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5.18 CUMULATIVE IMPACTS

5.18.1 Introduction

This section of the PEA discusses potential cumulative impacts related to the construction, operation, and maintenance of the Proposed Project. The purpose of the Proposed Project is to mitigate identified NERC thermal violations, to alleviate congestion on the existing 69kV system in the Poway Area Load Pocket, to accommodate load growth within the Proposed Project area, and to improve overall system efficiency. Additional information relating to the need for the Proposed Project is included in Section 2.0, Proposed Project Purpose and Need. As explained within Sections 5.1 through 5.17, no significant impacts were identified for the Proposed Project.

CEQA requires an analysis of the cumulative impacts that could occur as a result of the Proposed Project, in conjunction with other past, present, and probable future projects. The PEA Checklist similarly inquires as to the impacts of past, present, and reasonably foreseeable future projects. This section discusses such other projects and analyzes the potential for significant cumulative impacts. The Proposed Project involves the following four basic components: (1) expansion of the existing Artesian Substation, (2) installation of new underground getaways at the Artesian and Bernardo Substations, (3) reconductor of an approximately 2.2-mile long segment of an existing double-circuit 69 kV power line located between the Artesian and Bernardo Substations, and associated pole replacements; and (4) minor modifications at the existing Bernardo and Rancho Carmel Substations. The Proposed Project will be constructed and operated within existing SDG&E ROW, City and County of San Diego franchise position, and existing SDG&E-owned property, where SDG&E currently maintains and operates existing electric power, distribution and substation facilities.

Operation and maintenance of the Proposed Project would not be substantially different from existing, baseline conditions, with the exception of the expanded Artesian Substation. Therefore, the Proposed Project is generally not anticipated to contribute to any cumulatively significant impacts during operation and maintenance activities, except with respect to any potential effect related to the expanded Artesian Substation.

5.18.2 Significance Criteria

CEQA Guideline 15130(a)(1) defines a cumulative impact as one “*which is created as a result... of the project...together with other [past, present, and probable future] projects causing related impacts.*” Cumulative impacts refer to two or more individual effects which, when considered together, are considerable and cumulatively exceed the criteria established for each resource area as described in Sections 5.1 through 5.17 of the PEA. In such cases, the Proposed Project’s contribution is analyzed to determine whether it is cumulatively considerable.

CEQA Guidelines Section 15064(h)(1) further explains that:

When assessing whether a cumulative effect requires an [Environmental Impact Report], the lead agency shall consider whether the cumulative impact is significant and whether... the project's incremental effect, though individually limited, is cumulatively considerable...

Applying this qualitative standard necessarily requires application of judgment based on the facts of a particular project subject to CEQA.

The significance of an impact may be weighed against the overall effect as both increases and decreases in impacts may balance one another. Moreover, as noted in the *CEQA Guidelines* Section 15064(h)(4):

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

The PEA Checklist advises applicants to analyze past, present, and reasonably foreseeable future projects within the Proposed Project area that have the potential to be proximate in space and time to the Proposed Project.

5.18.3 Timeframe of Analysis

For the purpose of this cumulative impacts analysis, the Proposed Project is defined in terms of construction duration as well as post-construction operation and maintenance activities where they will differ from existing conditions. SDG&E anticipates that construction of the Proposed Project would take a total of approximately 30 months to complete, spanning from August 2018 through January 2021. Operation and maintenance of the Proposed Project would occur for the foreseeable future following the completion of construction.

5.18.4 Area of Analysis

In accordance with *CEQA Guidelines* Section 15130(b), past, present, and planned/probable/reasonably foreseeable future projects located within approximately 1 mile of the Proposed Project were reviewed in order to identify any projects that could, when combined with the Proposed Project, create a cumulatively considerable effect. The analysis of potential cumulative impacts was limited to within approximately 1 mile of the Proposed Project components because the majority of the Proposed Project's effects would be heavily localized.

5.18.5 Methodology

Existing conditions and reasonably foreseeable projects were identified within a 1-mile radius of each Proposed Project component. Information was gathered from internet searches of local planning department and state agency websites and correspondence with agency staff.

The websites of the following entities were reviewed and/or these agencies contacted regarding development projects, road and utility improvement projects, and capital investment/improvement projects:

- SDG&E,
- City of San Diego,
- County of San Diego,
- CPUC,
- CEC,
- CAISO, and
- Caltrans.

5.18.6 Existing/Operating Projects

As shown in Figure 3-1, Project Vicinity Map, the Proposed Project components are located within both the City and County of San Diego, California. The Proposed Project route traverses both developed residential and commercial areas, as well as undeveloped utility corridors. Section 5.10, Land Use and Planning, outlines all of the specific existing land uses for the entire Proposed Project vicinity. SDG&E currently operates and maintains (and will continue to do so) numerous facilities in Proposed Project vicinity, including the Artesian, Bernardo, and Rancho Carmel Substations, one 230kV transmission line, one 138kV power line, six 69kV power lines, and numerous distribution lines.

5.18.7 Foreseeable Projects Inventory

For the purposes of this document, “reasonably foreseeable” refers to projects that federal, state, or local agency representatives have knowledge of resulting from a formal application process. Table 5.18-1, Potential Cumulative Projects within 1 mile of the Proposed Project Area, lists known projects that are within 1 mile of the Proposed Project facilities. A total of 19 such projects have been identified within 1 mile of the Proposed Project, however, only 4 have been identified as having potentially overlapping construction or operation with the Proposed Project. Figure 5.18-1, Potential Cumulative Projects Map, depicts the location of each project with respect to the Proposed Project components.

Projects are included that are located within 1 mile of the Proposed Project and are of sufficient size and type such that, when combined with the Proposed Project, there would be a potential for cumulative effects on the environment. For example; small-scale discretionary or ministerial projects like usage permit projects (such as liquor license applications) that are internal to an existing building or development and have no potentially significant impact to the environment; modifications to existing individual homes or businesses that do not result in any increases in noise, traffic, air emissions, etc. (i.e., architectural modifications to existing structures such as patios, decks, fences, and awnings); and site-specific residential developments (including swimming pools, backyard renovations, and second story additions) do not create incremental environmental impacts that, when added with the impacts from the Proposed Project, could potentially result in a cumulatively significant impact.

The following projects were determined to have potential overlap during construction or operation, and as such constitute the main potential for cumulatively considerable adverse effects when considered with the Proposed Project:

- Del Sur Commercial/Professional Development;
- Del Sur Living Residential Development;
- Del Sur Town Center; and
- Sewer Group 836 Upgrades.

The remaining projects listed in Table 5.18-1 are generally not anticipated to have the potential to create cumulatively considerable adverse effects, and as such are not discussed in further detail herein.

