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5.0 DETAILED DISCUSSION OF SIGNIFICANT IMPACTS

In accordance with the PEA Checklist issued by the CPUC on October 7, 2008, this section:

- Identifies the potentially significant impacts that would result from the construction, operation, or maintenance of the Proposed Project;
- Discusses the alternatives that were evaluated in determining the Proposed Project and the justification for the selection of the preferred alternative; and
- Discusses the Proposed Project's potential to induce growth in the area.

5.1 APPLICANT PROPOSED MEASURES TO MINIMIZE SIGNIFICANT EFFECTS

Based on the findings in Section 4.0, Environmental Impact Assessment, the Proposed Project would result in no significant, unavoidable impacts during construction.

Other potential significant impacts were identified that could be reduced to a level less than significant with the incorporation of APMs for the following resource areas:

- Cultural Resources,
- Public Services,
- Transportation and Traffic, and
- Cumulative Impacts.

Additionally, while no significant impacts to biological resources are anticipated, one APM along with ordinary construction/operating restrictions including implementation of the *SDG&E Subregional NCCP* would ensure that potential impacts would remain less than significant.

SDG&E has identified 17 APMs that it plans to implement during construction and/or operation of the Proposed Project to reduce or avoid impacts. Chapter 3.0, Proposed Project Description, provides a list of all of the APMs that have been proposed as part of the Proposed Project, as well as the justification for each (refer to Tables 3-15 and 3-16). Additionally, all of the proposed APMs are detailed in Section 4, Environmental Impact Assessment.

5.2 DESCRIPTION OF PROJECT ALTERNATIVES TO MINIMIZE SIGNIFICANT EFFECTS

5.2.1 Introduction

The CPUC PEA Checklist asks public utilities to provide a summary of alternatives that would meet most of the objectives of the Proposed Project and an explanation as to why they were not

chosen as the Proposed Project. The CPUC PEA Checklist further requires that the discussion of alternatives include alternatives capable of substantially reducing or eliminating any significant environmental effects, even if the alternative(s) substantially impede the attainment of the project objectives, and are more costly.

5.2.2 Methodology

The Proposed Project involves the construction of new transmission line facilities and the replacement or relocation of existing power line and transmission line facilities as-needed in order to accommodate the new 230 kV transmission line. All proposed overhead facilities would be located within existing SDG&E ROW and utility corridors and proposed underground facilities would be located within existing franchise position (city street). The Proposed Project has been designed to avoid and minimize potential adverse environmental effects (refer to Sections 3.0 and 4.1 through 4.15). This section of the PEA considers whether any of the alternatives meet the Proposed Project Objectives and whether any of the alternatives could reduce potential adverse impacts.

In accordance with the CPUC PEA Checklist, this section considers the following potential alternatives:

- No Project Alternative;
- Northern Alignment Alternatives (Alternative Alignments 1 through 4);
- Southern Alignment Alternatives (Alternative Alignments 5 and 6); and
- Underground Project Alternative (Alternative Alignment 7).

In addition, this section describes the following cable structure alternate options for the east and west overhead termini of Proposed Project Segment B (underground transmission line through Carmel Valley Road):

- Eastern cable pole options.
    - Proposed Project Option: Double-circuit monopole structure north of Carmel Valley Road, within Black Mountain Ranch Community Park (Proposed Structure No. P41).
    - Alternate Option: 3-pole structure south of Carmel Valley Road (Structure No. P41[A]).
- Western cable pole options.
    - Proposed Project Option: Double-circuit monopole structure south of Carmel Valley Road (Structure No. P42).
    - Alternate Option: Double-circuit monopole structure north of Carmel Valley Road within the Evergreen Nursery (Structure No. P42[A]).

5.2.3 Proposed Project Objectives

As outlined in Section 2.0, Proposed Project Purpose and Need, the objectives for the Proposed Project are:

1. Meet the Functional Specifications identified by CAISO in its 2012-2013 Transmission Plan for a new 230 kV transmission line from the existing Sycamore Canyon Substation to the existing Peñasquitos Substation. This accomplishes the following sub-objectives for the SDG&E bulk power system:

    a. Ensure that the SDG&E bulk electric system continues to meet NERC, WECC, and CAISO reliability criteria;

    b. Promote compliance with State of California policy goals with regards to renewable energy integration and OTC retirement;

    c. Reliably and economically meet forecasted load growth for the San Diego metropolitan area; and

    d. Deliver imported energy more efficiently to the San Diego load center.

2. Locate the Proposed Project's facilities within existing transmission and power line corridors, SDG&E ROW, utility owned property, and City of San Diego franchise ROW.

5.2.4 Alternatives Considered but Rejected

SDG&E evaluated several alternatives based upon feasibility and ability to fulfill the Proposed Project objectives, especially the fundamental objective of meeting CAISO's Functional Specifications (Objective No. 1). The alternatives discussed below all meet Objective No. 1, with the exception of the No Project Alternative. However, some alternatives were judged not to be feasible, did not meet Objective No. 2, or were deemed to have potentially greater adverse effects (including potentially significant impacts under CEQA) in relation to the Proposed Project. Each alternative that was considered but rejected is discussed in detail in the following sections.

5.2.4.1 No Project Alternative

CEQA requires consideration of a "No Project Alternative". The purpose of the No Project Alternative is to enable decision-makers to compare the impacts of approving the Proposed Project against the impacts of not approving the Proposed Project. The No Project Alternative assumes that a new 230 kV transmission line would not be constructed to connect the existing Sycamore Canyon and Peñasquitos Substations.

Attainment of Project Objectives by the No Project Alternative

SDG&E would not be able to meet the Proposed Project's fundamental objective (Objective No. 1) if the No Project Alternative was selected.

Avoidance or Reduction of Potentially Significant Impacts

The Proposed Project would result in less than significant impacts (following implementation of APMs) to numerous resources areas, as outlined in Sections 4.1 through 4.15. The No Project Alternative would avoid all of the potentially significant impacts associated with the Proposed Project. However, it is important to note that the No Project alternative would result in some increased adverse effects relating to operation and maintenance. For instance, operation of the No Project Alternative (i.e. continuation of existing conditions) would result in increased fire hazards when compared to the Proposed Project because the Proposed Project would result in new, steel structures which represent an increase in fire safety and a decrease in fire hazards. Operation of the No Project Alternative would also result in increased frequency in maintenance activities, especially along Segments A and D because the existing, predominantly wood structures would require a greater level of operation maintenance activities when compared to the new, steel structures that would be constructed as part of the Proposed Project.

Additionally, while the No Project Alternative would eliminate all adverse effects that would result from construction and operation of the Proposed Project, it would not address the need for a new 230 kV connection between the Sycamore Canyon and Peñasquitos Substations. Therefore, it is reasonable to assume that in the absence of the Proposed Project, another project would be designed and implemented to meet the CAISO Functional Specification (Objective No. 1). This alternative solution can reasonably be assumed to result in some level of adverse effect to the human and/or natural environment. Thus, while a comparison of the Proposed Project to a No Project Alternative appears to avoid all adverse effects associated with the Proposed Project, it is more likely that the fundamental need for a new 230 kV connection between the Sycamore Canyon and Peñasquitos Substations would be fulfilled in some manner and some level of adverse effect would result.

Conclusion

The No Project Alternative would not meet the fundamental objective of the Proposed Project (Objective No. 1) because it would not include construction and operation of a new 230 kV transmission line between the existing Sycamore Canyon and Peñasquitos Substations. Therefore, SDG&E rejected the No Project Alternative.

