pats Ranch Road would result in a decrease in LOS at Wineville Avenue/ Limonite Avenue to below LOS E during both peak and off-peak periods.

6.4.2 No Project Alternative

The No Project Alternative is described in Section 3.6 of the Draft Subsequent EIR. In the absence of the RTRP, the City of Riverside and SCE are obligated to ensure system reliability and would need to pursue actions to alleviate potential outages that may be experienced during periods of high usage. The events that are reasonably expected to occur in the foreseeable future in the event that the RTRP were not approved include the following:

- SCE would not construct new high-voltage transmission lines in or near the project area to supply power to the City of Riverside
- RPU's electrical system would continue to have a single point of connection to SCE's electrical system, making it vulnerable to power outages in the future

RPU would likely opt to expand use of gas fired generation and install battery storage to mitigate the system impact from potential failure of RPU's transformers at Vista Substation or failure of RPU's interconnection to Vista Substation. The additional gas-fired power generation

and battery storage could not be economically employed at the same scale as the RTRP, and the gas-fired generation would be limited by SCAQMD. The additional gas-fired generation capacity and battery storage could reduce the impact on RPU of a potential failure of RPU's transformer bank at Vista Substation; however, RPU's system would remain vulnerable to future outages. Consequently, the No Project Alternative fails to meet any of the basic project objectives.

The No Project Alternative would reduce long term impacts on aesthetics and reduce construction impacts on noise and traffic to less than significant. Gas-fired generation would run for longer, resulting in significant and unavoidable increase of criteria pollutants. Impacts on biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, and utilities and service systems would be less than the Revised Project and less than significant. The No Project Alternative would have no impact on land use, mineral resources, population and housing, and public services.

6.4.3 Alternative 1: Bellegrave – Pats Ranch Road Underground

Overview

This section compares the impacts of Alternative 1 with impacts of the Revised Project. The area of comparison includes Revised Project and Proposed Project segments north of Limonite Avenue as shown on Figure 6.4-1.

This area of comparison is appropriate because Alternative 1 would replace this segment of the Revised Project and Proposed project. All impacts that occur south of Limonite Avenue as part of the Revised Project and Proposed Project would also occur if Alternative 1 were selected by the CPUC.

Summary of Impacts

Within the area of comparison, the Revised Project would result in three significant and unavoidable impacts: one each on aesthetics, agriculture, and noise. Alternative 1 would result in two significant and unavoidable impacts within two resource topics: noise and traffic.

Alterative 1 would reduce aesthetic impacts to all KOPs with views of the area of comparison to less than significant by relocating the transmission line underground in Pats Ranch Road. All impacts on important farmland would also be avoided by relocating the underground transmission segment from agricultural areas to disturbed roadways. The impacts of both the revised project and Alterative 1 within the area of comparison are summarized in Table 6.4-2, and the relative ranking for each impact is provided.

Both the Revised Project (within the area of comparison) and Alternative 1 would result in impacts on nine resource topics that would be either less than significant or less than significant impacts with mitigation. Neither the Revised Project nor Alternative 1 would impact land use, mineral resources, or population and housing.

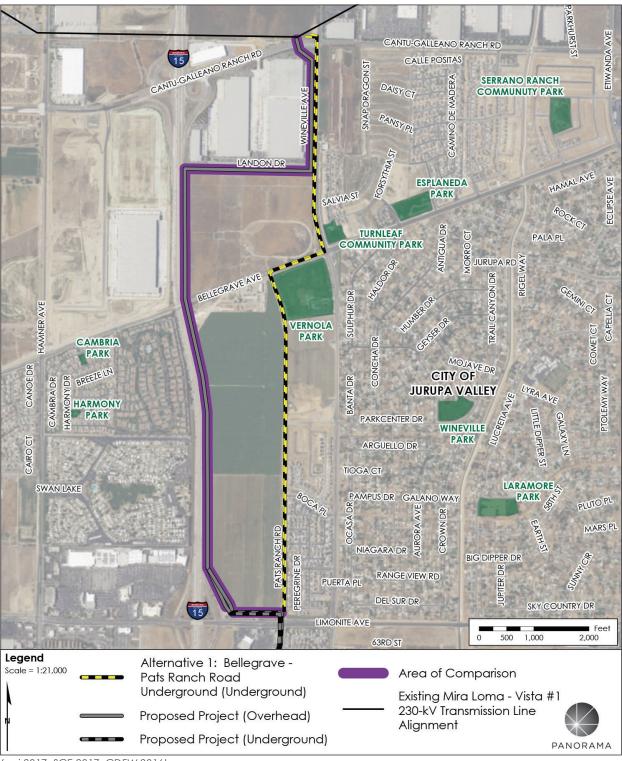


Figure 6.4-1 Alternative 1 and the Relevant Area of Comparison

(esri 2017, SCE 2017, CDFW 2016)

Table 6.4-2	Comparison of Revised Project and Alternative 1 Significant and
	Unavoidable Impacts within the Area of Comparison