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Table 5.18-1: Potential Cumulative Projects within One Mile of the Proposed Project Area

Map ID ^a and Project Name	Project Location ^a	Approximate Distance from the Proposed Project ^a	Project Description/Size	Anticipated Construction Schedule	
				Begin	End
1 – SDFD Station Alerting	Northside of Camino Del Sur near Casey Glen intersection	0.42 mile west of the Artesian Substation	This project will provide for the replacement of the Fire In-Station Alerting System at fire stations Citywide. The current alerting system technology is 21 years old and is no longer in service forcing the department to rely upon a back-up system.	Completed	
2 – Del Sur Commercial/ Professional Development	At the corner of Camino Del Sur and Babcock street	Located immediately east of the Artesian Substation Expansion site, across Babcock Street	The Del Sur Commercial/Professional development is an approximately 23-acre plot that will include offices and other professional development. A set construction date has not been confirmed by the developer, therefore overlapping construction cannot be ruled out.	TBD	TBD
3 – Del Sur Living Residential Development	Located south and east of the Artesian Substation Expansion site	Located south and east of the Artesian Substation Expansion site	Del Sur Living is constructing single-family homes within an approximately 20-acre plot southeast of the Substation Expansion site. A set construction date has not been confirmed by the developer, therefore overlapping construction cannot be ruled out.	TBD	TBD
4 - Del Sur Town Center	South of Camino Del Sur	Approximately 0.08 mile (east) from Artesian Substation Expansion	Retail center included in Del Sur Living’s development plan. This portion of Del Sur Living is already under construction and is anticipated to be complete prior to construction of the Proposed Project.	2015	TBD, but prior to 2018
5 – TL 633 Reconductor/ Underground Conversion Project	Project route would travel from Rancho Carmel Substation to Bernardo Substation via Camino Del Norte, Camino San Bernardo, and Rancho Bernardo Road	This project would occur at substations and streets used during the Proposed Project’s construction	The TL633 Reconductor/ Underground Conversion project would reconductor and relocate the existing 69kV power line TL633 between the Rancho Carmel and Bernardo Substations. SDG&E is working with the City of San Diego to install the approximately 3-mile line in an underground position located within City streets (franchise position). The project has an initial in service date of 2016, but construction could be delayed until 2017. It is anticipated that the TL633 project will be completed prior to the Proposed Project beginning construction.	2016 or 2017	2018

Table 5.18-1 (cont.): Planned and Proposed Projects within One Mile of the Proposed Project Area

Map ID ^a and Project Name	Project Location ^a	Approximate Distance from the Proposed Project ^a	Project Description/Size	Anticipated Construction Schedule	
				Begin	End
6 – City Wide SPS	Just south of Calle Paracho and Caminito Ryone intersection; Along Via Del Campo Ct	0.3 mile north of Rancho Carmel Substation; 0.6 mile southeast of Rancho Bernardo Substation along Via Del Campo Ct	Provision of secondary force mains, replacement of pumps, motors, suction and 3-way valves, provisions for emergency generators, including construction of fences and gates, repaving of station sites, irrigations upgrades and landscaping.	Completed	
7 - Sewer Group 836	Approximately 530 feet south of the intersection of Via Tazon and West Bernardo Court	0.6 mile east of Rancho Bernardo Substation	Rehabilitate and replace approximately 2.0 miles of existing sewer mains (Sewer Referral Program). Note that most of the 2.0 miles does not fall within 1 mile of the Proposed Project.	September 2017	August 2019
8 - West Bernardo Median	Intersection of West Bernardo Road and Rancho Bernardo	0.8 mile east of Rancho Bernardo Substation	Replace the existing 3-foot raised median with a new raised stamped concrete median, and a new black chain link fence. West Bernardo Dr. is to remove existing pylons, re-stripe and construct a 4' wide stamped concrete median on the north leg of W. Bernardo Dr.	July 2016	August 2017
9 – PS 84 Upgrade and PS 62 Abandonment	Along Avenida de los Lobos, continuing onto Paseo Montanoso. Cut to Paymogo Street and follows Almazon Street onto Peñasquitos Drive	0.8 mile west of Rancho Carmel Substation	This project provides for the elimination of Sewer Pump Station 62 through the installation of various pipelines and the upsizing of the existing Sewer Pump Station 84.	August 2012	February 2016
10 – Rolling Hills Neighborhood Park ADA Upgrade	South of the intersection between Madrigal Street and Peñasquitos Drive	0.7 mile west of Rancho Carmel Substation	This project provides for the design and construction of ADA upgrades to the tot lot play areas at Rolling Hills Neighborhood Park in the Rancho Peñasquitos Community.	March 2017	November 2017

Table 5.18-1 (cont.): Planned and Proposed Projects within One Mile of the Proposed Project Area