5.2.4.2 Northern Alignment Alternatives

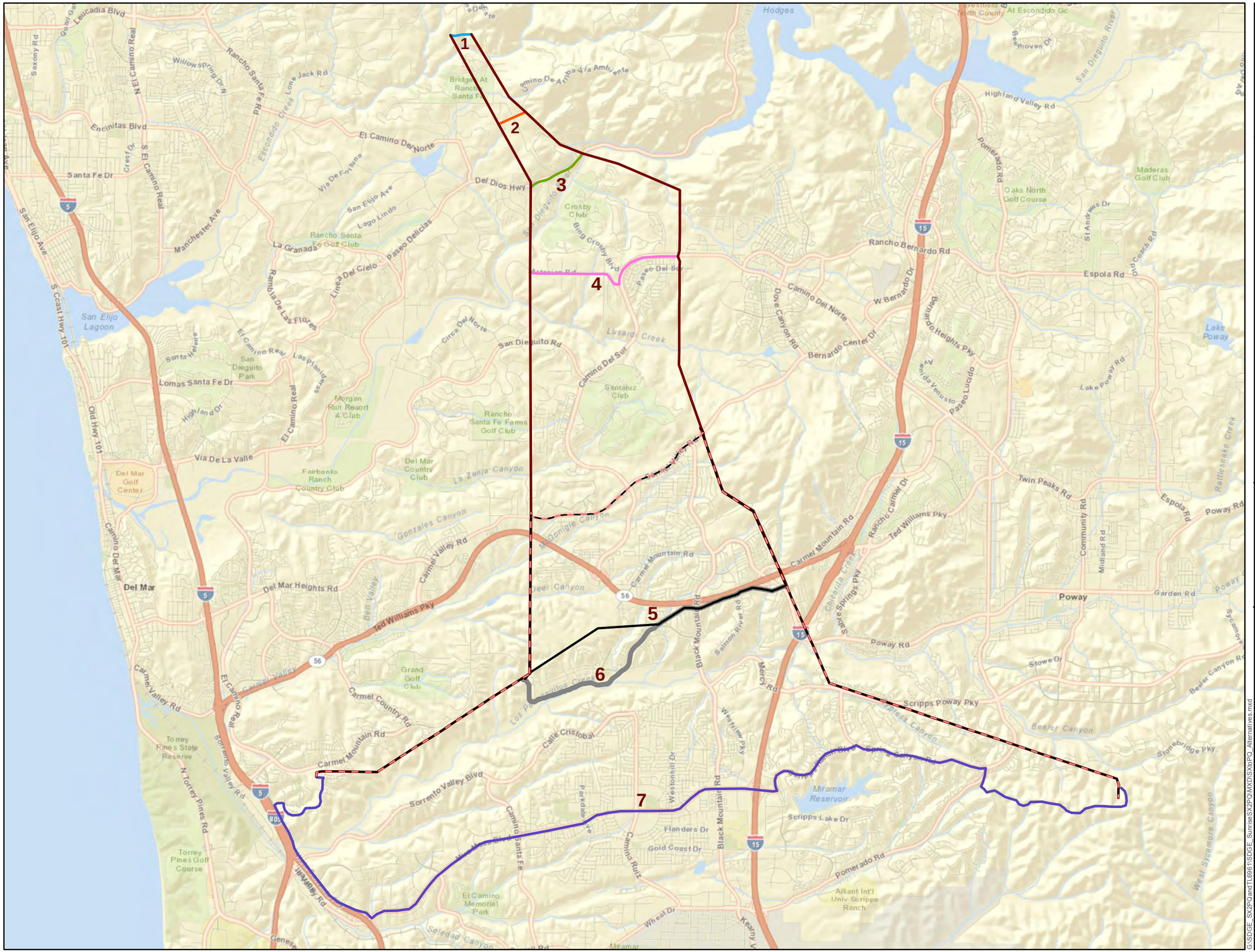
The Northern Alignment Alternatives (Alternative Nos. 1 through 4) would include construction and operation of a new 230 kV transmission line between the existing Sycamore Canyon and Peñasquitos Substations, and would utilize much of the alignment included as part of the Proposed Project (see Figure 5-1, Alternatives Map). Specifically, the Northern Alignment Alternatives would share the following elements with the Proposed Project:

- 8.3 miles of new 230 kV structures (approximately 41 structures) within existing ROW between the Sycamore Canyon Substation and Carmel Valley Road (Proposed Project Segment A);

Sycamore to Peñasquitos 230 kV Transmission Line Project

Alternatives Map

Figure 5-1



Route Alternatives

- Alternative 1
- Alternative 2
- Alternative 3
- Alternative 4
- Alternative 5
- Alternative 6
- Alternative 7
- Proposed Route
- Route in Existing Transmission Corridor

TRC

SDGE
A Sempra Energy utility

Date: 3/25/2014

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Miles

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Sources: SDG&E,2013;TRC, 2013; Esri,DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX,Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; National Geographic DeLorme, NAVTEQ,UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, iPC

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BACK OF FIGURE 5-1

- 2.1 miles of re-conductoring existing 230 kV transmission lines and installation of new conductor all on existing structures between Carmel Valley Road and the Peñasquitos Substation (Proposed Project Segment C);
- 3.3 miles of 230 kV conductoring (new conductor on existing structures) between the Peñasquitos Junction and the Peñasquitos Substation (Proposed Project Segment D); and
- 3.3 miles of 69 kV pole replacement (replace approximately 20 existing wood structures with approximately 17 new tubular steel poles between Peñasquitos Junction and existing Peñasquitos Substation) within existing ROW (Proposed Project Segment D).

The Northern Alignment Alternatives would extend further north than the Proposed Project alignment, and would essentially replace the Proposed Project Segment B (undergrounding in Carmel Valley Road) with alternative alignments (overhead or underground) located north of Carmel Valley Road (refer to Figure 5-1). The Northern Alignment Alternatives are further described in Table 5-1, Northern Alignment Alternatives.

Table 5-1: Northern Alignment Alternatives

Alignment No.	Total Route Length[1]	General Description
1	27.66 miles	Alternative No. 1 would include utilization of existing SDG&E ROW from the Sycamore Canyon Substation north for approximately 15.3 miles. Alternative No. 1 would then travel approximately 0.3 mile west within new ROW until connecting with existing SDG&E ROW. This segment of Alternative No. 1 would include new construction of single-circuit 230 kV in either an overhead or underground position. The Alternative No. 1 alignment would then continue south until reaching the Peñasquitos Junction (approximately 8.9 miles) and would utilize existing structures. Alternative No. 1 would utilize Segment D as included within the Proposed Project.
2	25.09 miles	Alternative Alignment No. 2 would include utilization of existing SDG&E ROW from the existing Sycamore Canyon Substation north for approximately 14 miles. Alternative No. 2 would then travel approximately 0.39 mile west within new ROW until connecting with existing SDG&E ROW. This segment of Alternative B would include new construction of single-circuit 230 kV transmission line in an underground or overhead position. The Alternative No. 2 alignment would then continue south within existing SDG&E ROW until reaching the Peñasquitos Junction (approximately 7.5 miles) and would utilize existing structures. Alternative No. 2 would utilize Segment D as included within the Proposed Project.

Table 5-1 (cont.): Northern Alignment Alternatives

Alignment No.	Total Route Length[1]	General Description
3	23.62 miles	Alternative Alignment No. 3 would include utilization of existing ROW from the existing Sycamore Canyon Substation north for approximately 13 miles. Alternative No. 3 would then travel approximately 0.86 mile west within franchise position in existing Del Dios Hwy until connecting with existing SDG&E ROW. This segment of Alternative 3 would include new construction of single-circuit 230 kV transmission line in an underground position. The Alternative No. 3 alignment would then continue south within existing SDG&E ROW until reaching the Peñasquitos Junction (approximately 6.5 miles) and would utilize existing structures. Alternative No. 3 would utilize Segment D as included within the Proposed Project.
4	21.60 miles	Alternative Alignment No. 4 would include utilization of existing ROW from the existing Sycamore Canyon Substation north for approximately 10.7 miles. Alternative No. 4 would then travel approximately 2.26 miles west within mostly franchise position in existing roadways (Artesian and Camino del Sur) until connecting with existing SDG&E ROW. This segment of Alternative No. 4 would include new construction of single-circuit 230 kV in an underground position. The Alternative No. 4 alignment would then continue south within existing SDG&E ROW until reaching the Peñasquitos Junction (approximately 5.4 miles). Alternative No. 4 would utilize Segment D as included within the Proposed Project.

Notes:
[1] Total route lengths include segments shared with the Proposed Project (Segments A, C, and D).

Source: *SDG&E*

Attainment of Project Objectives by the Northern Alignment Alternatives

Objective No. 1

All four of the Northern Alignment Alternatives would meet Objective No. 1. SDG&E could design, construct, and operate all four of the Northern Alignment Alternatives to meet the Functional Specifications identified by CAISO in its 2012-2013 Transmission Plan and as such, the Northern Alignment Alternatives would meet Objective No. 1 in a similar manner as the Proposed Project.