Resource Topic	Revised Project	Alternative 1
Impact Aesthetics-c: Would the Revised Project or Alternative 1 substantially degrade the existing visual character or quality of the site and its surroundings?	Significant and Unavoidable Riser poles and towers would result in a significant permanent impact on views from local roadways; parks and recreational areas.	Less than Significant with Mitigation The underground transmission line along Pats Ranch Road and Wineville Avenue would avoid long-term significant aesthetic impacts.
	Ranking = 2	Ranking = 1
Impact Agriculture-a: Would the Revised Project or Alternative 1 convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	Significant and Unavoidable Installation of the underground transmission line and northern riser pole in prime farmland north of Limonite Road would result in a significant permanent impact on important farmland.	No Impact Alterative 1 would avoid impacts on important farmland by locating the proposed transmission line within a disturbed roadway.
	Ranking = 2	Ranking = 1
Impact Noise-d: Would the Revised Project or Alternative 1 result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Significant and Unavoidable Construction of the transmission line on the northern side of the Limonite Ave. and Pats Ranch Road junction would result in a substantial temporary increase in noise levels at adjacent residences.	Significant and Unavoidable Construction of the underground transmission line on Pats Ranch Road and Wineville Road would result in a substantial temporary increase in noise levels at adjacent residences. Alternative 1 would involve construction in proximity to more residences than the Revised Project.
	Ranking = 1	Ranking = 2
Impact Traffic-a: Would the Revised Project or Alternative 1 conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, takin into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways,	Less Than Significant Road Closures and lane restrictions due to overhead construction along Wineville Road between Bellegrave and Cantu-Gallerano Ranch Road would not reduce LOS.	Significant and Unavoidable Road Closures on Bellegrave and Wineville Road would result in significant LOS reduction on Limonite Avenue.
pedestrian and bicycle paths, and mass transit?		

Conclusion

Alternative 1 would avoid the significant long-term impacts on aesthetic and important farmland by relocating the transmission line underground within roadways. The Revised Project impacts on aesthetics and important farmland would remain for the duration of the project. Alternative 1 would avoid all permanent significant impacts of the Revised Project.

Construction noise for both the Revised Project and Alternative 1 would be significant and unavoidable. Both alternatives would impact adjacent sensitive receptors and residences; however, Alterative 1 involves a longer underground route near to residences and would, therefore, have a proportionally greater impact on nearby residences during construction activities. Alternative 1 would also result in a significant and unavoidable traffic impact from the reduction in LOS during road closures on Wineville and Bellegrave Avenue. Alternative 1 would result in greater temporary construction-related impacts than the Revised Project.

Although Alterative 1 would have greater construction impacts, it would substantially reduce or eliminate the Revised Project permanent impacts on aesthetics and important farmlands. Noise and traffic impacts from the construction activity would be limited to the construction period and would cease when construction activities are completed. The reduction and mitigation of permanent impacts are of greater importance than the reduction of temporary impacts when deciding which alterative is environmentally superior. Alternative 1 is environmentally superior to the Revised Project because it avoids all permanent significant impacts.

6.4.4 Alternative 2: Wineville – Limonite Underground

Overview

This section compares the impacts of Alternative 2 with impacts of the Revised Project. The area of comparison includes Revised Project and Proposed Project segments north of Limonite Avenue as shown on Figure 6.4-2.

This area of comparison is appropriate because Alternative 2 would replace this segment of the Revised Project and Proposed project. All impacts that occur south of Limonite Avenue as part of the Revised Project and Proposed Project would also occur if Alternative 2 were selected by the CPUC.

Summary of Impacts

Within the area of comparison, the Revised Project would result in three significant and unavoidable impacts: one each on aesthetics, agriculture, and noise. Alternative 2 would result in one significant and unavoidable impact on noise and three significant and unavoidable impacts on traffic criteria.

Alterative 2 would reduce the aesthetic impacts to less than significant at all KOPs with view of the area of comparison by undergrounding the transmission line in Limonite road and Wineville Avenue. Further, by routing the transmission line under Wineville Avenue, all impacts on important farmland would be avoided. Routing the transmission line within

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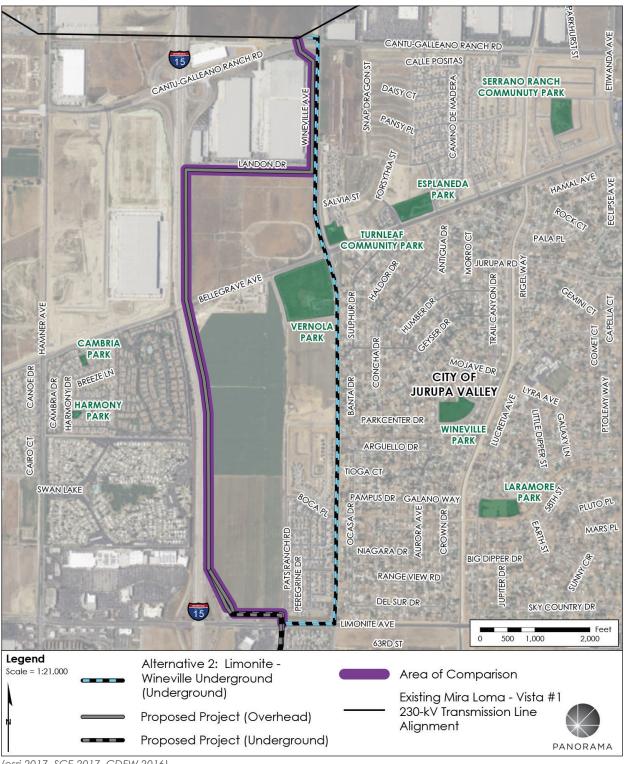


Figure 6.4-2 Alternative 2 and the Relevant Area of Comparison

(esri 2017, SCE 2017, CDFW 2016)

Wineville Avenue would result in extensive impacts to traffic LOS over the period of construction. Peak and off-peak LOS would be significantly negatively affected. Backups on the I-15 on- and off-ramps during peak hours would lead to traffic hazards. Impacts on three traffic and transportation resource criteria would be significant and unavoidable.

