

6 COMPARISON OF ALTERNATIVES

6.1 INTRODUCTION

This section summarizes and compares the environmental advantages and disadvantages of the proposed project with those of the alternatives to the proposed project evaluated in this Draft EIR. This comparison is based on the assessment of environmental impacts of the proposed project and each alternative, as identified in Chapters 4.1 through 4.15. Chapter 2: Project Description introduces and describes the proposed project, and Chapter 3: Alternatives introduces and describes the alternatives considered in this Draft EIR. This chapter includes the following sections:

- **Section 6.2** describes the methodology used for comparing alternatives.
- **Section 6.3** summarizes the environmental impacts of the proposed project and alternatives.
- **Section 6.4** defines the Environmentally Superior Alternative, based on the comparison of each alternative with the proposed project.
- **Section 6.5** presents a comparison of the No Project Alternative with the Environmental Superior Alternative determined in Section 6.4.

6.2 COMPARISON METHODOLOGY

This comparison of alternatives is designed to satisfy the requirements of CEQA Guidelines Section 15126.6(d), Evaluation of Alternatives, which states that:

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 proposed 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 proposed project. These requirements are set forth in CEQA Guidelines Section 15126.4(a)(4).

The environmental superiority of an alternative is determined based on a comparison of significant impacts that would result from the proposed project and the alternatives identified in the EIR. Issue areas that are generally given more weight in comparing alternatives are those with long-term impacts (e.g., visual impacts and permanent loss of habitat or land use conflicts).

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Impacts associated with construction (i.e., temporary or short-term) that can be mitigated to less-than-significant levels are generally given less weight.

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

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

- **Step 1: Identification of Alternatives.** An alternatives screening process (described in Chapter 3: Alternatives) was used to identify 18 alternatives to the proposed project. The screening process resulted in the definition of three alternatives for detailed EIR analysis. The No Project Alternative was also identified. No other feasible alternatives were identified that would lessen or alleviate significant environmental impacts and meet the basic project objectives.
- **Step 2: Determination of Environmental Impacts.** The environmental impacts associated with the construction, operation, and maintenance of the proposed project and alternatives were identified.
- **Step 3: Comparison of Proposed Project with Alternatives.** The environmental impacts of the proposed project were compared to those of each alternative and the No Project Alternative to determine the Environmentally Superior Alternative. The Environmentally Superior Alternative was then compared to the No Project Alternative.

Although this Draft 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, based on substantial evidence, determine that another alternative is environmentally superior or may approve a project that is not the Environmentally Superior Alternative identified in this analysis if it determines that the Environmentally Superior Alternative is infeasible.

6.3 EVALUATION OF PROJECT ALTERNATIVES

Three alternatives in addition to the No Project Alternative were identified for evaluation in this Draft EIR. Table 6.3-1 provides a summary comparison of environmental impact conclusions for the proposed project and each of the alternatives. The proposed project and each of the project alternatives would result in significant and unavoidable impacts on Aesthetic, Noise, and Recreational resources; however the intensity and duration of the impacts would differ across the alternatives.

6.1.1 Proposed Project

The proposed project would have a significant and unavoidable impact on Aesthetics, Noise, and Recreational resources, less than significant impacts with mitigation on the other ten resource areas, and less than significant impacts without mitigation on Agricultural and Forestry Resources. Significant and unavoidable impacts from noise during construction of the

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Table 6.3-1 Impacts of Alternatives Compared to the Proposed Project

Resource Area	Proposed Project 69/12-kV Substation 69-kV Loop-In 69-kV Overhead Power Line in SDG&E ROW	Alternative 1 230/12- kV Substation and 230-kV Loop-In	Alternative 2 69/12-kV Substation and Generation at Border and Larkspur Electric Generating Facilities	Alternative 3 69/12-kV Substation and Underground 69-kV Power Line within Public ROW	No Project Underground 12-kV Distribution Lines
Aesthetics	Significant and Unavoidable	+	-	-	-
		Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Less Than Significant
Agricultural and Forestry Resources	Less Than Significant	-	-	-	-
		Less Than Significant	Less Than Significant	Less Than Significant	No Impact
Air Quality	Less Than Significant with mitigation	+	+	+	-
		Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant
Biological Resources	Less Than Significant with mitigation	-	-	-	-
		Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant
Cultural Resources	Less Than Significant with mitigation	-	-	-	-
		Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	No Impact
Geology and Soils	Less Than Significant with mitigation	+	-	-	-
		Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant
Greenhouse Gas Emissions	Less Than Significant with mitigation	+	+	+	-
		Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant
Hazards and Hazardous Materials	Less Than Significant with mitigation	-	-	±	-
		Less Than Significant with mitigation	Less Than Significant with mitigation	Less than Significant with mitigation	Less Than Significant