Objective No. 2

Alternative Nos. 1 and 2 would require new ROW, and would therefore not meet Objective No. 2 to the extent that the Proposed Project would. Alternative Nos. 3 and 4 would utilize all existing ROW, utility corridors, or existing franchise position and as such would meet Objective No. 2 to a similar extent as the Proposed Project.

Avoidance or Reduction of Impacts

All four of the Northern Alignment Alternatives would include Proposed Project Segments A, C, and D. Therefore, the impacts associated with these segments would be similar for the Northern Alignment Alternatives and the Proposed Project. Alternative Nos. 3 and 4 would include construction and operation of new underground 230 kV transmission line within franchise position (city/county streets). Thus, the potential impacts relating to transportation and traffic, (refer to Section 4.14) would be similar for Alternative Nos. 3 and 4. Alternative Nos. 1 and 2 would not include construction of underground transmission line within public roadways, and would therefore avoid the impacts associated with construction and operation of underground utilities within public roadways that would result from the Proposed Project.

While the Northern Alignment Alternatives would result in similar effects as the Proposed Project along Segments A, C, and D, all four of the Northern Alignment Alternatives are longer than the Proposed Project which would result in increased impacts, or potential for impacts, as discussed further below.

Aesthetics

Alternative Nos. 1 and 2 would be anticipated to have slightly greater impacts to aesthetic resources as the line would include the addition of new ROW, 0.30 and 0.39 mile respectively, that would affect the permanent visual environment in that area. Construction activities would be visible along all segments; however, these effects would be temporary and would be more similar to the construction-related aesthetic impacts anticipated from the Proposed Project and other alternatives. Alternative Nos. 3 and 4 would include construction and operation of new underground 230 kV transmission line within franchise position (city/county streets). Thus, the potential impacts relating to aesthetics (refer to Section 4.1) would be similar for Alternative Nos. 3 and 4. Finally, due to the increased length of Alternatives 1 through 4, aesthetics impacts would be anticipated to be greater than those of the Proposed Project due to the increase in affected viewers.

Biological Resources

All four Northern Alignment Alternatives would require additional temporary and permanent impact areas, including temporary structure work areas, permanent structure maintenance pads, and temporary stringing sites. These increased impact areas required for the Northern Alignment Alternatives would result in greater impacts to biological resources, in the following ways:

1. Impacts to sensitive vegetation communities would increase proportionately with the length of proposed route. The longer the alignment, the greater the number of structures and stringing sites, which could result in greater impacts to sensitive vegetation communities.
2. The potential for impacts to sensitive plant and wildlife species increases with the increased length of each alternative alignment. The greater the footprint of a given alternative alignment, the greater potential for adverse effects to sensitive plant and wildlife species.

Cultural Resources

As stated above, all four Northern Alignment Alternatives would result in larger impact areas when compared to the Proposed Project. Therefore, the potential for impacts to cultural, historical, and paleontological resources would increase in general proportion to the increase in impact area.

Construction Impacts (Air Quality, Noise, Public Services, and Recreation)

As the Northern Alignment Alternatives are longer than the Proposed Project alignment, construction-related impacts to the human environment would increase. Specifically, the following impacts would be anticipated to increase during construction of any of the Northern Alignment Alternatives:

- Construction noise impacts would increase (in extent) proportional to the increase in alignment length as exposure of NSAs would increase with the length of the alignment. While noise impacts would increase for the longer northern alignment alternatives, it is not anticipated to change the severity (relative significance) of these effects.
- Construction air emissions would increase proportional to any increase in the usage of construction equipment. The longer northern alignment alternatives would require a higher total of construction equipment (greater total construction equipment hours required to construct additional facilities [structure installation/removal and conductor stringing]) which would result in greater overall emissions of criteria pollutants. In addition, these increased air quality impacts could result in more severe (i.e., more significant) effects as any increase in the amount of equipment operating simultaneously would increase the maximum daily emissions of criteria pollutants, thereby increasing the severity of the effects under CEQA.
- The potential for temporary impacts to parks, trails, and other recreational facilities would increase (in extent) proportional to the increase in alignment length as the number of recreational and public facilities can only increase as the length of the alignment increases. The increased impacts to public and recreational facilities would very likely increase in extent (i.e., number of impacted facilities) but would not likely result in increased severity of impacts.

Other Considerations

Cost

In general, the cost to construct and operate electrical transmission facilities increases proportionally with increased length of the facility (site-specific cost considerations not withstanding[1]). Also important to note is that construction of underground facilities is

[1] Due to site-specific cost considerations (such as soil conditions, presence of sensitive resources, topography, and site accessibility) a longer alignment could result in a lower cost where site specific cost concerns are not relatively equal. For example, a two-mile long underground transmission line located within favorable soil conditions (e.g.' loose or compacted topsoil) could have lower costs than a one-mile underground transmission located within more less favorable soil conditions (e.g., bedrock).

significantly more expensive than construction of overhead facilities. With respect to comparison of the Proposed Project and the Northern Alignment Alternatives, construction costs are anticipated to be approximately 12 to 21 percent more expensive than the Proposed Project.

Construction Schedule

In a similar manner to cost considerations, the construction schedule generally increases proportionally with the increased length of the alignment. This increase is directly defined as the increase in equipment hours required to construct a longer alignment. This increase can be manifested in one of two ways during actual construction:

1. Longer construction duration (increase in the actual linear length of the construction schedule); or
2. Additional construction activities occurring simultaneously (increase in the amount of construction occurring at one time).

In reality, a longer project alignment could result in both of the increases described above. That is to say, construction of one of the Northern Alignment Alternatives could reasonably be anticipated to result in both a longer overall construction schedule and utilization of additional construction equipment and workers when compared to the Proposed Project (construction is effectively longer and more intensive). All four Northern Alignment Alternatives would be anticipated to have a longer construction schedule, a more intensive construction schedule, or some combination of both.

Conclusion

Ultimately, all four of the Northern Alignment Alternatives were rejected because they would likely result in higher costs, longer and/or more intensive construction schedules, greater impacts, potentially more significant impacts, and no perceptible benefit that is not also provided by other alternative routes with lower cost, shorter schedules, and lower overall impacts to the public and natural environment.

5.2.4.3 Southern Alignment Alternatives

The Southern Alignment Alternatives (Alternative Nos. 5 and 6) would include construction and operation of a new 230 kV transmission line between the existing Sycamore Canyon and Peñasquitos Substations, and would utilize approximately half of the alignment included as part of the Proposed Project (refer to Figure 5-1). Specifically, the Southern Alignment Alternatives would share the following elements with the Proposed Project:

- 5.7 miles of new 230 kV conductor and structures (approximately 28 structures) within existing ROW between the Sycamore Canyon Substation and the Chicarita Substation (Proposed Project Segment A);
- 3.27 miles of 230 kV conductoring (new conductor on existing structures) between the Peñasquitos Junction and the Peñasquitos Substation (Proposed Project Segment D); and

- 3.27 miles of 69 kV pole replacement (replace approximately 20 existing wood structures with approximately 17 new tubular steel poles between Peñasquitos Junction and existing Peñasquitos Substation) within existing ROW (Proposed Project Segment D).

The Southern Alignment Alternatives would not extend further north than the existing Chicarita Substation, located south of SR-56 (thus effectively sharing approximately two thirds of the Proposed Project Segment A). The Southern Alignment Alternatives are further described in Table 5-2, Southern Alignment Alternatives.

Table 5-2: Southern Alignment Alternatives

Alignment No.	Total Route Length[1]	General Description
5	12.80 miles	Alternative No. 5 would include utilization of approximately 3.83 miles of existing, unoccupied SDG&E ROW between the Chicarita Substation and the Peñasquitos Junction. Under Alternative No. 5, new overhead 230 kV structures would be installed along with new single-circuit 230 kV conductor. Additionally, new access roads, spur roads and work pads would be required and a portion of the existing ROW is within the Del Mar Mesa Preserve. Alternative No. 5 would not require any new or amended ROW. Alternative No. 5 would utilize Segment D as described for the Proposed Project.
6	13.43 miles	Alternative No. 6 would utilize a combination of existing ROW, franchise positions (within existing streets), and new ROW to install approximately 4.46 miles of new single-circuit underground 230 kV transmission line from the Chicarita Substation to the Peñasquitos Junction. From approximately 500 feet southwest of the existing Chicarita Substation, Alternative No. 6 would travel west within existing, unoccupied SDG&E ROW for approximately 1.78 miles. Alternative No. 6 would then be installed within Park Village Road (franchise position) for approximately 0.92 mile. Finally, Alternative No. 6 would utilize new ROW for approximately 1.76 miles through the Los Peñasquitos Canyon Preserve until reaching the Peñasquitos Junction. Alternative No. 6 would utilize Segment D as described for the Proposed Project.