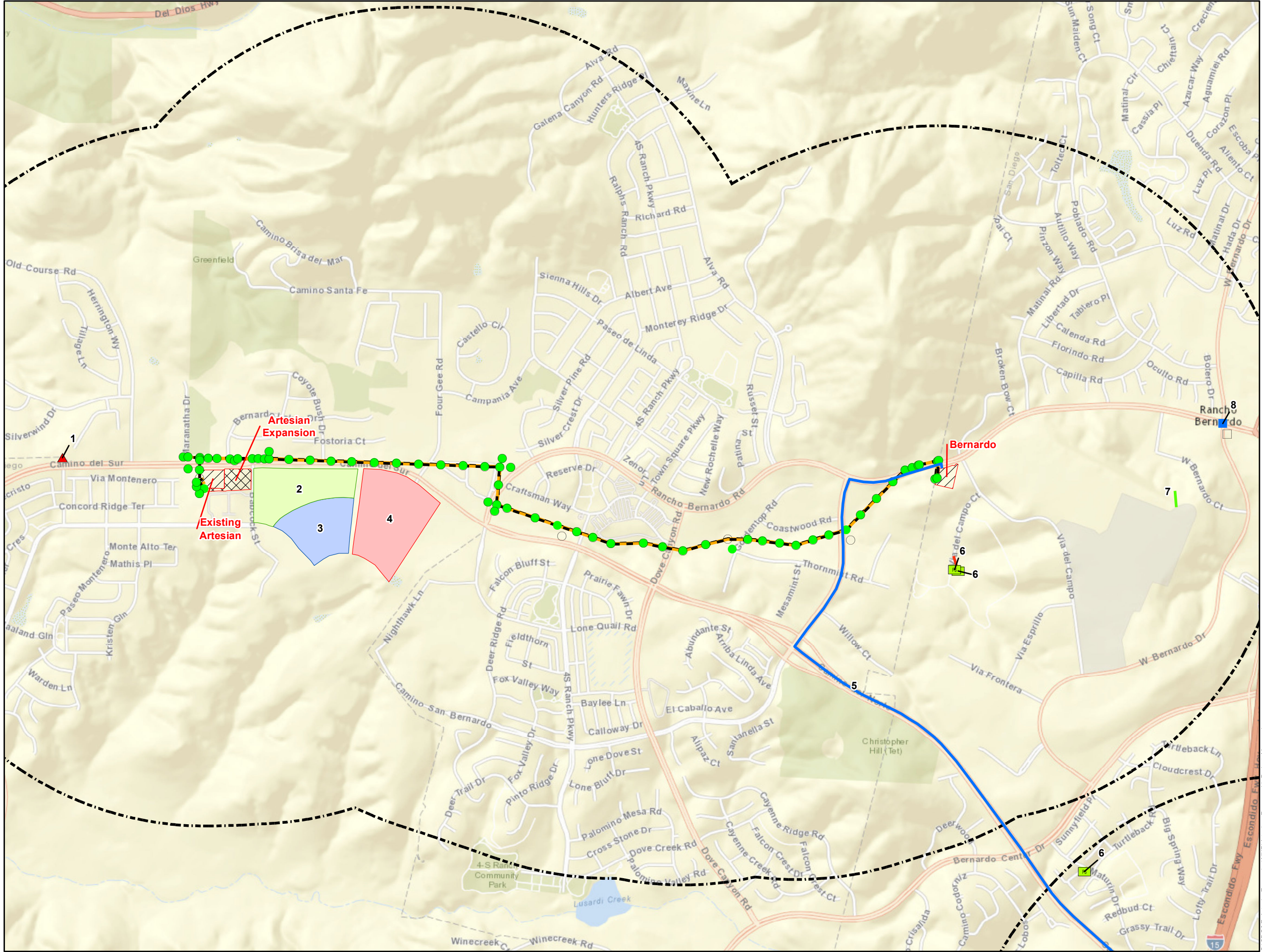
Map ID ^a and Project Name	Project Location ^a	Approximate Distance from the Proposed Project ^a	Project Description/Size	Anticipated Construction Schedule	
				Begin	End
11 – Citywide Manhole Improvements	North of Via Abajo; Northwest of Rancho Carmel Drive; Intersection of Calle Saucillo and Paseo Lucido	0.7 mile southwest of Rancho Carmel Substation, 0.2 mile west of Rancho Carmel Substation, 0.6 northeast of Rancho Carmel substation	Improvements to deteriorated manholes citywide.	October 2015	May 2016
12 – 70 th St, Paseo Lucido & San Ysidro St Lts	Along Paseo Lucido in between Avenida Venusto and Calle Pueblito	0.5 mile northeast of Rancho Carmel Substation	This project will install street lighting to City Standards to improve safety.	August 2015	April 2016
13 – ADA Accessibility Improvements Group II	Southern corner of Highland Ranch Road and World Trade Drive	Approximately 0.8 mile southeast of Rancho Carmel Substation	The project proposes to mitigate existing major barriers to accessibility in the parking area and path of travel to the building and throughout the building including the restrooms.	September 2016	December 2017
14 – Recycled Water Tank Modification	This project occurs along Carmel Valley Road and cuts across to travel along a private road that extends south from Carmel Valley Road	Approximately 0.9 mile northeast of Carmel Valley Staging Yard	To comply with California Water Code: Section 13529.2, the sub drains and tank drains from the Black Mountain Ranch Recycled Water Steel Tank will be relocated to the sewer.	September 2015	August 2017
15 – Recycled Water System Upgrades	This project cuts across Carmel Valley Road and extend to Elford Ct	Approximately 0.4 mile northeast of Carmel Valley Staging Yard	Nuisance water from multiple recycled water vaults is being discharged into municipal storm drains against State regulations. This project will bring the City into compliance by rerouting the reclaimed vault drains to the waste water system	October 2012	January 2016
16 – Citywide Street Lights GF Group 15	Intersection of Lethbridge Way and Black Mountain Road	Approximately 0.9 mile southeast of Carmel Valley Staging Yard	This project will install street lighting to City Standards to improve safety.	November 2017	July 2018
17 – Torrey Highlands Community ID and Enhance	Travels west along Carmel Valley Road from Caminito Vistana and then south along Camino Del Sur to Torrey Meadows Drive	As close as 400 feet southwest of Carmel Valley Staging Yard	This project will provide for community identification signage that will help differentiate Torrey Highland from the adjacent areas of Rancho Peñasquitos, Black Mountain/Santa Luz and Pacific Highland Ranch.	July 2016	November 2016

Table 5.18-1 (cont.): Planned and Proposed Projects within One Mile of the Proposed Project Area

Map ID ^a and Project Name	Project Location ^a	Approximate Distance from the Proposed Project ^a	Project Description/Size	Anticipated Construction Schedule	
				Begin	End
18 – Torrey Highlands Neighborhood Park	Northwest corner of Torrey Meadows Drive and Via Sabbia	Approximately 0.9 mile southwest of Carmel Valley Staging Yard	This project provides for the acquisition, design, and construction of a five useable acre neighborhood park in Torrey Highlands adjacent to a proposed elementary school, including half-width street improvement and a comfort station	September 2016	October 2017
19 – SDG&E Sycamore to Peñasquitos 230kV Transmission Line Project	Between existing Sycamore Canyon and Peñasquitos Substations	Adjacent to the Carmel Valley Road staging yard – new line would be installed in Carmel Valley Road.	The Sycamore to Peñasquitos project would construct a new 230kV transmission line between the existing Sycamore Canyon and Peñasquitos substations. The new line would be a combination of overhead and underground. The in service date is May of 2017, and construction is not anticipated to overlap with the Proposed Project.	2016	2017
<p>Notes: ^a Refer to Figure 5.18-1 for locations of all of the projects listed in this table and locations relative to the Proposed Project facilities. Projects are numbered (MAP ID) as they occur from west to east along the Proposed Project Alignment as indicated on Figure 5.18-1. Sources: <i>City of San Diego, SanGIS-Project Map Viewer, County of San Diego, City of San Diego GIS Project Map Viewer (Updated 2/01/2014), California Department of Transportation, SDG&E.</i></p>					



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Artesian 230kV Substation Expansion Project
Potential Cumulative Projects
Map
Fig. 5.18-1



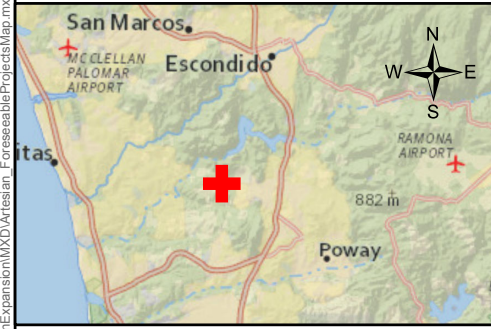
- Foreseeable Projects**
- ▲ Fire Facility/Structure
 - Sewer Pump Station
 - West Bernardo Median
 - PS Group II - City Wide SPS
 - Sewer Group 836
 - TL 633 Reconductor Project
 - Del Sur Living Future Neighborhood
 - Del Sur Town Center
 - Future Office Park
- Project Features**
- Project Structure
 - Overhead Alignment
 - ▨ Artesian Expansion Area
 - ▨ Other Project Areas
 - ⊞ 1 mile Buffer

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7/30/2016 A Sempra Energy utility

0 720 1,440 2,160 Feet





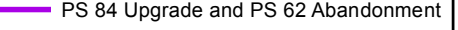
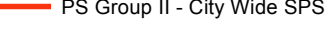
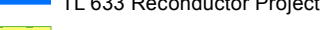



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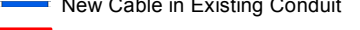
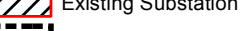
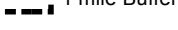
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Artesian 230kV Substation Expansion Project
Potential Cumulative Projects
Map
Fig. 5.18-1