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Resource Area	Proposed Project 69/12-kV Substation 69-kV Loop-In 69-kV Overhead Power Line in SDG&E ROW	Alternative 1 230/12- kV Substation and 230-kV Loop-In	Alternative 2 69/12-kV Substation and Generation at Border and Larkspur Electric Generating Facilities	Alternative 3 69/12-kV Substation and Underground 69-kV Power Line within Public ROW	No Project Underground 12-kV Distribution Lines
Hydrology and Water Quality		+	-	=	-
	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant
Land Use and Planning	No impact	No impact	No impact	No impact	No impact
Noise		=	-	=	-
	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Less Than Significant
Public Services		-	-	+	+
	Less Than Significant with mitigation	Less Than Significant	Less Than Significant	Less Than Significant with mitigation	Significant and Unavoidable
Recreation		+	-	-	-
	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	Significant and Unavoidable	No Impact
Transportation and Traffic		-	-	+	-
	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant
Utilities and Service Systems		-	-	=	+
	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Less Than Significant with mitigation	Significant and Unavoidable
<p>- Reduced environmental effect relative to proposed project</p> <p>+ Increased environmental effect relative to proposed project</p> <p>± Reduces some impacts relative to the proposed project while increasing other impacts</p> <p>= Equal environmental effect relative to the proposed project</p>					

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proposed project would be temporary (18 to 24 months). Significant and unavoidable impacts to aesthetics and recreation from the presence of the substation would be mitigated to a less-than-significant level within 5 years following construction of the project.

7.3.1 Alternative 1: 230/12-kV Substation and 230-kV Loop-In

Alternative 1 would have a significant and unavoidable impact on three resource areas: Aesthetics, Noise, and Recreation. Impacts on Aesthetic and Recreational resources would last through the operational life of the project, while permanent and temporary increases in Noise would be limited to construction of the project (24 to 30 months). Alternative 1 would result in less than significant impacts with mitigation on ten resource areas and adverse, but less than significant, impacts on Agricultural and Forestry Resources and Public Services.

Alternative 1 would reduce or eliminate the following environmental impacts of the proposed project:

- Eliminates temporary significant and unavoidable substantial increase in noise at schools, parks, and over 1,000 residents within 200 feet of the transmission corridor, even though the alternative would result in a substantial temporary and permanent increase in noise for receptors near the substation during construction; noise levels near the substation would be similar to the proposed project
- Eliminates helicopter noise along the power line and near staging yards
- Eliminates the aesthetic impact of an additional power line in the transmission corridor
- Reduces biological impacts by eliminating temporary and permanent habitat impacts and noise impacts on wildlife along the 5-mile-long power line
- Eliminates impacts on all eligible cultural resources in the proposed project area
- Reduces potential for hazards and hazardous materials impacts by avoiding construction of power pole foundations near fuel pipelines
- Eliminates impacts from trail detours and closures and noise and aesthetic impacts on recreational facilities within and near the transmission corridor north of Hunte Parkway
- Eliminates the need for temporary road or lane closures associated with power line stringing
- Reduces conflicts with utilities in the utility corridor

The 230/12-kV substation would create new or increase the following environmental impacts:

- The larger 230/12-kV substation would have a higher profile than the proposed substation and would be visible from a greater distance, resulting in a permanent significant and unavoidable visual impact
- The significant unavoidable visual impact from the 230/12-kV substation would result in permanent significant and unavoidable impacts on the recreational value of the adjacent trails
- The larger 230/12-kV substation would have a longer construction duration of 24 to 30 months compared to 18 to 24 months for the proposed project; the longer