Notes:
[1]Total route lengths include segments shared with the Proposed Project.
Source: *SDG&E*

Attainment of Project Objectives by the Southern Alignment Alternatives

Objective No. 1

Both of the Southern Alignment Alternatives would meet Objective No. 1. SDG&E could design, construct, and operate Alternative Nos. 5 and 6 to meet the Functional Specifications identified by CAISO in its 2012-2013 Transmission Plan and as such, the Southern Alignment Alternatives would meet Objective No. 1 in a similar manner as the Proposed Project.

Objective No. 2

Alternative No. 6 would require significant new ROW (approximately 1.8 miles) and would not be constructed entirely within existing utility corridors or franchise position. Alternative No. 5 would utilize all existing ROW, but would not utilize existing utility corridors. Therefore, neither of the Southern Alignment Alternatives is considered to meet the full intent of Objective No. 2.

Avoidance or Reduction of Impacts

Both Southern Alignment Alternatives would include Proposed Project Segment D and a large portion of Segment A as described for the Proposed Project. Therefore, the impacts associated with these segments would be similar for the Southern Alignment Alternatives and the Proposed Project. While the Southern Alignment Alternatives would result in similar effects as the Proposed Project along Segment D and a large portion of Segment A, both Southern Alignment Alternatives have elements that result in perceptible variation in potential adverse effects due to each alternative route's connection between the Chicarita Substation and the Peñasquitos Junction. The specific variations in anticipated adverse effects (impacts) for the Southern Alignment Alternatives are further discussed below.

Southern Alignment Alternative No. 5

Alternative No. 5 is the shortest alternative considered, and as such could be anticipated to have a reduction relating to certain construction-related impacts (such as air emissions and construction generated noise). However, due to the location and nature of the existing environment along the Alternative No. 5 alignment, potentially adverse effects to the natural and human environment are anticipated which would not result as part of the Proposed Project or the Northern Alignment Alternatives. Potential impacts for the Alternative No. 5 are described below, including comparisons to the anticipated impacts for the Proposed Project, for applicable resource areas. Reductions and increases to adverse effects in relation to the Proposed Project are indicated.

Construction Impacts (Noise, Air Quality, Public Service, and Recreation)

Construction-related impacts to the human environment (e.g., noise and air quality) associated with Alternative No. 5 would likely be less than those anticipated for the Proposed Project due to the shorter alignment Alternative No. 5 would include. In addition, temporary impacts to recreational facilities could be slightly less than those anticipated for the Proposed Project due to the shorter alignment and smaller number of facilities affected.

Biological Resources

The Alternative No. 5 alignment contains known sensitive biological resources, including vernal pools and a portion occurs within the Del Mar Mesa Preserve. Construction of Alternative No. 5 would require creation of new access roads, spur roads, and structure work areas (construction and maintenance work pads). Construction of these facilities would result in unavoidable direct impacts to known vernal pool resources. The *SDG&E Subregional NCCP* does not cover direct impacts to vernal pools for construction of new facilities. Therefore, unavoidable direct impacts

to the vernal pool features along the Alternative No. 5 alignment would require consultation with the wildlife agencies (CDFW and USFWS), and proper mitigation for such impacts would need to be secured. Suitable mitigation for direct impacts to these vernal pool features is currently unknown, and these impacts are anticipated to be significant if proper mitigation were not available. This impact would be anticipated to be significant and unavoidable.

Aesthetics

Alternative No. 5 would include the installation of approximately 19 new single-circuit, 230 kV steel poles within existing, unoccupied SDG&E ROW. This segment is approximately 3.83 miles in length, and is located in close proximity to existing viewsheds and potential viewers. While the Proposed Project includes construction of new 230 kV steel structures along Segment A, these structures would replace existing 138 kV wood H-frame structures and would be located adjacent to existing 230 kV steel lattice towers and monopole structures. Alternative No. 5 would include similar structures as those included within Segment A of the Proposed Project; however, while Alternative No. 5 is within an existing utility ROW corridor, there are no existing structures within this ROW, and as such the installation of new 230 kV structures (typical average height of 120 feet) where no similar structures currently exist would represent a greater change in the existing visual environment, and thus would result in comparatively greater adverse impact to aesthetic resources.

Traffic

Alternative No. 5 would not include construction of underground transmission line(s) within public roadways, and would therefore avoid the impacts associated with construction and operation of underground utilities within public roadways that would result from the Proposed Project.

Southern Alignment Alternative No. 6

Alternative No. 6 is the second shortest alternative considered, and as such could be anticipated to have a reduction relating to certain construction-related impacts (such as air emissions and construction generated noise). However, due to the location and nature of the existing environment along the Alternative No. 6 alignment, potentially adverse effects to the natural and human environment are anticipated which would not result as part of the Proposed Project or the Northern Alignment Alternatives. Potential impacts for Alternative No. 6 are described below, including comparisons to the anticipated impacts for the Proposed Project, for applicable resource areas. Reductions and increases to adverse effects in relation to the Proposed Project are indicated.

Construction Impacts (Noise, Air Quality, Public Service, and Recreation)

Construction-related impacts to the human environment (e.g., noise and air quality) associated with Alternative No. 6 would likely be less than those anticipated for the Proposed Project due to the shorter alignment Alternative No. 6 would include. This reduction in overall noise and air quality impacts would not necessarily reduce the severity of anticipated impacts in these areas. In addition, temporary impacts to recreational facilities could be slightly less than those anticipated for the Proposed Project due to the shorter alignment and smaller number of facilities

affected. However, Alternative No. 6 would result in temporary impacts to the Los Peñasquitos Canyon Preserve to a much greater extent than would the Proposed Project.

Biological Resources

The Alternative No. 6 alignment contains known sensitive biological resources, including vernal pool features. Construction of Alternative No. 6 would require creation of new access roads, spur roads, and structure work areas (construction and maintenance work pads). Construction of these facilities would result in direct impacts to known vernal pool resources. The *SDG&E Subregional NCCP* does not cover direct impacts to vernal pools for construction of new facilities. Therefore, direct impacts to the vernal pool features along the Alternative No. 6 alignment would require consultation with the wildlife agencies (CDFW and USFWS), and proper mitigation for such impacts would need to be secured. Suitable mitigation for direct impacts to these vernal pool features is currently unknown, and these impacts are anticipated to be significant if proper mitigation were not available. This impact would be greater than the impacts anticipated to result from the Proposed Project.

Aesthetics

Alternative No. 6 would include installation of underground transmission line between the Chicarita Substation and the Peñasquitos Junction. Therefore, Alternative No. 6 would result in less overall visual change when compared to the Proposed Project or Alternative No. 5.

Traffic

Alternative No. 6 would include construction and operation of new underground 230 kV transmission line(s) within franchise position (city streets). Thus, the potential impacts relating to transportation and traffic (refer to Section 4.14) would be similar (although not within the same location) for Alternative No. 6 and the Proposed Project.

Additional Permitting and Mitigation Requirements

The Southern Alignment Alternatives are anticipated to trigger additional, potentially significant permitting, mitigation, and discretionary approvals. Specific anticipated requirements are discussed below for each of the Southern Alignment Alternatives.

Alternative No. 5

A 3.83-mile segment of the Alternative No. 5 alignment is currently unoccupied by any electrical infrastructure (e.g., transmission or distribution poles and associated conductor) or support features (e.g., access roads). Construction of new 230 kV structures within this 3.83-mile segment of Alternative No. 5 would result in impacts to vernal pools and other sensitive biological resources as well as impacts within designated critical habitat and habitat preserve areas. Impacts to biological resources along this alignment would result in the need for direct consultation with the CDFW and USFWS as the *SDG&E Subregional NCCP* could not be utilized for these impacts. The consultation process, especially as it compares to the *SDG&E Subregional NCCP* process, represents an almost certain significant increase in the overall schedule. Finally, mitigation for direct impacts (loss) of vernal pool features is considered a

significant permitting, cost, and schedule uncertainty and a potential significant impact in the absence of mitigation.