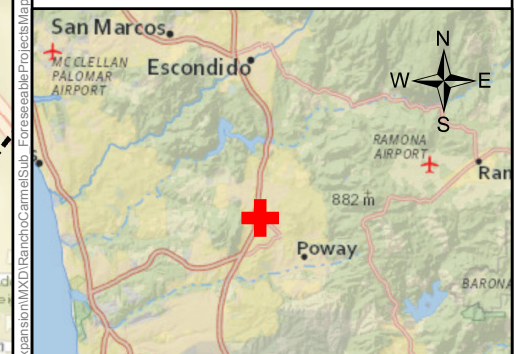
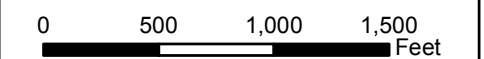
Foreseeable Projects

-  ADA Accessibility Improvements Group II
-  Man Hole Improvement
-  Sewer Pump Station
-  Street Light
-  PS 84 Upgrade and PS 62 Abandonment
-  PS Group II - City Wide SPS
-  TL 633 Reconductor Project
-  Rolling Hills Park ADA Upgrade

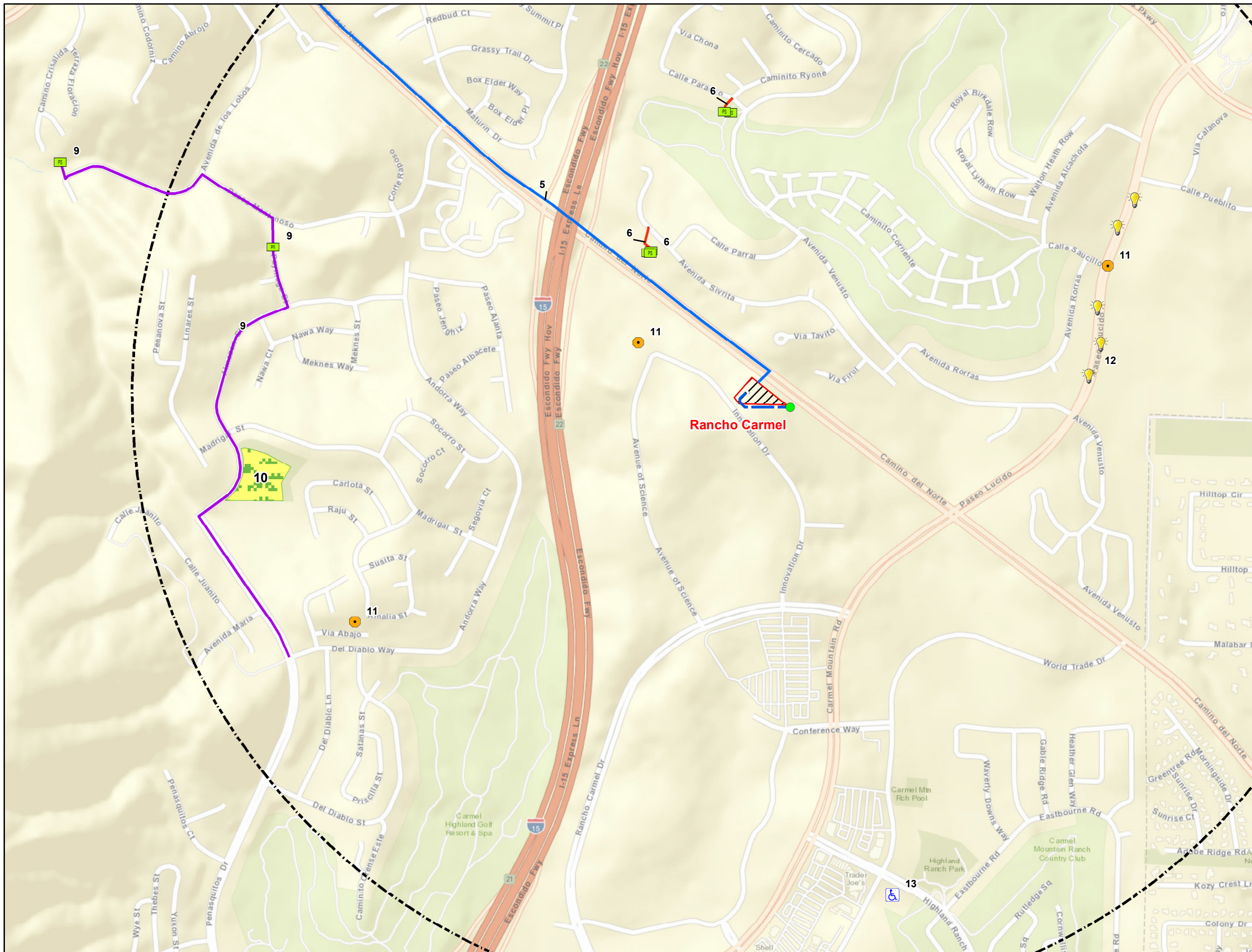
Project Features

-  Project Structure
-  New Cable in Existing Conduit
-  Existing Substation
-  1 mile Buffer

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Artesian 230kV Substation Expansion Project
Potential Cumulative Projects
Map
Fig. 5.18-1

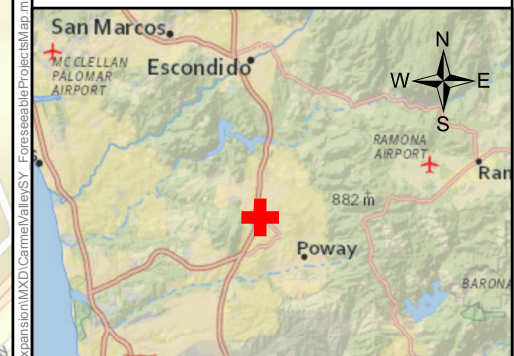
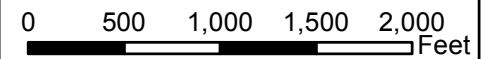
Sheet 3 of 3

- Foreseeable Projects**
- Citywide Street Lights GF Group 15
 - Recycled Water System Upgrades
 - Recycled Water Tank Modifications
 - Torrey Highlands Community ID and Enhance
 - Recycled Water System Upgrades
 - Recycled Water Tank Modifications
 - SX-PQ 230kV Transmission Line Project
 - Torrey Highlands Neighborhood Park South
- Project Features**
- Staging / Storage Yard
 - 1-mile Buffer