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construction duration would result in greater air quality and greenhouse gas emissions than the proposed project

- The longer construction timeframe of 24 to 30 months would result in a significant and unavoidable impact from a permanent increase in noise (impacts exceeding 2 years are considered permanent)
- The larger 230/12-kV substation would require more grading with larger retaining walls and steeper slopes than the proposed project substation resulting in greater potential impacts on geology and soils from increased loss of topsoil
- The increased grading and increased impervious surfaces at the substation would result in greater risk of sedimentation and increase in runoff volume

7.3.2 Alternative 2: 69/12-kV Substation with Generation at Border and Larkspur Electric Generating Facilities

Alternative 2 would have significant and unavoidable impacts on Aesthetics, Noise, and Recreational resources, similar to the proposed project. These significant and unavoidable impacts would result from construction of the 69/12-kV substation in the same location as the proposed project. All significant and unavoidable impacts from Alternative 2 would be limited to the period during and up to 5 years following construction of the project. Alternative 2 would result in less than significant impacts with mitigation on nine resource areas and adverse, but less than significant, impacts on Agricultural and Forestry Resources and Public Services. Alternative 2 would eliminate all environmental impacts associated with construction, operation, and maintenance of the proposed 5-mile-long 69-kV power line. Alternative 2 would reduce or eliminate all of the impacts that would be reduced or eliminated by Alternative 1 (Refer to Section 6.3.2, above).

Alternative 2 would also reduce the following impacts:

- Reduces air quality emissions during project construction, resulting in decreased potential to exceed air quality thresholds

Alternative 2 would create new or increase the following environmental impact:

- The additional generation of power at Border and LEF would result in increased air quality and greenhouse gas emissions over the operating life of the project; however, these emissions would be well below all air quality and GHG emissions thresholds for the basin, and the nominal additional power generation at the facilities would be within the permitted operating limits and less than significant without mitigation

7.3.3 Alternative 3: 69/12-kV Substation and Underground Power Line within Public ROW

Alternative 3 would have significant and unavoidable impacts on Aesthetics, Noise, and Recreational resources. These significant and unavoidable impacts would result from construction of the 69/12-kV substation in the same location as the proposed project. Significant and unavoidable noise impacts would also result from underground construction of the power

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line in proximity to sensitive receptors. All significant and unavoidable impacts from Alternative 3 would be limited to the period during and up to 5 years following construction of the project; Noise impacts would last approximately 18 to 24 months and Aesthetic, and Recreation impacts would be reduced to a less than significant level within a period of 5 years as vegetation matures and provides visual screening of the facility. Alternative 3 would result in less than significant impacts with mitigation on twelve resource areas and adverse, but less than significant impacts on Agriculture and Forestry Resources. The underground power line would reduce or eliminate the following environmental impacts of concern for the proposed project:

- Eliminates the aesthetic impact of a new power line in the transmission corridor
- Reduces noise impacts on sensitive receptors by eliminating the use of helicopters for power line stringing
- Reduces impacts on cultural resources by avoiding the CRHR-eligible resources within the transmission corridor; Alternative 3 construction is less likely to encounter resources than the proposed project because the work area was previously disturbed by road construction
- Reduces impacts on native habitats by avoiding the temporary and permanent habitat impacts in the transmission corridor
- Reduces potential for hazards and hazardous materials impacts by avoiding construction of power pole foundations near fuel pipelines

The underground power line would create new or increase the following impacts:

- Noise impacts on sensitive receptors including residents and schools near the underground alignment during underground construction. The noise impacts would not be more intense, but would impact different receptors than the proposed project. Construction of the underground power line would last longer than the proposed project power line due to the increased duration and increased activity level required to construct an underground power line relative to an overhead power line
- Indirect noise impacts on wildlife in Preserve areas near the underground alignment. The underground alignment along Hunte Parkway is adjacent to the City's MSCP Preserve and critical habitat for Coastal California gnatcatcher
- Impacts on transportation and traffic as a result of traffic lane closures, bicycle lane closures, and potential temporary bus stop closures or relocation to avoid conflicts with the active construction area and open trench within the roadway

7.3.4 Conclusion

Table 6.3-2 provides a comparative ranking of the proposed project and each alternative across environmental resource areas. The table provides a comparison for environmental resource areas with significant and unavoidable impacts or less than significant impacts with mitigation. A preferred alternative is identified for each resource area. Alternatives with equivalent impacts in a resource category are given the same numeric ranking.