Construction noise from both the Revised Project and Alterative 2 would affect sensitive receptors and residences; however, Alterative 2 would result in greater impacts from construction noise and ground borne vibration due to the increased length of underground construction in close proximity to more residences and sensitive receptors. The impacts of both the Revised Project and Alterative 2 are summarized in Table 6.4-3, and the relative ranking for each impact is provided for comparison.

Both the Revised Project (within the area of comparison) and Alternative 2 would result in impacts on nine resource topics that would be either less than significant or less than significant with mitigation. Neither the Revised Project nor Alternative 2 would impact land use, mineral resources, or population and housing.

Conclusion

Alternative 2 would avoid significant long-term impacts on aesthetic resources and important farmland. The Revised Project impacts on aesthetics and important farmland would remain for the duration of the project. Alternative 2 would have no long-term significant impacts.

Construction noise for both the Revised Project and Alternative 2 would be significant and unavoidable. Alternative 2 would affect a greater number of receptors due to the increased construction activity in proximity to a greater number of residences. Trenching and vault installation along Wineville Avenue and Limonite Avenue would result in extensive impacts to traffic regulation and traffic flow during both peak and off-peak hours, which would potentially result in hazardous back-ups on the I-15 on- and off-ramps because Limonite Avenue within Alternative 2 provides direct access to I-15. Alternative 2 would have a significant and unavoidable impact on traffic during lane and road closures on Limonite Avenue. Alternative 2 would result in greater temporary construction-related impacts than the Revised Project.

Although Alterative 2 has greater construction impacts, it substantially reduces or eliminates the long-term impacts on aesthetics and important farmlands. Alternative 2 impacts on traffic and noise would be limited to the construction period and would cease when construction activities are completed. The reduction and mitigation of long term impacts are of greater importance than the reduction of temporary impacts when deciding which alterative is environmentally superior. Alternative 2 is environmentally superior to the Revised Project because it avoids the long-term significant impacts of the Revised Project.

Table 6.4-3	Summary of Revised Project and Alternative 2 Significant and
	Unavoidable Impacts within the Area of Comparison

	Revised Project	Alternative 2
Resource Topic Impact Aesthetics-c: Would the Revised Project or Alternative 2 substantially degrade the existing visual character or quality of the site and its surroundings?	The Revised Project riser poles antially degrade the existing and icharacter or quality of the and its surroundings? The Revised Project riser poles and towers would result in a long-term significant impact on views from local roadways; parks and recreational areas; and local residences. Ranking = 2 Significant and Unavoidable	
Revised Project or Alternative 2 convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	The underground transmission line and riser pole in Farmland north of Limonite Avenue would result in a long-term significant impact on important farmland.	No Impact Alterative 2 would avoid important farmland by locating the transmission line within disturbed roadways.
	Ranking = 2	Ranking = 1
Impact Noise-d: Would the Revised Project or Alternative 2 result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Significant and Unavoidable Revised Project construction in proximity to residences on the northern side of the Limonite Avenue and Pats Ranch Road junction would result in a substantial temporary increase in noise levels.	Significant and Unavoidable Transmission line construction in proximity to residences on Limonite Avenue and Wineville Avenue would result in a substantial temporary increase in noise levels. Alternative 2 would involve construction in proximity to more residences than the Revised Project.
	Ranking = 1	Ranking = 2
Impact Traffic-a: Would the Revised Project or Alternative 2 conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non- motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Less Than Significant Road Closures and lane restrictions due to overhead construction along Wineville Avenue between Bellegrave and Cantu-Galleano Ranch Road would not reduce LOS.	Significant and Unavoidable Temporary road closures on Limonite Avenue between Pats Ranch Road and Wineville Avenue, and along Wineville Avenue during vault installation could cause significant traffic delays.
	Ranking = 1	Ranking = 2

Resource Topic	Revised Project	Alternative 2	
Impact Traffic-b: Would the Revised Project or Alternative 2 conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Less than Significant The Revised Project would not require any road or lane closures on CMP roadways, LOS would be maintained.	Significant and Unavoidable Lane closures on Limonite Avenue could cause intersection operations to remain below LOS E during lane closures.	
	Ranking = 1	Ranking = 2	
Impact Traffic-d: Would the	Less than Significant	Significant and Unavoidable	
Revised Project or Alternative 2 substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Construction activities within the area of comparisons would be limited to construction traffic and road restrictions for overhead line installation along Wineville Avenue. Neither of these	Road or lane closures on Limonite Avenue could result in backups onto the I-15 freeway ramps.	
	impacts would be sufficiently intense to increase hazards.		

6.4.5 Alternative 3: Relocate Northern Riser Poles

Overview

This section compares the impacts of Alternative 3 with the impacts of the Revised Project adjacent to I-15 north of Limonite Avenue. Figure 6.4-3 shows the area of comparison for Alternative 3, which relocates the Revised Project the riser poles 0.25 mile north along the I-15 freeway. All other Revised Project impacts would occur.