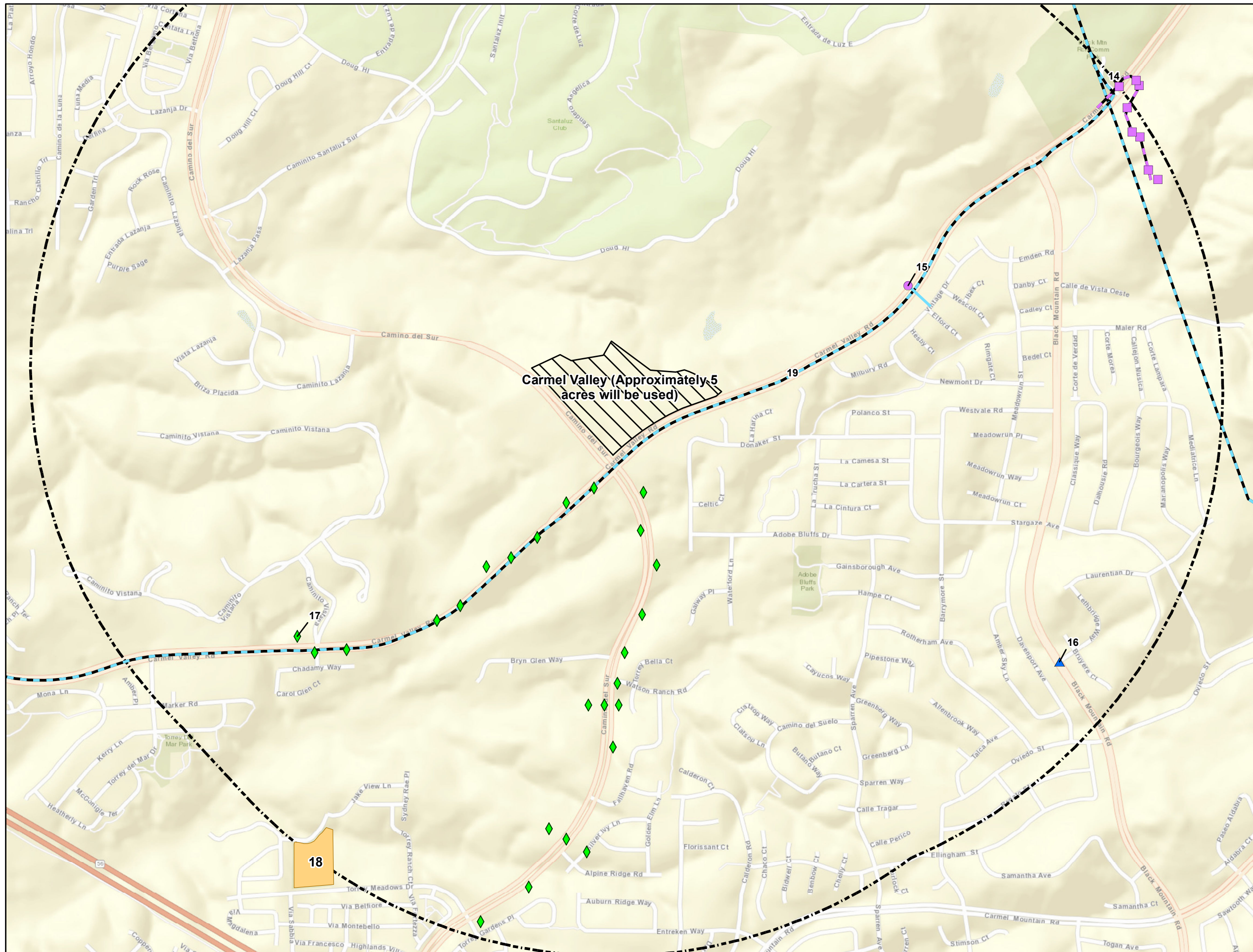
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Carmel Valley (Approximately 5 acres will be used)

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5.18.8 Potential Cumulative Impacts

This section of the PEA discusses potential cumulative impacts associated with the Proposed Project. As discussed in Section 5.18.2, cumulative impacts are those impacts that result from a combination of effects from the Proposed Project and other past, present, or planned, approved, or otherwise probable future projects. In order for cumulatively significant impacts to result, projects must generally share two factors in common; schedule and location. Thus, for cumulative impacts to occur, the Proposed Project must occur within the vicinity of other projects and be either constructed or operated at the same time, such that impacts associated with the project can combine for a net effect greater than either project taken individually. Projects that were not within one mile of the Proposed Project would not contribute to cumulative impacts and as such are not analyzed herein. As stated above, there were generally four identified projects that could reasonably result in cumulative considerable adverse effects, mainly due to location and potential overlaps during construction. These four projects are listed below:

- Del Sur Commercial/Professional Development
- Del Sur Living Residential Development
- Del Sur Town Center
- City of San Diego Sewer Group 836 Upgrades

Operation and maintenance of the Proposed Project would almost exclusively mirror existing operation and maintenance activities and as such, there is very little potential for cumulative effects resulting from operation and maintenance of the Proposed Project. However, certain focused impacts (such as operational noise and permanent change to visual character) could result in a potential for cumulatively considerable impacts, and these impacts are discussed herein, as applicable.

The potential cumulative impacts are analyzed for the following resource areas:

- Aesthetics,
- Air Quality,
- Biological Resources,
- Cultural Resources,
- Geology and Soils,
- Greenhouse Gases,
- Hazards and Hazardous Materials,
- Hydrology and Water Quality,
- Noise,
- Population and Housing,
- Public Services,

- Transportation and Traffic, and
- Utilities and Service Systems.

For each of these resource areas, only the criteria for which a potential cumulative impact exists are discussed. Where there is no potential for the Proposed Project to create an adverse impact relating to an individual CEQA Appendix G criterion, no potential for cumulative effects were deemed possible and the particular criterion is not discussed. At the beginning of each subsection below, the specific criterion with no potential for impacts are listed. Where there is potential for adverse impact, the pertinent CEQA Appendix G significance criteria are discussed and the Proposed Project’s contribution of any cumulatively considerable effects is analyzed.

No impacts were identified relating to the following CEQA Appendix G resource areas; therefore there is no discussion of potential cumulative impacts relating to these resource areas:

- Agriculture and Forestry Resources,
- Land Use and Planning,
- Mineral Resources, and
- Recreation.

5.18.8.1 Aesthetics

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to aesthetics or visual resources during construction or operations and maintenance:

- Substantial adverse effect on a scenic vista (Question 1a).
- Substantial damage to scenic resources (Question 1b).

In addition, as outlined in Section 5.1, Aesthetics, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criteria:

- New sources of light or glare (Question 1d).

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria and the above listed criteria are not discussed further herein. The remaining aesthetics-related impacts are discussed below, as applicable, for construction, operation, and maintenance of the Proposed Project.

Construction

Overall Visual Character (Question 1c)

Construction of the Proposed Project is anticipated to have temporary, less than significant impacts on the overall visual character of surrounding areas. Similarly, the projects listed in Table 5.18-1 would also result in temporary impacts in this regard, mostly involving short-term

visual impact effects to residents, motorists, and recreation users. Where construction of multiple projects overlap, and construction equipment and activities are visible within the same viewsheds, impacts would be cumulatively considerable. However, any resulting cumulatively considerable adverse impacts are not anticipated to be significant because construction itself would be temporary, and there would be limited numbers of potential receptors where multiple projects would be visible in a common viewshed. Construction of the Del Sur Commercial/Professional development, if it occurred simultaneously with the Proposed Project construction at Artesian Substation, could create cumulatively considerable effects. However, these effects are anticipated to be less than significant due to the limited time frame of construction and limited visual effect of construction activities.