Alternative 2: 69/12-kV Substation and Generation at Border and Larkspur Electric Facilities would be environmentally superior because it would avoid all impacts associated with

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construction, operation and maintenance of a 5-mile-long power line while resulting in only minimal increases in adverse air quality and GHG emissions from increasing electric generation at Border and LEF by 220 to 350 MWh/yr (equivalent to five to seven hours of cumulative run time at the electric facilities annually because each peaker plant produces power at 49 MW/h).

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires selection of an Environmentally Superior Alternative. Based on the analysis presented in Sections 4.1 through 4.15 of this Draft EIR, the No Project Alternative would reduce or avoid most of the impacts of the proposed project; however the No Project Alternative would result in long-term significant and unavoidable impacts on Utilities and Service Systems and indirect impacts on Public Services due to increased brown-outs and blackouts.

The comparison of project alternatives, including consideration of differences in intensity and duration of significant impacts, showed that Alternative 2: 69/12-kV Substation with Generation at Border and Larkspur Electric Generating Facilities would be the Environmentally Superior Alternative because it would avoid all impacts associated with construction of the proposed power line. Unlike the No Project alternative, the Environmentally Superior Alternative would have no long-term significant and unavoidable impacts.

6.5 NO PROJECT ALTERNATIVE VS. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

6.5.1 Summary of the No Project Alternative and Impacts

The No Project Alternative is described in Section 3.5.1. Under the No Project Alternative, the proposed project would not be implemented. SDG&E would need to serve the electrical needs of the area from existing substations because energy demand will soon exceed available capacity. In order to meet energy needs in the southeast Chula Vista area, SDG&E would build out the existing Proctor Valley Substation to its maximum of four transformer banks (current configuration has two transformer banks) and construct distribution circuits to the Otay Ranch Area. These circuits would be approximately 6 to 7 miles long. This option would be a temporary solution for approximately 2 years. Over time, the No Project Alternative would result in significant and unavoidable impacts to the provision of Utilities and indirect impacts to Public Services and safety associated with the increased risk of brown-outs and black-outs in the area. The construction of the underground distribution lines would result in less than significant impacts on nine resource areas and no impact on five resource areas.

6.5.2 Summary of the Environmentally Superior Project Alternative and Impacts

Alternative 2 is the Environmentally Superior Alternative. Alternative 2 would result in similar significant Aesthetic and Recreational impacts because Alternative 2 would construct a substation in the same location and manner as the proposed project. Substation construction

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Table 6.5-1 Comparison of the Proposed Project to Project Alternative Impacts

Resource Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3	No Project
Aesthetics	<p>Ranking = 4</p> <ul style="list-style-type: none"> Increased visual contrast from substation and power line resulting in significant and unavoidable impacts for up to 5 years while vegetation matures to screen the substation Significant impacts to scenic resources at Hunte Parkway from views of the substation 	<p>Ranking = 5</p> <ul style="list-style-type: none"> Substantial increase in visual contrast from larger and higher-profile substation and taller cable pole resulting in significant and unavoidable impacts Greater visual impacts for substation than proposed project Avoids visual impacts of power line 	<p>Ranking = 2</p> <ul style="list-style-type: none"> Increased visual contrast from substation resulting in significant and unavoidable impacts for up to 5 years while vegetation matures to screen the substation Significant impacts to scenic resources at Hunte Parkway from views of the substation Avoids permanent visual impact from new power line 	<p>Ranking = 3</p> <ul style="list-style-type: none"> Increased visual contrast from substation resulting in significant and unavoidable impacts for up to 5 years while vegetation matures to screen the substation Significant impacts to scenic resources at Hunte Parkway from views of the substation Avoids permanent visual impact from new power line with an underground line Temporary aesthetic impacts from underground construction 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Temporary visual impact from construction of underground distribution No permanent visual impact of underground distribution line No visual impact from expansion of existing approved substations
Air Quality	<p>Ranking = 3</p> <ul style="list-style-type: none"> Less than significant NO_x, PM₁₀ and PM_{2.5} emissions from earthwork during construction Less than significant emissions from power line construction 	<p>Ranking = 4</p> <ul style="list-style-type: none"> Temporary increase in emissions associated with construction of a larger substation NO_x emissions from construction of the substation less than significant with mitigation 	<p>Ranking = 2</p> <ul style="list-style-type: none"> Avoids air quality emissions from construction of a new power line On-going increased operational emissions from power generation 	<p>Ranking = 5</p> <ul style="list-style-type: none"> Temporary increase in emissions from construction of an underground power line relative to an overhead power line 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Avoids emissions from construction of a substation Emissions from underground distribution construction less than proposed project