Summary of Impacts

Within the area of comparison, the Revised Project would result in two significant and unavoidable impacts: one each on aesthetics and agriculture. Alternative 3 would result in the same two significant and unavoidable impacts.

Alterative 3 would reduce the aesthetic impact of riser poles to viewers from Limonite Avenue at Pats Ranch Road (KOP 6), and the Limonite Avenue Park and Ride (KOP 5) to less than significant; however, impacts of the riser poles on views from Vernola Park (KOP 4) would remain significant and unavoidable. Both the Revised Project and Alternative 3 would result in a similar magnitude of long-term loss of important farmland. Table 6.4-4 compares the significant and unavoidable impacts of the Revised Project and Alternative 3 within the area of comparison.

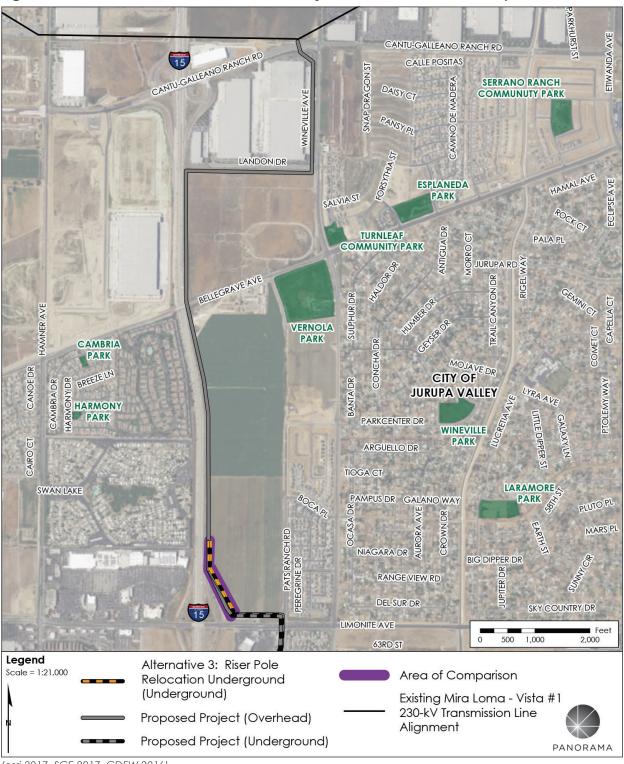


Figure 6.4-3 Alternative 3 and Revised Project Relevant Area of Comparison

(esri 2017, SCE 2017, CDFW 2016)

Table 6.4-4	Summary of Significant and Unavoidable Impacts of the Revised Project
	and Alternative 3 within Area of Comparison

Resource Topic	Revised Project	Alternative 3
Impact Aesthetics-c: Would the Revised Project or Alternative 3 substantially degrade the existing visual character or quality of the site and its surroundings?	Significant and Unavoidable The riser poles north of Limonite Avenue would have a long-term significant impact on views from local roadways, parks and recreational areas.	Significant and Unavoidable The relocated riser poles would have a long-term significant impact on views from local parks and recreational areas. Views from local roadways would be marginally improved by moving riser poles away from Limonite Avenue.
	Ranking = 2	Ranking = 1
Impact Agriculture-a: Would the Revised Project or Alternative 3 convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	Significant and Unavoidable Installation of the riser poles would result in a significant and unavoidable permanent loss of important farmland.	Significant and Unavoidable Installation of vaults and the relocated riser poles would result in the permanent loss of important farmland. Alternative 3 avoids the installation of one Proposed Project LST, but the reduced impact of above- ground infrastructure would be balanced out by the addition of vaults that would result in a similar loss of important farmland.
	Ranking = no preference	Ranking = no preference

Both the Revised Project (within the area of comparison) and Alternative 3 would have impacts on nine resource topics that would be either less than significant or less than significant with mitigation. Neither the Revised Project nor Alternative 3 would impact land use, noise, mineral resources, recreation, or population and housing.

Conclusion

When compared to the Revised Project, Alternative 3 would reduce impacts on aesthetics for viewers on Limonite Avenue and the I-15 on- and off-ramps. Alterative 3 would not reduce impacts on important farmland. Alternative 3 would reduce the long-term impacts of the Revised Project.

The Revised Project and Alternative 3 would have the same construction impacts, all of which would be less than significant or less than significant with mitigation. Construction-related impacts of the Revised Project and Alternative 3 would be comparable and neither option would be preferable.

Alternative 3 reduces the Revised Project long-term impact on aesthetics from local roads. The long-term impact on important farmland would be the same for the Revised Project and Alternative 3. Given that Alternative 3 reduces the long-term aesthetic impact, it is environmentally superior to the Revised Project.

6.4.6 Alternative 4: Wineville – Landon Underground

Overview

This section compares the impacts of Alternative 4 with impacts of the Revised Project. Figure 6.4-4 shows the relevant area of comparison, which includes the Revised Project overhead segment along Wineville Avenue between Cantu-Galleano Ranch Road and Landon Drive.

This area of comparison is appropriate because this is the Revised Project and Proposed Project segment that affected by Alternative 4. All impacts that occur south of Landon Drive as part of the Revised Project and Proposed Project would also occur if Alternative 4 were selected by the CPUC.

Summary of Impact

Within the area of comparison, the Revised Project would result in one significant and unavoidable impact on aesthetics, and Alternative 4 would have no significant and unavoidable impacts.