New Light or Glare (Question 1d)

Construction of the Proposed Project is anticipated to have less than significant impacts relating to new light or glare (refer to Section 5.1, Aesthetics). Any required night time construction and temporary security lighting (at staging yards) would utilize lighting that would be directed on site and away from any nearby sensitive receptors. This will effectively limit the extent such lighting would have an impact. Therefore, the potential for significant cumulative impacts is low, even if other nearby projects (such as the adjacent Del Sur Commercial and Residential developments) also utilize night time construction. No other projects outlined in Table 5.18-1 occur within the immediate vicinity of Proposed Project to create cumulatively considerable adverse effects relating to light or glare. Therefore, the Proposed Project is not anticipated to contribute to any cumulatively considerable adverse effects in this regard.

Operation & Maintenance

Overall Visual Character (Question 1c)

Operation and maintenance of the Proposed Project is anticipated to have less than significant impacts on the overall visual character of the surrounding area. The change from baseline would be an incremental visual effect within a visual setting where existing substation, transmission, power line, and distribution line structures of similar scale and appearance are visible. It is not expected that this change would create a substantial change in the visual landscape to the public. The greatest potential for cumulative visual change is at the Artesian Substation site, where the Artesian Substation will be expanded to the parcel that is directly across the street from the Camino Del Sur Commercial/Professional Development project. However, the most visually prominent structures associated with the Artesian Substation expansion (230kV substation yard and new 230kV drop poles) would be located on the western portion of the substation property, separated from the proposed Camino Del Sur developments. The primary public view of both the Proposed Project and the Camino Del Sur Commercial Development would be from motorists along Camino Del Sur. However, given the separation between the 230kV yard and drop poles from the Del Sur Developments, any common view of both projects would be minimal. Therefore, the Proposed Project is not anticipated to contribute to any cumulatively considerable adverse effects in this regard.

5.18.8.2 Air Quality and Greenhouse Gases

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criterion during construction or operations and maintenance:

- Conflict with or obstruct implementation of the applicable air quality plan (Question 3a).

In addition, as outlined in Section 5.3, Air Quality, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criterion:

- Violate Air Quality Standards (Question 3b),
- Cumulatively considerable net increase of any criteria pollutant (Question 3c),
- Exposure of Sensitive Receptors (Question 3d), and
- Objectionable odors (Question 3e).

There would be no potential for cumulatively considerable impacts associated with these significance criteria, and the above listed criteria with no impacts are not discussed further herein. The remaining air quality-related impacts are discussed below for construction, operation, and maintenance of the Proposed Project.

Construction

Construction of the Proposed Project is anticipated to result in less than significant short-term impacts to air quality standards, exposure of sensitive receptors to pollutant emissions, and creation of objectionable odors. The potential for cumulatively considerable effects relating to these significance criteria is discussed below.

Air Quality Standards (Question 3b and 3c)

As stated above and within Section 5.3, Air Quality, emissions from construction of the Proposed Project would result in less than significant, short-term, temporary impacts relating to emission of criteria pollutants. Maximum daily emissions for the Proposed Project (simultaneous construction during peak construction) are also anticipated to be well below established significance thresholds (refer to Section 5.3 and Table 5.3-4).

The Proposed Project is therefore not anticipated to result in cumulatively significant impacts relating to air quality and emissions of criteria pollutants, either. Table 5.18-1 lists reasonably foreseeable projects located within 1 mile of the Proposed Project. Some of the projects listed in Table 5.18-1 may result in short-term impacts to air quality during construction activities. Therefore, while construction of the Proposed Project is not anticipated to result in significant cumulative impacts to air quality, potential construction overlap with other nearby projects could be cumulatively considerable. In general, construction emissions thresholds are developed with respect to existing air basin air quality and with respect to the fact that air emissions can be cumulatively considerable throughout a given air basin. Because construction emissions thresholds are developed to account, in part, for the possibility of other simultaneous projects and because precise evaluation of all construction emissions throughout a given air basin is not

feasible, the construction significance thresholds are considered herein as an indicator of the potential significance of the Proposed Project's direct and cumulative effect on air quality. Because the Proposed Project's emissions are all anticipated to be below thresholds of significance, the Proposed Project's contribution to cumulative emissions impacts are considered to be less than significant.

Exposure of Sensitive Receptors (Question 3d)

Although sensitive receptors were identified within a 1-mile radius of the Proposed Project's components, impacts to these receptors would be less than significant due to the limited nature of emissions (primarily from construction equipment) and the implementation of standard construction practices and BMPs which includes reducing idling time and implementing dust-control measures. Therefore the potential for increased, cumulative adverse effects to sensitive receptors is considered to be low. Impacts, if any, would be less than significant.

Objectionable Odors (Question 3e)

Construction of the Proposed Project is anticipated to have less than significant impacts associated with the emission of objectionable odors. Typical odor nuisances include emissions of substances such as hydrogen sulfide, ammonia, chlorine, and other sulfide-related compounds. No substantial sources of these pollutants would exist during construction of the Proposed Project, and none of the projects identified in Table 5.18-1 are likely to result in the emission of any of these substances during construction or operation, because none of them are the type of project that typically use these strong odor-producing compounds. Construction equipment and construction operations for the Proposed Project and the cumulative projects would emit trace pollutants that could be considered to have objectionable odors, such as diesel exhaust. However, these odors would be temporary and limited in nature, and are localized in effect, even where construction of the Proposed Project would occur simultaneously with other projects. Therefore, no cumulatively considerable adverse effects are anticipated relating to objectionable odors. Impacts, if any, would be less than significant.

5.18.8.3 Biological Resources

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to biological resources during construction or operations and maintenance:

- Substantial adverse effect on wetlands (Question 4c);
- Interfere substantially with native species (Question 4d),
- Conflict with local policies or ordinances (Question 4e); and
- Conflict with adopted HCP or NCCP (Question 4f).

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria and the above listed criteria are not discussed further herein. The remaining biological resource impacts are discussed below for construction, operation, and maintenance of the Proposed Project.

Construction and Operation

Impacts to Protected Species and Habitats (Questions 4a and 4b)

Construction of the Proposed Project is anticipated to have less than significant impacts relating to state and federally listed species and protected habitats with implementation of APMs. Impacts to native vegetation communities resulting from the construction of the Proposed Project areas can be cumulatively significant when assessed with other projects in the vicinity. As illustrated in Table 5.18-1, there are projects that are within a one-mile radius of the Proposed Project and are large enough to potentially have a regionally significant impact (such as the Del Sur development projects and the SDG&E Sycamore to Peñasquitos project). However, impacts to biological resources associated with the Proposed Project would be avoided or minimized through implementation of APMs BIO-1 through BIO-8 (refer to Section 5.4.5).

The Proposed Project would permanently affect approximately 1.2 acres of sensitive vegetation communities. Consistent with the *SDG&E Subregional NCCP*, the Proposed Project has been designed to avoid impacts to wetlands and non-wetland waters and sensitive vegetation communities when possible by placing poles outside of drainage areas, using existing access roads to the greatest extent possible, and placing any new facilities, staging areas, or access roads outside native vegetation communities, when feasible. Where sensitive resources are located within or adjacent to temporary work areas, such features would be avoided, to the extent feasible. The areas of permanent impacts from substation construction, new transmission and pole line structures, or new access roads do not occur all in one place but rather are spread across the length of the Proposed Project in locations where existing utility features already exist, but which are generally undeveloped and continue to have substantial acreage of land available for biological resources and wildlife migration. In addition, permanent impacts to sensitive habitat will be offset in accordance with the *SDG&E Subregional NCCP* by withdrawing credit from the SDG&E mitigation bank at prescribed ratios, or as required by the CDFW and USFWS if the *SDG&E Subregional NCCP* is not used for construction impacts.