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Resource Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3	No Project
Biological Resources	<p>Ranking = 5</p> <ul style="list-style-type: none"> • Impacts on habitat from substation grading and power line construction • Indirect noise impacts on biological resources near the substation and power line • Potential impacts on jurisdictional drainages within transmission corridor 	<p>Ranking = 3</p> <ul style="list-style-type: none"> • Impacts less native habitat than the proposed project or Alternative 3 • Greater construction duration resulting in increased indirect noise impacts • Avoids natural drainages 	<p>Ranking = 2</p> <ul style="list-style-type: none"> • Impacts less native habitat than the proposed project or Alternative 3 • Shorter construction duration than Alternative 1 • Avoids natural drainages 	<p>Ranking = 4</p> <ul style="list-style-type: none"> • Impacts less native habitat than the proposed project • Indirect noise impacts on Preserve areas near the alignment of the underground power line and the substation • Avoids natural drainages 	<p>Ranking = 1</p> <ul style="list-style-type: none"> • Avoids impacts on habitat and special-status species • Minimal indirect noise impacts on biological resources from underground distribution construction
Cultural Resources	<p>Ranking = 4</p> <ul style="list-style-type: none"> • Less than significant impacts with mitigation on eligible resources from power line construction 	<p>Ranking = 2</p> <ul style="list-style-type: none"> • Avoids all eligible resources recorded during project surveys 	<p>Ranking = 2</p> <ul style="list-style-type: none"> • Avoids all eligible resources recorded during project surveys 	<p>Ranking = 3</p> <ul style="list-style-type: none"> • Could impact eligible resources previously impacted by road • Avoids eligible resources within transmission corridor 	<p>Ranking = 1</p> <ul style="list-style-type: none"> • Reduces potential impacts on cultural resources by limiting construction to disturbed areas and roadways
Geology and Soils	<p>Ranking = 4</p> <ul style="list-style-type: none"> • Impacts from substation grading • Geology and soil impacts from construction of a new power line 	<p>Ranking = 5</p> <ul style="list-style-type: none"> • Greater geology impacts due to increased cut and fill at substation, steeper slopes, and increased retaining wall height 	<p>Ranking = 2</p> <ul style="list-style-type: none"> • Impacts from substation grading • Avoids impacts from power line construction 	<p>Ranking = 3</p> <ul style="list-style-type: none"> • Impacts from substation grading • Impact from trenching of power line in roadways slightly less than aboveground power line because the power line would be constructed in the previously disturbed roadway 	<p>Ranking = 1</p> <ul style="list-style-type: none"> • Reduces impacts on geology and soils by limiting construction to disturbed areas and roads