The Revised Project involves installation of LSTs, TSPs, and conductor along Wineville Avenue between Cantu-Galleano Ranch Road and Landon Drive. Views from Rosebud Lane (KOP 3) would be adversely affected by the transmission infrastructure, resulting in a significant and unavoidable impact. Alterative 4 would relocate the transmission line underground along Wineville Avenue and Landon Drive adjacent to the Revised Project and Proposed Project overhead transmission line alignment. Both the Revised Project (within the area of comparison) and Alternative 4 would result in impacts on twelve resource topics that would be either less than significant or less than significant with mitigation. Neither the Revised Project nor Alternative 4 would impact land use, mineral resources, or population and housing.

Table 6.4-5 compares the significant and unavoidable impacts of the Revised Project with Alternative 4 within the area of comparison.

Both the Revised Project (within the area of comparison) and Alternative 4 would result in impacts on twelve resource topics that would be either less than significant or less than significant with mitigation. Neither the Revised Project nor Alternative 4 would impact land use, mineral resources, or population and housing.

Table 6.4-5Summary of Significant and Unavoidable Impacts of the Revised Project
and Alternative 4 within the Area of Comparison

Resource Topic	Revised Project Alternative 4	
Impact Aesthetics-c: Would the Revised Project or Alternative 4 substantially degrade the existing visual character or quality of the site and its surroundings?	Significant and Unavoidable Views from local roadways; parks and recreational areas; and local residences would be significantly affected by LSTs along Wineville Avenue.	Less Than Significant The underground transmission line would not significantly affect views from local roadways, parks and recreational areas.
	Ranking = 2	Ranking = 1

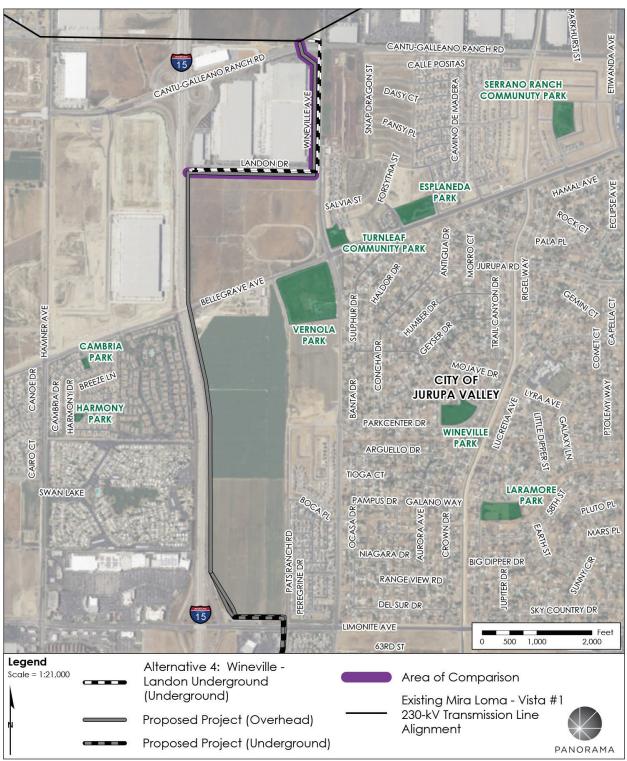


Figure 6.4-4 Alternative 4 and the Relevant Area of Comparison

⁽esri 2017, SCE 2017, CDFW 2016)

Conclusion

When compared to the Revised Project, Alternative 4 would reduce long-term impact on aesthetics for viewers on local roadways (KOP 3). The Revised Project and Alternative 4 would have similar construction impacts. Given that Alternative 4 reduces the long-term aesthetic impact and would have comparable construction impacts, Alternative 4 is environmentally superior to the Revised Project.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The following section analyses each alternative along with the segment of the Revised projects that are unaffected by the alternative. Table 6.5-1 presents the comparison of significant and unavoidable impacts between the Revised Project and alternatives, including the Revised Project in the remaining segments, as analyzed in Section 4.0. The relative magnitude of impacts are described, and the Revised Project and alternatives are ranked. The alternative with least environmental consequence is then compared to the No Project Alternative to determine the Environmentally Superior Alternative.

The following alternatives, and combinations of alternatives, are considered:

- Revised Project
- Alternative 1 with Revised Project in remaining segments
- Alternative 2 with Revised Project in remaining segments
- Alternative 3 with Revised Project in remaining segments
- Alternative 4 with Revised Project in remaining segments
- Alternative 3 + Alterative 4 with Revised Project in remaining segments

The impacts of each alternative presented in Table 6.5-1 include the impacts of the Revised Project segments that are not affected by the alternative. Table 6.5-2 quantifies, summarizes and ranks each alternative with regard to the extent and magnitude of each significant and unavoidable impacts.

6.5.1 Comparison of Impacts between the Revised Project and Alternatives

For each resource where there is a significant and unavoidable impact, the following section summarizes and ranks the impacts of the Revised Project and each alternative.

Impacts on Aesthetic Resources

As described in Table 6.5-1, all alternatives and the revised project would have a significant and unavoidable impact on aesthetics. Alterative 1 and Alternative 2 would minimize long-term impacts on aesthetics by avoiding installation of riser poles near Limonite Avenue and LSTs along Wineville Avenue, but the Revised Project riser poles in Goose Creek Golf Club would remain and would result in a significant impact.