Alternative No. 6

Similar to Alternative No. 5, Alternative No. 6 would involve construction of new facilities where no facilities currently exist, including in areas of sensitive biological resources within Los Peñasquitos Canyon Preserve. These impacts to biological resources would likely require direct consultation with the CDFW and USFWS, resulting in a significantly longer permitting schedule and uncertain yet potentially significant mitigation requirements. Mitigation for direct impacts to vernal pools would also be likely, which represents a large permitting/consultation and mitigation unknown as vernal pool mitigation can be extremely challenging.

Unlike Alternative No. 5, Alternative No. 6 would require new ROW for approximately 1.76 miles. More importantly, most of the 1.76 miles would be located within the Los Peñasquitos Canyon Preserve, which is dedicated open space by the City of San Diego. In order to obtain new ROW within dedicated open space, discretionary approval from the City would be required. Given this area is dedicated Open Space, approval of new ROW by the City is considered to be unlikely. This ROW approval constitutes an unknown schedule element and additional discretionary approval requirement. This discretionary review would be anticipated to result in potentially significant schedule delays. Further schedule uncertainty would result from new construction and ROW within the Coastal Zone, which covers a portion of the underground portion of Alternative No. 6.

Other Considerations

Cost

The direct cost of construction for both Southern Alignment Alternatives would be less than construction of the Proposed Project. The construction cost of Alternative No. 5 would be approximately half the construction cost of the Proposed Project. The cost of Alternative No. 6 would be approximately 20 percent less than the construction cost of the Proposed Project. However, potential land acquisition, mitigation and permitting costs are anticipated to be much higher for the Southern Alignment Alternatives due to the presence of sensitive biological resources and land use designations (refer to description of anticipated impacts to biological resources above). For Alternative No. 5, costs for mitigation to vernal pool resources is of primary concern and costs associated with obtaining new ROW through the Los Peñasquitos Preserve is of principal concern for Alternative No. 6.

Construction Schedule

The Southern Alignment Alternatives are the shortest alternatives considered, and as such could be expected to have shorter, less intense construction schedules. However, the Southern Alignment alternatives do contain elements that could result in longer or more intensive construction. For example, the Southern Alignment Alternatives would require construction of new access and spur roads as these support features do not currently exist. In addition, Alternative No. 6 includes extensive underground construction, which is more intensive (per unit of distance) than overhead construction.

Conclusion

Ultimately, both of the Southern Alignment Alternatives were rejected because they would likely result in longer, uncertain permitting and mitigation requirements, potentially significant impacts to biological and visual resources, and non-achievement of Objective No. 2 (utilization of existing ROW and utility corridors).

5.2.4.4 Underground Project Alternative

The underground alternative (Alternative No. 7) would connect the Sycamore Canyon and Peñasquitos Substations with a new, single-circuit underground 230 kV transmission line utilizing public roadways to the greatest extent possible (refer to Figure 5-1). The underground alternative would include approximately 12.74 miles of new underground 230 kV transmission line within public roadways (i.e., franchise position) and approximately 2.53 miles of new underground 230 kV transmission line located within the boundaries of MCAS Miramar. The total length of Alternative No. 7 would be approximately 15.27 miles. Alternative No. 7 would not utilize any of the common segments applicable to the Proposed Project and the Northern and Southern Alignment Alternatives. The underground alternative alignment would be generally west from the Sycamore Canyon Substation, and then generally north to the Peñasquitos Substation.

Attainment of Project Objectives by the Underground Project Alternative

Objective No. 1

While detailed engineering has not been conducted, SDG&E anticipates that it could design, construct, and operate the Underground Alternative to meet the Functional Specifications identified by CAISO in its 2012-2013 Transmission Plan and as such, the Alternative No. 7 would meet Objective No. 1 in a similar manner as the Proposed Project.

Objective No. 2

While Alternative No. 7 would utilize a high percentage of existing franchise ROW, it would also require significant new ROW located on MCAS Miramar. Therefore, Alternative No. 7 would not meet Objective No. 2.

Avoidance or Reduction of Potentially Significant Impacts

Alternative No. 7 would not utilize any common segments utilized by the Proposed Project or Southern and Northern Alignment Alternatives. Therefore, impacts anticipated to result from construction and operation of Alternative No. 7 would be different (at least in location) than those anticipated from the Proposed Project and remainder of the alternatives considered. Potential impacts anticipated (potential reductions and increases) from the Alternative No. 7 alignment are described below for applicable resource areas.

Construction Impacts (Noise, Air Quality, Public Services, and Recreation)

Construction of Alternative No. 7 would be relatively more intensive due to the fact that the entire alignment would be underground. Underground construction takes longer and requires more equipment per mile than overhead construction. Therefore, relatively higher (and potentially more severe) impacts would be anticipated for noise and air quality.

However, impacts to recreational public and private facilities would be anticipated to be less than the Proposed Project due to the fact that Alternative No. 7 would largely utilize franchise position (city streets). The portion of Alternative No. 7 that would not utilize franchise position would be located on MCAS Miramar and would therefore not be likely to impact public or private recreational facilities.

Aesthetics

Alternative No. 7 would be anticipated to have substantially less impacts to aesthetic resources as the line would be located in an underground position and would not affect the permanent visual environment. Construction activities would be visible; however, these effects would be temporary and would be more similar to the construction-related aesthetic impacts anticipated from the Proposed Project and other alternatives.

Biological Resources

Focused biological surveys have not been completed for the Alternative No. 7, and therefore exact potential for impacts to biological resources are not known. However, while construction of Alternative No. 7 would mostly occur within franchise position (city streets), the portion of the Alternative No. 7 located on MCAS Miramar could result in impacts to biological resources, overall impacts would be anticipated to be lower for Alternative No. 7 when compared to the Proposed Project due to the large amount of construction within city streets.

Cultural and Paleontological Resources

While cultural and paleontological resources for the Alternative No. 7 route have not been investigated, the intensive amount of ground disturbance (trenching) could result in potential impacts to buried cultural and paleontological resources. This potential could be greatly reduced due to the Alternative No. 7's utilization of existing streets, however, this fact alone does not preclude the potential to encounter of buried resources.

Traffic

Alternative No. 7 would include approximately 12.74 miles of underground construction within city streets (franchise position). As discussed within Section 4.14, construction of an underground line within city streets created potential impacts associated with traffic congestion (LOS) and emergency vehicle access. Due to the extent of underground construction within city streets that would be included within Alternative No. 7, these impacts would be greater than those anticipated for the Proposed Project. In addition, the impacts to traffic congestion and emergency vehicle access could also be more severe (i.e., significant) due to localized conditions where construction would occur. These localized conditions can include existing traffic

congestion (LOS), and intensive traffic generating land uses (high schools, large professional office buildings, or existing road design features [bottle necks, sharp turns, etc.]). The Alternative No. 7 alignment has not been analyzed for these conditions, but given the length of the alignment within city streets and the location (in the vicinity of the coastal zone and the I-5 Freeway), a potential for significant impacts is considered to be present.

Other Considerations

Cost

Alternative No. 7 would have the highest construction cost of any alternative considered (over 90 percent higher than the Proposed Project), despite having a shorter total route length than most of the alternatives considered. This is due to the fact that construction of underground lines is far more expensive per miles than overhead construction.

Additional Permitting and Mitigation Requirements

In addition to the increased construction cost, Alternative No. 7 would also require approximately 2.5 miles of new easement from MCAS Miramar, and a much more intensive NEPA review that would result from the granting of the new easement. Both the new easement approval and the NEPA compliance process would add potentially significant schedule delays and cost increases when compared to the alternatives that connect the two substations from the east (utilizing existing easement within MCAS Miramar). Alternative No. 7 could also result in additional review and approval for new construction within the Coastal Zone as the Alternative No. 7 route passes through portions of the Coastal Zone as it approaches the Peñasquitos Substation from the south.

Schedule

As previously discussed, the construction schedule for Alternative No. 7 would likely be longer and more intensive than the Proposed Project due to the amount of underground construction required. An additional schedule consideration for Alternative No. 7 is the requirement for new easement within MCAS Miramar. Approval of new easement (approximately 2.5 miles) from MCAS Miramar would require discretionary approval and intensive NEPA compliance that could significantly extend the overall project and permitting schedule when compared to the Proposed Project.