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Resource Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3	No Project
Greenhouse Gas Emissions	<p>Ranking = 2</p> <ul style="list-style-type: none"> Lowest amortized greenhouse gas emissions over the estimated 30-year life of the facility 	<p>Ranking = 4</p> <ul style="list-style-type: none"> Increased emissions from construction of a larger substation 	<p>Ranking = 5</p> <ul style="list-style-type: none"> Eliminates emissions from power line construction Long-term increase in greenhouse gas emissions from increased electric generation 	<p>Ranking = 3</p> <ul style="list-style-type: none"> Increased emissions from equipment required for underground power line construction 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Avoids emissions from construction of a substation and power line Emissions from construction of underground distribution lines
Hazards and Hazardous Materials	<p>Ranking = 5</p> <ul style="list-style-type: none"> Involves subsurface construction near buried fuel pipelines Helicopter use for line stringing Work areas and staging within 0.25 miles of 6 schools 	<p>Ranking = 3</p> <ul style="list-style-type: none"> Avoids potential hazard from utility pipelines in the transmission corridor Construction and staging within 0.25 miles of 1 school Avoids use of helicopters Longest construction duration and associated use of hazardous materials 	<p>Ranking = 2</p> <ul style="list-style-type: none"> Avoids potential hazard from utility pipelines in the transmission corridor Construction and staging within 0.25 miles of 1 school Avoids use of helicopters 	<p>Ranking = 4</p> <ul style="list-style-type: none"> Avoids potential hazard from utility pipelines in the transmission corridor Construction and staging within 0.25 miles of 7 schools Avoids use of helicopters 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Avoids potential hazard from utility pipelines in the project area No permanent sources of hazardous materials

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Resource Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3	No Project
Hydrology and Water Quality	<p>Ranking = 4</p> <ul style="list-style-type: none"> Slope recontouring at substation and potential for sedimentation to Salt Creek Crossing of jurisdictional drainages required to access work areas 	<p>Ranking = 5</p> <ul style="list-style-type: none"> Steep slopes with large retaining walls required to construct larger substation Greatest potential for erosion and water quality impacts due to steep slopes at the substation Larger impervious area at substation 	<p>Ranking = 2</p> <ul style="list-style-type: none"> Slope recontouring at substation and potential for sedimentation to Salt Creek Avoids earth disturbance within transmission corridor Avoids direct impacts on jurisdictional drainages 	<p>Ranking = 3</p> <ul style="list-style-type: none"> Slope recontouring at substation and potential for sedimentation to Salt Creek Earth disturbance and potential water quality impacts during trenching Avoids direct impacts on jurisdictional drainages 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Reduces impacts on hydrology and water quality by limiting construction to disturbed areas and roads
Noise	<p>Ranking = 5</p> <ul style="list-style-type: none"> Significant noise impacts from substation construction Significant noise impacts from helicopter use on power line Helicopters and other equipment within 200 feet of sensitive receptors would cause a substantial, temporary and periodic increase in noise along power line route 	<p>Ranking = 4</p> <ul style="list-style-type: none"> Construction equipment use at substation would result in temporary substantial increase in noise at receptors north of the substation Longest construction duration (> 2 years) and associated noise impacts result in significant impact from permanent increase in noise Avoids noise from power line construction and helicopters; reduces number of sensitive receptors impacted 	<p>Ranking = 2</p> <ul style="list-style-type: none"> Construction equipment use at substation would result in temporary substantial increase in noise at receptors north of the substation Avoids noise from power line construction and helicopters 	<p>Ranking = 3</p> <ul style="list-style-type: none"> Construction equipment use at substation would result in temporary substantial increase in noise at receptors north of the substation Equipment within 200 feet of sensitive receptors would periodically cause a substantial increase in noise along the along underground alignment Avoids helicopter noise 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Reduces impacts on noise by avoiding construction of the substation and overhead power line

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Resource Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3	No Project
Public Services	<p>Ranking = 2</p> <ul style="list-style-type: none"> Road closure and potential impacts on emergency response during power line stringing 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Less than significant impacts on public services 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Less than significant impacts on public services 	<p>Ranking = 3</p> <ul style="list-style-type: none"> Lane closures and potential impacts on emergency response during underground line construction 	<p>Ranking = 4</p> <ul style="list-style-type: none"> Results in significant and unavoidable indirect impacts on public services by reducing electrical reliability
Recreation	<p>Ranking = 3</p> <ul style="list-style-type: none"> Temporary trail closures or detours during construction Temporary noise and visual impact on adjacent recreational facilities reduces recreation value of passive recreation facilities 	<p>Ranking = 5</p> <ul style="list-style-type: none"> Temporary trail closure adjacent to substation Temporary noise impact on trails near substation Permanent visual impact on nearby trails reduces recreational value of the trails 	<p>Ranking = 2</p> <ul style="list-style-type: none"> Temporary trail closure adjacent to substation Temporary noise and visual impact on trails near substation Avoids trail closures and detours within the transmission corridor 	<p>Ranking = 4</p> <ul style="list-style-type: none"> Temporary trail closure adjacent to substation Temporary bicycle lane closures during underground line construction Temporary noise impact on adjacent recreational facilities 	<p>Ranking = 1</p> <ul style="list-style-type: none"> Avoids impacts on trails and recreational facilities in the project area Potential short-term impacts on bicycle lanes during underground distribution construction