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Resource Topic	Revised Project	Alternative 1 with Revised Project in Remaining Segments	Alternative 2 with Revised Project in Remaining Segments	Alternative 3 with Revised Project in Remaining Segments	Alternative 4 with Revised Project in Remaining Segments	Combined Alternative 3 and Alternative 4 with Revised Project in Remaining Segments
Impact Aesthetics-c: Would the project or alternative substantially degrade the existing visual character or quality of the site and its surroundings?	Significant and Unavoidable Views from local roadways; parks and recreational areas, including Goose Creek Golf Club would be significantly affected by riser poles and poles in agricultural land.	Significant and Unavoidable Undergrounding of the line along Pats Ranch Road would avoid impacts to views from Limonite Avenue, Rosebud Lane, and Vernola Park. Impacts from riser poles at the Goose Creek Golf Club would remain significant.	Significant and Unavoidable Undergrounding of the line along Wineville Road would avoid impacts to views from Limonite Avenue, Rosebud Lane, and Vernola Park Impacts from riser poles at the Goose Creek Golf Club would remain significant.	Significant and Unavoidable Views from Limonite Avenue would be marginally improved by undergrounding lines adjacent to Limonite Avenue and setting the riser poles further north of Limonite Avenue; however, the impact from the northern riser poles on views from Vernola Park would remain significant and unavoidable. Impacts from riser poles at the Goose Creek Golf Club would remain significant.	Significant and Unavoidable Undergrounding along Landon Drive and Wineville Avenue would reduce impacts to visual resources from Rosebud Lane. Impacts from riser poles at Limonite Avenue and at the Goose Creek Golf Club would remain significant.	Significant and Unavoidable Undergrounding along Landon Drive and Wineville Avenue and setting the riser poles further north of Limonite Avenue would reduce impacts for viewers from Limonite Avenue and Rosebud Lane; however, the impact from the northern riser poles on views from Vernola Park, and from riser poles at the Goose Creek Golf Club would remain significant.
	Ranking = 5	Ranking = 1	Ranking = 1	Ranking = 4	Ranking = 3	Ranking = 2
Impact Agriculture-a: Would the	Significant and Unavoidable	No Impact	No Impact	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable
project or alternative convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	Installation of vaults and riser poles in important farmland north of Limonite Avenue would result in a significant impact.	Alterative 1 would avoid important farmland by locating the transmission line underground within disturbed roadways.	Alterative 2 would avoid important farmland by locating the transmission line underground within disturbed roadways.	Impacts would be comparable to the Revised Project	Impacts would be the same as the Revised Project. The alternative would not modify the Revised Project in the area of impact.	Impacts would be comparable to the Revised Project.
	Ranking = 2	Ranking = 1	Ranking = 1	Ranking = 2	Ranking = 2	Ranking = 2
Impact Noise-d: Would the project or alternative result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Significant and Unavoidable Construction of the underground transmission line on Pats Ranch Road mostly south of Limonite Avenue, and along 68th Street would occur adjacent to sensitive receptors and residences and would produce noise levels in excess of thresholds.	Significant and Unavoidable Construction of the underground transmission line on Pats Ranch Road, and 68th Street, would occur adjacent to sensitive receptors and existing residences and would produce noise levels in excess of thresholds.	Significant and Unavoidable Construction of the underground transmission line on Limonite Avenue, Wineville Avenue, Pats Ranch Road, and 68th Street would occur adjacent to sensitive receptors and existing residences and would produce noise levels in excess of thresholds.	Significant and Unavoidable Construction of the underground transmission line on Pats Ranch Road south of Limonite Avenue, and along 68th Street would occur adjacent sensitive receptors and residences and would produce noise levels in excess of thresholds.	Significant and Unavoidable Construction of the underground transmission line on Pats Ranch Road south of Limonite Avenue, and along 68th Street would occur adjacent sensitive receptors and residences and would produce noise levels in excess of thresholds.	Significant and Unavoidable Construction of the underground construction on Pats Ranch Road south of Limonite Avenue, and along 68th Street would occur adjacent sensitive receptors and residences and would produce noise levels in excess of thresholds.
	Ranking = 1	Ranking = 3	Ranking = 4	Ranking = 2	Ranking = 2	Ranking = 2

Table 6.5-1 Summary of Significant and Unavoidable Impacts of the Revised Project and Alternatives