Reliability During Maintenance and Repair

Alternative No. 7 would include the operation and maintenance of an approximately 15 mile underground transmission line. By nature, underground transmission lines are less accessible for maintenance and repair due to their location underground. Alternative No. 7 would include significantly more underground transmission line than all other alternatives considered, including the Proposed Project. Therefore, potential reliability concerns for maintenance and repair of the Alternative No. 7 transmission line would be significantly higher than the Proposed Project (which is proposed to be approximately 83 percent overhead) or any of the other alternatives considered.

Conclusion

Alternative No. 7 (underground alternative) was ultimately rejected due to the increased approval requirements on MCAS Miramar and associated schedule uncertainty, high construction costs, longer and more intensive construction schedule, and non-achievement of Objective No. 2 (utilization of existing ROW and utility corridors).

5.2.4.5 Cable Pole Structure Options

As discussed in Section 3.3.2, Segment B – Carmel Valley Road, SDG&E is considering an alternate option for each of the two required new 230 kV cable pole structures. These alternate options are further discussed below. Cable pole structures, or cable poles, are utilized to transfer electric transmission, power, or distribution lines from overhead to underground positions. Therefore, a cable pole structure is required at the beginning and end of every underground segment of electric utility line. With respect to the Proposed Project, new 230 kV cable pole structures are required at the east and west termini of Segment B.

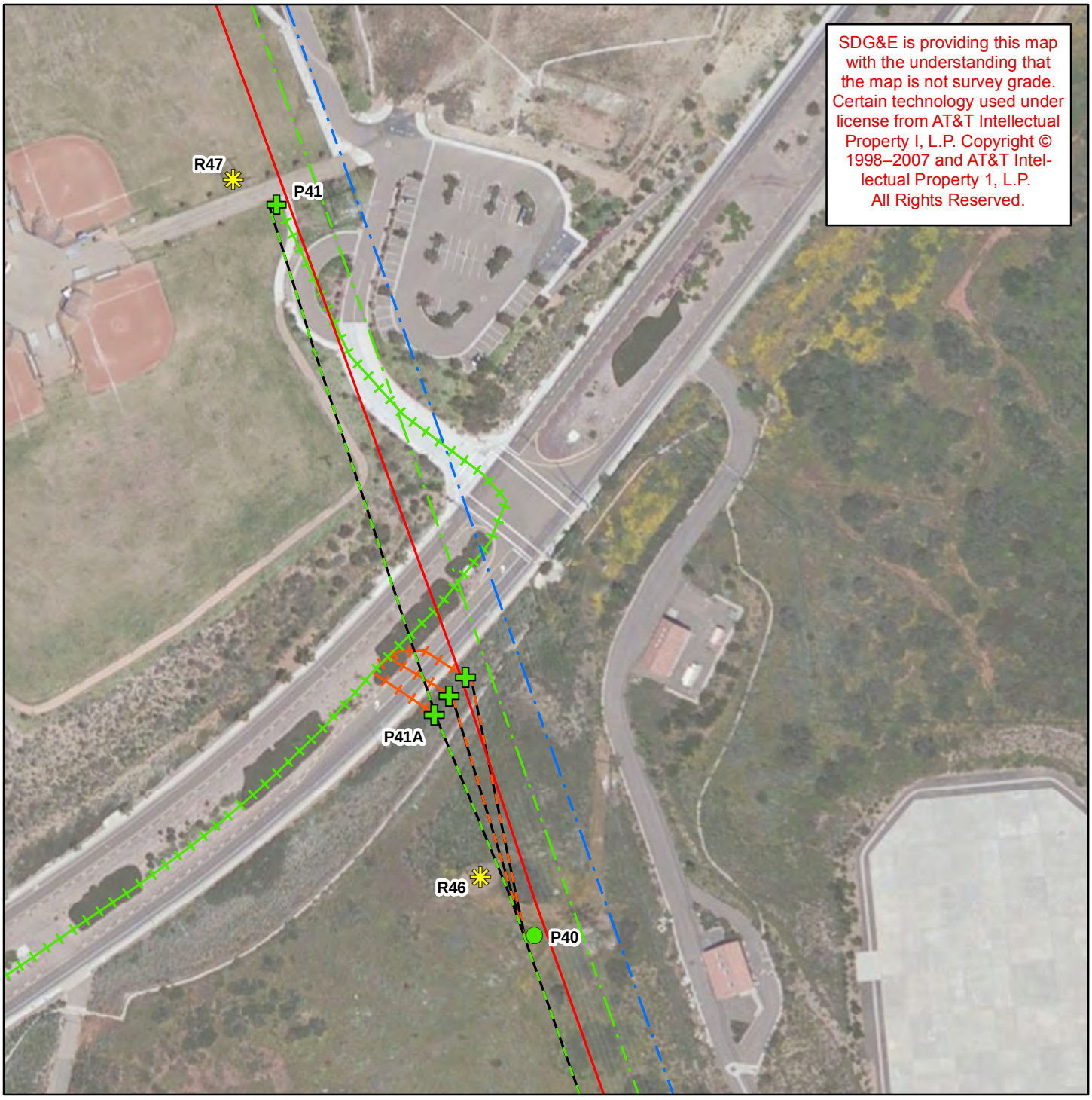
East Cable Pole Options

SDG&E is currently considering an alternate option for the eastern cable pole (connection of Proposed Project Segments A and B), as follows:

- Proposed Project Option: Double-circuit monopole structure north of Carmel Valley Road, within Black Mountain Ranch Community Park (Structure No. P41 – refer to Appendix 3-B).
- Alternate Option: 3-pole structure south of Carmel Valley Road (Structure No. P41[A]- see Figure 5-2, Alternate East Cable Pole Option Map).

Proposed Project East Cable Pole Option

The Proposed Project East Cable Pole option would be a tubular, steel, monopole (single pole), double-circuit structure located within Black Mountain Ranch Community Park (Structure No. P41 – refer to Appendix 3-B), approximately 350 feet north of Carmel Valley Road. Black Mountain Ranch Community Park is an existing sports facility that supports mainly baseball and soccer activities (refer to Sections 4.9, 4.12, and 4.13). The Proposed Project option would be approximately 160 feet tall and would also support TL 13825, requiring it to be a double-circuit structure. The Proposed Project option would replace an existing single-circuit, wood H-frame structure approximately 83 feet in height (Structure No. R47) that currently supports TL 13825. Compared to the Alternate option discussed below, the Proposed Project option would require a slightly longer underground segment, and one additional underground splice vault that would be located within the driveway to Black Mountain Ranch Community Park, as further described in Section 3.3.2. Figure 4.1-9 depicts a visual rendering of how the Proposed Project east cable pole option would appear following construction.



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Sycamore to Peñasquitos 230 kV Transmission Line Project

Alternate East Cable Pole Option Map

Figure 5-2

- New 230 kV Overhead Alternative Route
- New 230 kV Underground Alternative Route
- Existing 138 kV
- Reconductor 230 kV
- New 230 kV Proposed Route
- New 230 kV Underground Proposed Route
- Cable Poles
- Structure to be Removed

0 100 200 300 Feet

N W E S

TRC

SDGE A Sempra Energy utility

Date: 3/25/2014

Sources: SDG&E, 2013; National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, iPC

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BACK OF FIGURE 5-2

Alternate East Cable Pole Option

The Alternate East Cable Pole option would be a tubular, steel, 3-pole (low profile) structure located immediately south of Carmel Valley Road within existing SDG&E ROW (Structure No. P41[A] – refer to Figure 5-2). The Alternate option would utilize three separate structures, one for each of the three phases of the new 230 kV transmission line. Two of the three structures would be approximately 55 feet tall and would be utilized to transition one phase each of the circuit into an underground position. The third structure (which would be located furthest east) would be approximately 85 feet tall and would support the third phase of circuit as well as the OPGW. The third structure is taller than the other two in order to support the overhead OPGW. The Alternate option would require a slightly shorter underground segment than the Proposed Project option, and would not require an underground splice vault within the driveway to Black Mountain Ranch Community Park.

West Cable Pole Options

SDG&E is currently considering an alternate option for the western cable pole (connection of Proposed Project Segments B and C), as follows:

- Proposed Project Option: Double-circuit monopole structure south of Carmel Valley Road (Structure No. P42 – refer to Appendix 3-B).
- Alternate Option: Double-circuit monopole structure north of Carmel Valley Road, within the Evergreen Nursery (Structure No. P42[A] – see Figure 5-3, Alternate West Cable Pole Option Map).