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Resource Area	Proposed Project	Alternative 1	Alternative 2	Alternative 3	No Project
Transportation and Traffic	Ranking = 3 <ul style="list-style-type: none"> • Impacts on Hunte Parkway curb and gutter • Temporary lane closure during substation deliveries and distribution trenching • Potential closure of SR-125 during power line stringing • Use of helicopters within 1,500 feet of homes 	Ranking = 2 <ul style="list-style-type: none"> • Impacts on Hunte Parkway curb and gutter • Greater construction duration resulting in longer temporary lane closure during substation deliveries and distribution trenching • Avoids impacts on transportation and traffic associated with power line construction and stringing 	Ranking = 1 <ul style="list-style-type: none"> • Impacts on Hunte Parkway curb and gutter • Temporary lane closure during substation deliveries and distribution trenching • Avoids impacts on transportation and traffic associated with power line construction and stringing 	Ranking = 4 <ul style="list-style-type: none"> • Impacts on Hunte Parkway curb and gutter • Temporary lane closure during substation deliveries and distribution trenching • Lane closures and traffic controls required for over a year during underground power line construction 	Ranking = 4 <ul style="list-style-type: none"> • Impacts on traffic during construction of 6 to 7 miles of underground distribution lines
Utilities and Service Systems	Ranking = 3 <ul style="list-style-type: none"> • Potential conflicts with utilities in transmission corridor • Impacts on City of Chula Vista sewer access road 	Ranking = 1 <ul style="list-style-type: none"> • No potential conflicts with buried utilities in the transmission corridor 	Ranking = 1 <ul style="list-style-type: none"> • No potential conflicts with buried utilities in the transmission corridor 	Ranking = 2 <ul style="list-style-type: none"> • Unlikely to have conflicts with buried utilities in the public roadway, but potholing would be required to verify potential conflicts 	Ranking = 5 <ul style="list-style-type: none"> • Long-term significant and unavoidable impacts on electric reliability

Notes:

Ranking 1 = Least effect and Ranking 5 = Greatest effect

Alternatives that would result in the same relative impact for a resource area are given the same ranking

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would degrade the scenic quality and thereby reduce recreational value of nearby trails and open space recreational areas, resulting in temporary (up to 5 years) significant impacts. These impacts would be mitigated over time through landscaping and the associated visual screening of the substation. Open views of the substation would cause significant impacts to the recreational value of nearby trails and open spaces; visually screening the substation would reduce that impact. Alternative 2 would avoid significant and unavoidable impacts from the substantial temporary and periodic increase in ambient noise levels along the power line corridor. Noise from Alternative 2 construction would affect residents near the substation; however, Alternative 2 would avoid the use of helicopters and associated noise impacts on residents and schools located near the power line alignment. Alternative 2 would also reduce impacts on biological and cultural resources by limiting the area of project disturbance relative to the proposed project. Alternative 2 also avoids construction in proximity to a gas pipeline and avoids all hazards associated with construction and operation of a power line adjacent to a buried gas pipeline. Table 6.3-3 demonstrates that Alternative 2 is the preferred alternative across the majority of resource categories. Alternative 2 reduces impacts of the proposed project without creating any new or more intense significant impacts.

6.5.3 Conclusion

The Environmentally Superior Alternative (Alternative 2) would result in temporary significant and unavoidable impacts related to noise, aesthetics, and recreation; it would have no long-term significant and unavoidable impacts. The No Project Alternative would have the least intensive environmental impacts; however, it would prevent SDG&E from providing reliable electric service to customers within the service area for more than 2 to 3 years (after 2017). The No Project Alternative would create the potential for increased incidence of brown-outs and black-outs after 2017, which would result in long-term significant and unavoidable impacts on utilities and service systems and indirect impacts to the provision of public services.

6 COMPARISON OF ALTERNATIVES

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