Resource Topic	Revised Project	Alternative 1 with Revised Project in Remaining Segments	Alternative 2 with Revised Project in Remaining Segments	Alternative 3 with Revised Project in Remaining Segments	Alternative 4 with Revised Project in Remaining Segments	Combined Alternative 3 and Alternative 4 with Revised Project in Remaining Segments
Impact Traffic-a: Would the project or an alternative conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, takin into account all modes of transportation including mass transit and non- motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Significant and Unavoidable LOS for Limonite Avenue West of Pats Ranch Road and I-15 would be impacted by construction activities that require road closure.	Significant and Unavoidable Road closures on Bellegrave Avenue and Wineville Avenue would result in significant traffic delays on Limonite Avenue.	Significant and Unavoidable Road closures on Pats Ranch Road, Wineville Avenue, and on Limonite Avenue between Pats Ranch Road and Wineville Avenue during vault installation would result in significant traffic delays on Limonite Avenue.	Significant and Unavoidable Impact similar to the Revised Project.	Significant and Unavoidable Impact similar to the Revised Project.	Significant and Unavoidable Impact similar to the Revised Project.
	Ranking = 1	Ranking = 2	Ranking = 3	Ranking = 1	Ranking = 1	Ranking = 1
Impact Traffic-b: Would the project or alternatives conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Significant and Unavoidable Detoured traffic around road closures on Pats Ranch Road could result in a decrease in LOS at Wineville Avenue/ Limonite Avenue to decline below LOS E.	Significant and Unavoidable Impact similar to the Revised Project.	Significant and Unavoidable Alternative 2 would involve lane and road closures on Limonite Avenue during construction of the underground transmission duct banks and vaults. Due to the high traffic volumes on Limonite Avenue, off-peak intersection operations of CMP roadway intersections could remain below LOS E.	Significant and Unavoidable Impact similar to the Revised Project	Significant and Unavoidable Impact similar to the Revised Project	Significant and Unavoidable Impact similar to the Revised Project
	Ranking = 1	Ranking = 1	Ranking = 2	Ranking = 1	Ranking = 1	Ranking = 1
Impact Traffic-d: Would the project or alternatives substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant with Mitigation Potential traffic queuing hazards, which could occur during peak hours, would be mitigated by ensuring lane and road closures only occur during off peak hours.	Less than Significant with Mitigation Impact similar to the Revised Project	Significant and Unavoidable Lane and road closures construction of the underground transmission line on Limonite Road could result in queuing on to the I-15 freeway at Limonite exit.	Less than Significant with Mitigation Impact similar to the Revised Project	Less than Significant with Mitigation Impact similar to the Revised Project	Less than Significant with Mitigation Impact similar to the Revised Project
	Ranking = 1	Ranking = 1	Ranking = 2	Ranking = 1	Ranking =1	Ranking = 1

ive 4 with Revised Remaining Segments	Alternative 4 with Revise Project in Remaining Segn	
and Unavoidable	Significant and Unavoidable	
lar to the Revised	Impact similar to the Revise Project.	

Alternative	Ranking on Long-term Impact Only	Overall Ranking including Short- term Impacts
Alternative 1	1	1
Alternative 2	1	2
Combined Alternative 3 & 4	2	3
Alternative 4	3	4
Alternative 3	4	5
Revised Project	5	6

Table 6.5-2Summary of Rankings for the Revised project and the Alternatives by
Long-term and Short-term Impacts

Alternative 3, Alternative 4, and the combination thereof would each respectively reduce aesthetic impacts through relocation of the riser pole at Limonite Avenue and avoidance of the overhead LSTs along Wineville Avenue. However, these alternatives would retain the riser poles in Goose Creek Golf Club and consequently aesthetic impacts would remain significant and unavoidable.

The Revised Project would retain both the northern riser poles near Limonite Avenue, the southern riser poles in Goose Creek Golf Club and the overhead lines along Wineville Avenue, which would, significantly affect views from surrounding roadways, recreational areas, and residential areas.

Impacts to Important Farmland

As described in Table 6.5-1, Alterative 1 and 2 would avoid impacts to agricultural resources by removing the northern riser poles from important farmland near Limonite Avenue. All other alternatives would retain riser poles in important farmland, resulting in a significant and unavoidable impact.

Impacts from Construction Noise

The Revised Project along with Alternatives 1 and 2 would result in significant and unavoidable noise impacts where underground transmission line construction would be located in near to sensitive receptors. The relative magnitude of impacts can be ranked by the proximity of the underground construction activities to residences and sensitive receptors, combined with the number of residences that would be affected. More detail regarding the magnitude of impacts are provided in Table 6.5-1.

The Revised Project, Alternative 3, and Alternative 4 have the least underground construction near sensitive receptors. Alternative 1 would impact residences along Pats Ranch Road north of Limonite Avenue in addition to sensitive receptors along the Revised Project route south of Limonite Avenue. Alternative 2 construction noise would affect the greatest number of people because, underground transmission line construction activities along Wineville Avenue would affect numerous residences bordering both sides of Wineville Avenue.

Impacts of Construction to Traffic

As described in Table 6.5-1, the Revised Project, Alterative 3, Alterative 4 and the combination thereof would result in significant unavoidable impacts on Limonite Avenue and Pats Ranch Road due construction-related road closures. Alternative 1 road closures would cause additional impacts on Bellegrave Avenue and Wineville Avenue. Alternative 2 lane and road closures could severely affect traffic flow due to the substantial volume of traffic on Limonite Avenue that would need to be diverted and managed. Alternative 2 would also require lane and road closures on Wineville Avenue. Closures on Limonite Avenue could cause potentially hazardous congestion and backups on to the I-15 on- and off-ramps as a consequence of traffic diversions and traffic delays on Limonite Avenue.

Conclusion

The following section discusses the relative ranking by impact. The rankings for each alternative and the Revised Project are summarized in Table 6.5-2. The alternatives are ranked in Table 6.5-2 according to their ability to reduce long-term impacts of the Revised Project while minimizing potential construction related impacts. Both Alternative 1 and Alternative 2 would avoid the same long-term impacts of the Revised Project, but Alternative 1 would have fewer significant and unavoidable short-term construction related impacts than Alternative 2. In conclusion Alternative 1 would result in the least environmental impacts and is the Environmentally Superior Alternative.