Proposed Project West Cable Pole Option

The Proposed Project West Cable Pole option would be a tubular, steel, monopole double-circuit structure located approximately 100 feet south of Carmel Valley Road within existing SDG&E ROW (Structure No. P42 – refer to Appendix 3-B). The Proposed Project option would be approximately 165 feet tall and would also support TL 23004. Structure No. P42 would replace existing Structure No. R48, which is a double-circuit steel lattice tower approximately 127 feet in height that currently supports TL 23001 and TL 23004. Figure 4.1-10 depicts a visual rendering of how the Proposed Project west cable pole option would appear following construction.

Alternate West Cable Pole Option

The Alternate West Cable Pole option would be a tubular, steel, double-circuit monopole structure located within the Evergreen Nursery, approximately 200 feet north of Carmel Valley Road (Structure No. P42[A] – refer to Figure 5-3). The Alternate option would be approximately 145 feet tall and would not directly replace any existing structures including Structure No. R48, which would be removed under the Proposed Project option.

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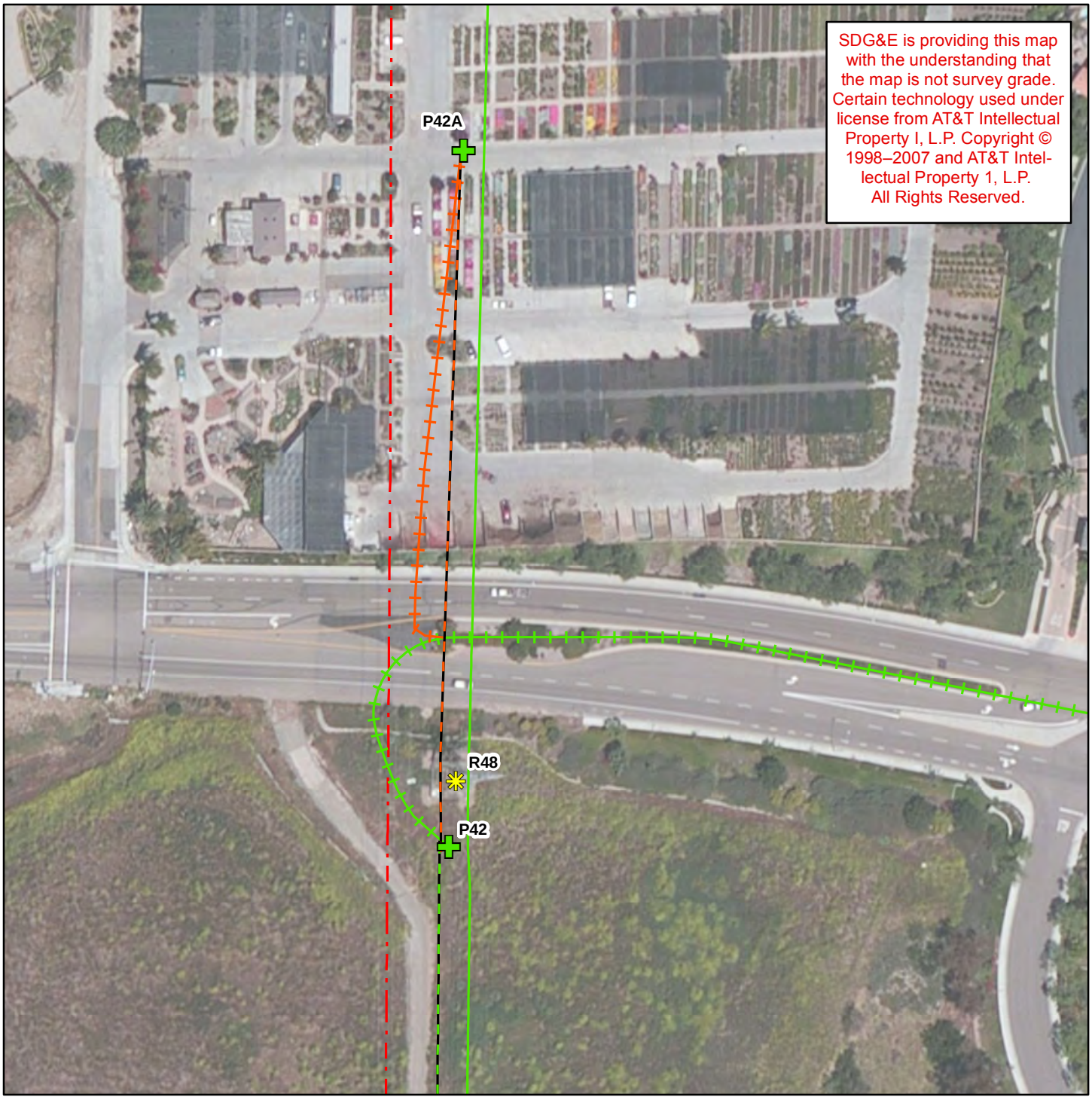

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Sycamore to Peñasquitos 230 kV Transmission Line Project

Alternate West Cable Pole Option Map

Figure 5-3

- New 230 kV Overhead Alternative Route
- New 230 kV Underground Alternative Route
- Existing 138 kV
- Reconductor 230 kV
- New 230 kV Proposed Route
- New 230 kV Underground Proposed Route
- Cable Poles
- Structure to be Removed

0 100 200 300 Feet

N W E S

Date: 3/25/2014

TRC

SDGE A Sempra Energy utility

Sources: SDG&E, 2013; National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, iPC

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BACK OF FIGURE 5-3

Attainment of Project Objectives by the Cable Pole Options

Objective No. 1

While detailed engineering has not been conducted for the alternate cable pole options described above, SDG&E anticipates that it could design, construct, and operate both the Proposed Project and Alternate option to meet the Functional Specifications identified by CAISO in its 2012-2013 Transmission Plan and as such, both the Proposed Project and Alternate cable pole options would meet Objective No. 1 in a similar manner as the Proposed Project.

Objective No. 2

Both the Proposed Project and Alternate cable pole options would utilize existing SDG&E ROW. However, all of the Proposed Project and Alternate cable pole options with the exception of the Proposed Project east cable pole option (Structure No. P41A) would require an amendment to the existing ROW agreement to allow for underground electric utility lines. Therefore, both the Proposed Project and Alternate cable pole options are considered to meet Objective No. 2 in a similar manner to the Proposed Project.

Conclusion

The Proposed Project and Alternate cable pole options for the west and east ends of Proposed Project Segment B would meet both project objectives and would not cause any additional significant long- or short-term impacts. SDG&E plans to implement the Proposed Project option, pending any significant unforeseen changes that would require a reassessment.

5.3 GROWTH-INDUCING IMPACTS

CEQA requires a lead agency to review and discuss whether a project would foster economic or population growth, either directly or indirectly, in the surrounding environment. The *CEQA Guidelines* consider a project to be growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding area. New employees hired for proposed commercial and industrial development projects and population growth resulting from residential development projects represent *direct* forms of growth. Other examples of *indirect* forms of growth-inducing projects are the expansion of urban services into previously undeveloped areas or the removal of major obstacles to growth, such as transportation corridors and potable water supply.

Consistent with the *CEQA Guidelines*, the Proposed Project could be considered to have growth-inducing impacts if it would either directly or indirectly foster economic or population growth within the cities of San Diego or Poway, or remove existing obstacles to growth in these areas above what would be expected without the Proposed Project. The Proposed Project could also have a growth-inducing impact if it would provide a substantial amount of new employment, create a substantial new burden on existing communities, provide access to previously inaccessible areas or extend public services to previously un-served areas, or cause new development elsewhere (outside of the Proposed Project area [cities of San Diego and Poway and the County of San Diego]).

As explained previously, the Proposed Project generally entails the construction of new transmission line facilities and the replacement or relocation of existing power line and transmission line facilities as-needed in order to accommodate the new 230 kV transmission line between the existing Sycamore Canyon and Peñasquitos Substations. The installation of this new 230 kV transmission line would provide at least 1175 MVA of additional capacity. Specifically, the installation of an additional 230 kV high-voltage outlet at the Sycamore Canyon substation would allow the delivery of power directly to the coastal load center rather than forcing it onto the existing 138 kV and 69 kV networks. As a result, the Proposed Project would relieve congestion on existing lower-voltage facilities. Although the Proposed Project would improve electrical service reliability in the Proposed Project service area, implementation of the Proposed Project would not result in any significant growth-inducing environmental effects.