Cumulative impacts within a region are most effectively minimized by comprehensive plans that address the impacts of regional growth on wildlife and its habitats. SDG&E has developed and implemented a regional, multi-species conservation program within its southern California range, known as the *SDG&E Subregional NCCP*. The *SDG&E Subregional NCCP* was developed in accordance with the California NCCP Act to avoid, minimize, and offset for regionally cumulative impacts to biological resources. Implementation of operational protocols in the *SDG&E Subregional NCCP* during operation and maintenance of the Proposed Project would ensure that any other cumulative impacts to biological resources would not be significant. Similarly, all other projects listed in Table 5.18-1 would be required to mitigate any impacts to state and federally listed species and/or habitats through compliance with Federal ESA, CESA, CWA, and applicable local habitat conservation plans. Therefore, any impacts to biological resources from other projects listed in Table 5.18-1 would also be mitigated, and as such, cumulatively considerable impacts to biological resources would be less than significant.

5.18.8.4 Cultural Resources

Operation and maintenance of the Proposed Project is not anticipated to have impacts on cultural resources. Therefore, no cumulative impacts would result for operation and maintenance of the

Proposed Project. The remaining cultural resources-related impacts are discussed below for construction of the Proposed Project.

Construction

Construction of the Proposed Project is anticipated to result in less than significant impacts (with implementation of APMs CUL-1 through CUL-9) to historic, archaeological, and paleontological resources and less than significant impacts to human remains and tribal cultural resources.

As illustrated in Table 5.18-1, there are 19 projects that are within a one-mile radius of the Proposed Project and are potentially large enough to have a regionally significant impact to cultural resources. However, impacts to cultural resources are site-specific, and as such are not expected to combine with the development of other projects to cumulatively increase the risk of impacting historic, prehistoric archaeological, paleontological resources or human remains. Potential impacts are evaluated on a case-by-case basis. The Proposed Project is designed to avoid known cultural resources and includes APMs to ensure impacts to any cultural resources within the Proposed Project area are less than significant. As such, the Proposed Project's contribution to cumulative impacts related to cultural resources would be less than significant.

5.18.8.5 Geology, Soils, and Mineral Resources

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to geology and soils resources during construction or operations and maintenance:

- Alquist-Priolo Earthquake Faults (Question 6a[i]), and
- Soils incapable of supporting septic system use (Question 6e).

In addition, as outlined in Section 5.6, Geology and Soils, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criterion:

- Substantial soil erosion or loss of topsoil (Question 6b),
- Located on unstable geologic unit (Question 6c), and
- Located on expansive soil (Question 6d).

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria and the above listed criteria are not discussed further herein. The remaining geology and soils impacts are discussed below for construction, operation, and maintenance of the Proposed Project.

Construction

Seismic, Geologic and Landslide Hazards (Questions 6a[ii] through 6a[iv], 6c, and 6d)

Construction of the Proposed Project is anticipated to have less than significant impacts relating to seismic and geologic hazards (refer to Section 5.6, Geology and Soils). Potential geologic

hazards, such as seismic shaking, liquefaction, subsidence, lateral spreading, and landslides, could adversely affect the Proposed Project, as well as most of the projects listed within Table 5.18-1. However, these potential impacts are largely avoided through adherence to project design features and engineering standards, which are generally applicable to all of the projects listed in Table 5.18-1 (note that SDG&E projects are not subject to the same standards as private development projects, however, all projects would be designed to account for geologic hazards). Furthermore, construction activities are short-term, and workers are not exposed to potential risks for long periods of time (i.e., only during work hours). Finally, construction activities would not occur at the same site, thereby reducing the probability that multiple construction crews (i.e., from different projects) would be exposed to the same potential risks during construction activities at one location. Therefore, any potential cumulative impacts would be less than significant.

Soil Erosion and Loss of Topsoil (Question 6b)

Construction of the Proposed Project would have less than significant impacts relating to soil erosion and loss of topsoil. The projects listed in Table 5.18-1 could reasonably be expected to have similar effects during construction activities. While these projects are not likely to have impacts relating to soil erosion and loss of topsoil in the immediate vicinity of the Proposed Project, all of these projects (including the Proposed Project) would be subject to NPDES requirements, including the preparation of a SWPPP. Adherence to NPDES requirements and erosion control BMPs included within the SWPPPs would ensure that the cumulative effects from the combined projects would be less than significant.

Operation and Maintenance

Seismic and Landslide Hazards (Question 6a[ii] through 6a[iv])

Operation and maintenance of the Proposed Project is anticipated to have less than significant impacts relating to seismic and geologic hazards (refer to Section 5.6, Geology and Soils) and activities for the Proposed Project would be similar to baseline conditions. Potential geologic hazards, such as seismic shaking, liquefaction, and landslides, could adversely affect the Proposed Project, as well as most of the projects listed within Table 5.18-1. However, these potential impacts are largely avoided through adherence to design and engineering standards, which are applicable to all of the projects listed in Table 5.18-1 as well as to the Proposed Project (refer to Section 5.6.3.1 for key substation design standards). Therefore, any potential cumulative impacts would be less than significant.

5.18.8.6 Greenhouse Gases

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criterion relating to greenhouse gases during construction or operations and maintenance:

- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Question 7b).

Therefore, there would be no potential for cumulatively considerable impacts associated with this significance criteria and the above listed criteria is not discussed further herein. The

remaining greenhouse gas impact is discussed below for construction, operation, and maintenance of the Proposed Project.

Construction

Greenhouse Gas Emissions (Question 7a)

The Proposed Project would result in GHG emissions during construction, specifically relating to fossil fuel combustion. These emissions would be below the threshold of 10,000 metric tons of carbon dioxide equivalents annually for industrial projects. Impacts are therefore anticipated to be less than significant. All GHG emissions can be considered to have a cumulative effect, and potential cumulative impacts associated with GHG emissions can be considered a state-wide effect. Existing thresholds were developed with this in mind. While construction of the Proposed Project could combine with construction of other projects, any cumulative impacts would not substantially hinder the long-term reduction of GHG emissions within the State of California. Therefore, cumulative effects are less than significant.

Operation and Maintenance

Greenhouse Gas Emissions (Question 7a)

Operation and maintenance activities would generate a minor amount of GHG emissions from vehicles and/or equipment used to inspect and maintain the facilities. However, this effect would mirror current conditions whereby the alignment is already operated and maintained by existing SDG&E employees and equipment. The Proposed Project GHG emissions were calculated to be well below the GHG significance threshold for industrial projects. Additionally, the Proposed Project will comply with applicable rules and regulations and will follow SDG&E's design and operational procedures to decrease GHG emissions. Some of the projects listed in Table 5.18-1, such as the Del Sur developments, would result in emission of GHGs during construction and operation. However, the Proposed Project operation is not anticipated to create a substantial contribution to cumulative effects from emission of GHGs. Cumulative impacts are anticipated to be less than significant.