6.5.2 No Project Alternative vs. Alternative 1

The following section compares Alternative 1 to the No Project Alternative to determine whether the No Project is environmentally superior to Alternative 1. In the absence of the Proposed Project, RPU's electrical system would continue to have a single point of connection to SCE's electrical system, making it vulnerable to power outages in the future. In the absence of the RTRP, it is likely that RPU would opt to increase gas-fired generation and install battery storage to mitigate the system impact from potential failure of RPU's transformers at Vista Substation, or failure of RPU's interconnection to Vista Substation.

Summary of Impacts

Table 6.5-3 compares the No Project Alternative with the Alternative 1 for each environmental resource area with a significant and unavoidable impact. The No Project Alternative would result in significant and unavoidable impacts to air quality whereas Alternative 1 with the Revised Project in the remaining segments would result in impacts on aesthetics, noise, and traffic.

Resource Topic	Alternative 1 + Revised Project in Remaining Segments	No project
Impact Aesthetics-c: Would Alternative 1 or the No Project Alternative substantially degrade the existing visual character or quality of the site and its surroundings?	Significant and Unavoidable Undergrounding of the line along Pats Ranch Road would avoid impacts to views from Limonite Avenue, Rosebud Lane, and Vernola Park Impacts from riser poles at the Goose Creek Golf Club would not be avoided by the alternative and would remain significant and unavoidable.	Less than Significant New battery storage facilities would likely be installed at substations or facilities that appear industrial and similar to the battery storage.
	Ranking = 2	Ranking = 1
Air Quality-b: Would Alternative 1 or the No Project Alternative violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Less than Significant with Mitigation Air Quality analysis for Alternative 1 developed mitigation measures that require implementation of a Fugitive Dust Control Plan, use of exhaust emissions controls, and specify requirements prohibiting overlap of certain construction activities. Mitigation would ensure that the Alternative 1 would not generate emissions and pollutants for which the region is not in attainment. Alternative 1 would not create a source of long-term emissions.	Significant and Unavoidable Additional power generation would likely result in additional emission of criteria pollutants as point source emissions from a generator would likely exceed SCAQMD's emissions thresholds.
	Ranking = 1	Ranking = 2
Air Quality-c: Would Alternative 1 or the No Project Alternative result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	Less than Significant with Mitigation Air Quality analysis for Alternative 1 developed mitigation measures that require implementation of a Fugitive Dust Control Plan, use of exhaust emissions controls, and specify requirements prohibiting overlap of certain construction activities. Mitigation would ensure that the Alternative 1 would not generate emissions and pollutants for which the region is not in	Significant and Unavoidable Poor air quality in the SCAQMD region already limits emission from generation, therefore emissions from increased gas-fired generation could potentially be substantial and could cumulatively contribute to exceedance of established thresholds.

Table 6.5-3 Summary of Significant and Unavoidable Impacts of the Alternative 1 and No Project Alterative

Resource Topic	Alternative 1 + Revised Project in Remaining Segments	No project
	attainment. Alternative 1 would not create a source of long-term emissions.	
	Ranking = 1	Ranking = 2
Impact Noise-d: Would Alternative 1 or the No Project Alternative result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Significant and Unavoidable Construction of the Alternative 1 and Revised	Less than Significant Construction of battery storage facilities would be
	Project underground transmission line on Pats Ranch Road, and 68th Street, would occur adjacent to sensitive receptors and existing residences.	expected to occur within or adjacent to existing substations which are typically at a distance from sensitive receptors. The impact would likely be less than significant.
	Ranking = 2	Ranking = 1
Impact Traffic-a: Would Alternative 1 or the No Project Alternative conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non- motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Significant and Unavoidable LOS for Limonite Avenue west of Pats Ranch Road and I-15 would be impacted by construction activities that require road closure. Road Closures on Bellegrave Avenue and Wineville Avenue would result in significant LOS reduction on Limonite Avenue.	Less than Significant The No Project Alternative is not expected to require any construction work within roadways or otherwise cause road or lane closure and is not expected to impact LOS.
	Ranking = 2	Ranking = 1

Resource Topic	Alternative 1 + Revised Project in Remaining Segments	No project
Impact Traffic-b: Would Alternative 1 or the No Project Alternative conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Significant and Unavoidable Mitigation would limit road closures to off-peak periods and ensure the that LOS is maintained during peak periods; however, detoured traffic around a road closure on Pats Ranch Road would result in a decrease in LOS at Wineville Avenue/ Limonite Avenue to below LOS E during off-peak periods.	Less than Significant The No Project Alternative is not expected to require any construction work within roadways or otherwise cause road or lane closure.

Ranking = 2

Ranking = 1

6.5.3 Conclusion

The No Project Alternative would reduce the Revised Project impacts on aesthetics, important farmland, noise, and traffic to less than significant or less than significant with mitigation but could result in a significant and unavoidable impacts on air quality due to the need for increased gas-fired generation. The No Project Alternative is therefore superior to Alternative 1 and is the Environmentally Superior Alternative. The no project alternative fails to meet any of the basic project objectives, since it cannot guarantee a new reliable linkage between the SCE system and the RPU system and will not provide an additional source of bulk power to meet projected energy demand in Riverside.

Should the No Project be the Environmentally Superior Alternative, CEQA requires the identification of the next Environmentally Superior Alternative. For all the reasons discussed in Section 6.5.1, Alternative 1 with the Revised Project in the remaining segments would be the next Environmentally Superior Alternative.