5.3.1 Economic or Population Growth

5.3.1.1 Background and Anticipated Growth in the Proposed Project Area

As outlined in Section 4.11, Population and Housing, San Diego County is projected to grow to a total population of 3,535,000 by the year 2020, an increase of approximately 357,937 people (or approximately 11.3 percent) as predicted by the SANDAG Demographics & Other Data- Fast Facts (October, 2013). The populations within the cities of San Diego and Poway are anticipated to grow to 1,542,324 (from 1,338,348) and 54,054 (from 49,071), respectively. These increases represent growth of approximately 15.2 and 10.2 percent, respectively, above 2012 populations.

5.3.1.2 Growth and the Proposed Project

The Proposed Project would be implemented to ensure the reliability of the existing transmission system, meet State of California policy goals, accommodate load growth, and improve system efficiency. Additionally, a major secondary objective is to locate the Proposed Project facilities within existing transmission corridors, SDG&E ROW, utility owned property and City of San Diego franchise position. The Sycamore Canyon Substation is one of two major gateways for energy imported from the east into the San Diego metropolitan area to serve customer load. As the San Diego metropolitan area load continues to increase, the imports into the Sycamore Canyon Substation would also increase, thus further necessitating the need for an additional 230 kV high-voltage outlet at the Sycamore Canyon Substation. This need outlined within a Functional Specification issued by CAISO for the Proposed Project would be satisfied by extending a new 230 kV transmission line from the existing Sycamore Canyon Substation to the existing Peñasquitos Substation. As previously mentioned this would allow the delivery of power directly to the coastal load center rather than forcing it onto the 138 kV and 69 kV networks, resulting in relieved congestion on these lower-voltage facilities.

The Proposed Project is not being implemented in advance of growth but, rather, to improve the reliability of the existing transmission system in the San Diego metropolitan area. As discussed in Chapter 2.0, Proposed Project Purpose and Need, SDG&E is legally required to adhere to reliability requirements consistent with CPUC General Orders, CAISO Tariff provisions, NERC/FERC requirements, and SDG&E internal standards. The Proposed Project would not increase housing or bring in new services, but would improve the existing infrastructure system by making the system more reliable, adding additional capacity and consolidating two existing

power lines onto new double-circuit, steel structures that would replace existing, predominantly wood structures along Segment A of the proposed route.

The Proposed Project involves the construction of new transmission line facilities and the replacement or relocation of existing power line and transmission line facilities as-needed in order to accommodate the new 230 kV transmission line. The proposed transmission line between Sycamore Canyon and Peñasquitos Substations would utilize approximately 13.6 miles of existing ROW, and approximately 2.8 miles of franchise ROW in the City of San Diego along an existing street (Carmel Valley Road). This would accommodate existing and projected demand in the service area by providing additional electrical transmission system capacity and improving system reliability. If these improvements are not implemented, a deterioration of services and an increased likelihood of system instability could result. The Proposed Project would not directly or indirectly foster growth or remove obstacles to economic or population growth in the area.

5.3.2 New Employment

The Proposed Project would provide short-term construction employment, but no new permanent employment increase. Construction activities are expected to take approximately 12 months under normal conditions. During peak construction times, SDG&E would employ up to approximately 100 workers per day, during the peak of construction, including construction crews, environmental monitors and all other support staff. SDG&E would supplement its workforce as needed during construction from a contractor's pool of experienced personnel. This workforce would derive from existing local residents in the San Diego area and it is not anticipated that a substantial numbers of workers would need to reside temporarily at local lodging establishments. The limited, temporary nature of employment for this pool of workers would not result in long-term growth within the Proposed Project area.

Furthermore, operation and maintenance activities for the Proposed Project would be performed by current SDG&E personnel, and no new jobs would be required. As a result, the Proposed Project would not induce any increase in employment.

5.3.3 Extended Access or Public Services

The Proposed Project would add one new 230 kV transmission line that would be located within existing utility corridors and within franchise position. All proposed new and relocated facilities are located in existing SDG&E ROWs that currently contain similar facilities that are currently operated and maintained, except for the new underground segment of 230 kV transmission line within Carmel Valley Road. The new 230 kV transmission would provide for the transmission of bulk electric power, and would not create new customer-level (distribution line) facilities. Thus, the Proposed Project would not provide access to previously inaccessible areas, or extend public services to any currently un-served areas. SDG&E currently provides electric service to the Proposed Project areas and the Proposed Project does not include the expansion of the electric system into areas that currently do not have electric service infrastructure. Therefore, the Proposed Project would not induce growth by extending access or public services (electric service infrastructure) into areas that are currently un-served.

5.3.4 Existing Community Services

The Proposed Project would not significantly impact existing community services, and no new or altered governmental services would be required as a result of project operations. The Proposed Project would not generate a new permanent demand for water, wastewater, or solid waste services, and its demand for City- and County-provided services, such as road improvements, law enforcement, and fire protection, would be negligible, and short-term (for construction) and equal to or less than existing demand for operations and maintenance. Due to the fact the Proposed Project utilizes existing utility corridors, structures, and franchise position, operation and maintenance of the new transmission line would largely mirror current operation and maintenance conditions, and as such there would be no impact to existing community services. The entirety of the Proposed Project constitutes a replacement or enhancement of existing facilities and, as such, SDG&E has existing operations and maintenance resources available to service the Proposed Project upon completion.

5.3.5 New Development

The Proposed Project would not promote new development, either in the San Diego area (including the cities of San Diego or Poway) or elsewhere, because it is primarily a response to existing and planned development and to improve the reliability of an existing electrical system for present and planned development. The Proposed Project would satisfy SDG&E's obligation to accommodate the demand that the development market and local governments have projected or planned. Established and locally supported patterns of development and growth carry with them a corresponding electrical demand that SDG&E is obligated to anticipate and serve to avoid the consequences of electrical overload, as discussed in Section 2.0, Proposed Project Purpose and Need. The Proposed Project would not directly or indirectly cause or promote new development that would not otherwise be constructed, as approved through local land use approval processes.

5.3.6 Conclusion

The Proposed Project is designed to improve transmission system reliability and increase capacity for projected load growth in the San Diego metropolitan service area. With the addition of a new 230 kV transmission line between the Sycamore Canyon and Peñasquitos Substations, the proposed system would meet state environmental and energy policy goals and CAISO's Functional Specifications for the Project including all NERC, CAISO, and WECC transmission planning standards (refer to Section 2.0, Proposed Project Purpose and Need). The Proposed Project would mitigate transmission overloads identified by CAISO and SDG&E, by delivering the power efficiently and effectively to the coastal San Diego load center (refer to Figure 2-2, 2013 Load Distribution) rather than forcing the power through the existing 138 kV and 69 kV network systems. Additionally, the Proposed Project is one of the power system upgrades identified by CAISO in the event of the unplanned closure of the SONGS. Consequently, Southern California Edison has recently announced (June of 2013) of the permanent retirement of SONGS after an unplanned, yearlong outage. Additional benefits of the Proposed Project would include the reduction of the risk of a service interruption resulting from a transmission failure, infrastructure improvement of existing transmission lines, and the fact that the Proposed Project is located entirely within existing utility corridors and franchise position.

The Proposed Project would not create a new customer-level service or source of power that would indirectly allow for an increase in population, housing, or other development because the Proposed Project would not extend electrical service infrastructure into previously un-served areas. The Proposed Project would accommodate existing and planned power demands in SDG&E's service territory through increasing the transmission system reliability. SDG&E responds to projected development and forecasts, rather than inducing growth by extending infrastructure for future unplanned development. The Proposed Project would require new employment for construction activities; however, most of the construction force is anticipated to come from the existing local workforce from a pool of existing SDG&E electrical personnel and contractors. Operation and maintenance of the Proposed Project would be similar to existing operations and maintenance needs for the Sycamore and Peñasquitos Substations and the existing transmission and power line networks that currently connect the substations and other local substations, with the exception of the new underground transmission line (Segment B) within Carmel Valley Road, which lies within an existing roadway (franchise position). Therefore, the Proposed Project would not induce growth, directly or indirectly, and no impacts are anticipated.

5.4 REFERENCES

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