5.18.8.7 Hazards and Hazardous Materials

The Proposed Project would not have any impacts associated with the following CEQA significance criteria relating to hazards and hazardous materials during construction or operations and maintenance:

- Sites listed pursuant to Government Code Section 65962.5 (Question 8d),
- Airport land use plans (Question 8e), and
- Private airstrip safety hazards (Questions 8f).

In addition, as outlined in Section 5.8, Hazards and Hazardous Materials, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criteria:

- Routine Transport and Handling of Hazardous Materials and Waste (Question 8a and 8b),

- Hazardous Emissions within one-quarter mile of school (Question 8c), and
- Fire Hazards (Question 8h).

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria and the above listed criteria are not discussed further herein. The remaining hazards and hazardous materials-related impacts are discussed below for construction, operation, and maintenance of the Proposed Project.

Construction

Routine Transport and Handling of Hazardous Materials and Wastes (Question 7a and 7b)

The Proposed Project would result in less than significant impacts associated with the routine handling and transport of hazardous materials as well as for potential accident or upset conditions. Any other similar potential hazardous materials impacts associated with the projects outlined in Table 5.18-1 would similarly be minimized through adherence to existing regulations. SDG&E, and all contractors involved in the construction of the Proposed Project would implement standard operational procedures to ensure that potential impacts resulting from hazardous material transport, use, storage and disposal remain less than significant. None of the projects outlined within Table 5.18-1 are likely to involve large-scale utilization of hazardous or acutely hazardous substances (such as chemical plants, refineries, or heavy manufacturing) and as such, the possibility of a cumulatively considerable threat from the routine transport or reasonably foreseeable accident or upset conditions involving these hazardous materials is considered to be less than significant.

Hazardous Emissions within 0.25 Mile of a School (Question 7c)

The Proposed Project would result in less than significant impacts related to hazardous emissions within 0.25 mile of a school. Construction of the Proposed Project would include common hazardous materials (such as fuels and lubricants), as would construction of most other projects listed in Table 5.18-1. However, the use and transportation of regulated materials is governed by extensive laws, ordinances, regulations, and standards. While the Proposed Project and some of the Projects within Table 5.18-1 occur within 0.25 mile of an existing school (such as the Del Sur developments), none of the projects with potentially overlapping construction are likely to emit hazardous materials in close proximity to any one of the schools. While the potential for upset conditions to cause a release of hazardous materials does exist during construction of any project, the chances of an upset or accident resulting in a substantial hazard to the public or the environment due to a hazardous material release is considered low. Any combined risk from overlapping construction is also considered to be low, and cumulative impacts (if any) would be less than significant.

Emergency Response and Evacuation (Question 7g)

The Proposed Project would not interfere with any emergency response or evacuation plans. Refer to discussion for cumulative impacts associated with traffic and transportation under Section 5.18.3.12 (Transportation and Traffic) below.

With traffic management practiced in accordance with City and County of San Diego requirements, impacts on emergency response or emergency evacuation routes from the Proposed Project would be less than significant. Temporary construction with appropriate traffic controls would occur as needed for installation of Proposed Project facilities. Emergency response planning would not be impacted during construction as streets would remain open to emergency vehicles throughout construction.

Of the Projects listed within Table 5.18-1 that could also result in partial or full road closures, none are expected to have overlapping construction with the Proposed Project along the same roadway segments. Therefore, there is no potential for cumulatively considerable impacts in this regard.

Fire Hazards (Question 7h)

Construction of the Proposed Project is anticipated to have less than significant impacts relating to fire hazards (refer to Section 5.8, Hazards and Hazardous Materials). Construction of the Proposed Project through vegetated areas, could be cumulatively considerable with other projects that would involve construction in the same areas. However, the projects outlined in Table 5.18-1 are either not located in heavily vegetated areas (such as the Del Sur development projects) or are not in the immediate vicinity of the Proposed Project construction areas. During construction activities, Proposed Project workers would follow the *SDG&E Fire Prevention Plan* and *Electric Standard Practice 113.1*, to ensure that the risk of a fire event during construction of the Proposed Project is minimized. With respect to potentially cumulatively considerable impacts resulting from construction of the Proposed Project and the projects outlined in Table 5.18-1, impacts would be less than significant because of the relatively lower risk of wildland fires from the potential cumulative projects.

Operation & Maintenance

Emergency Response and Evacuation (Question 7g)

While operation and maintenance of the Proposed Project would result in less than significant impacts to emergency response or evacuation during inspection of underground vaults, these impacts are not anticipated to create a cumulatively considerable effect when combined with the projects listed in Table 5.18-1. Of the Projects listed within Table 5.18-1 that could also result in partial or full road closures, only the TL633 project could have similar effects in the same area as the Proposed Project. Specifically, the TL633 project could (pending final design) have underground vaults adjacent to the Bernardo Substation, along the same stretch of road where the new underground Bernardo getaways included with the Proposed Project would also include new underground vaults. However, the infrequent nature of underground vault inspection events (approximately once every three years) dictate that any cumulative effect of the projects would be less than significant.

5.18.8.8 Hydrology and Water Quality

The Proposed Project would have no potential for impacts associated with the following CEQA significance criteria relating to hydrology and water quality during construction or operations and maintenance:

- Substantial depletion of groundwater (Question 9b),
- Placement of housing within 100-year flood hazard area (Question 9g),
- Placement of structures within 100-year flood hazard area (Question 9h), and
- Exposure of people or structures to flooding (Question 9i).

In addition, as outlined in Section 5.9, Hydrology and Water Quality, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criteria:

- Effects on existing drainage patterns (Question 9c and 9d);
- Runoff water (Question 9e);
- Substantially degrade water quality (Question 9f); and
- Exposure of people or structures to seiche, tsunami, or mud flow (Question 9j).

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria or with operation and maintenance of the Proposed Project. The remaining hydrology and water quality-related impacts are discussed below for construction of the Proposed Project.

Construction

Stormwater and Water Quality (Questions 9a, 9e, 9f)

Construction of the Proposed Project would result in less than significant impacts to water quality standards, stormwater, and runoff. While construction of the Proposed Project has the potential to cause detrimental impacts to water quality, these potential adverse effects are minimized by complying with existing regulations, including NPDES and stormwater control regulations, and by implementing guidance and BMPs presented in the project-specific SWPPP and *SDG&E BMP Manual*. Additionally, the Proposed Project would comply with the Construction General Permit and would require implementation of BMPs to prevent degradation of water quality from stormwater runoff and other non-stormwater permitted discharges. No other discharges to surface or ground water are anticipated during construction.

The projects listed in Table 5.18-1 would have a similar potential to degrade water quality during construction, but these projects would also be subject to existing water quality and stormwater regulations and would also generally be considered to have less than significant impacts on water quality.

None of the projects outlined in Table 5.18-1 that could occur concurrently with the Proposed Project would likely involve direct discharges to surface waters that could result in significant adverse effects to surface water quality. As such, no cumulatively considerable effects are anticipated. Overall, the Proposed Project is not anticipated to contribute to any cumulatively considerable adverse effects on water quality, and, should limited construction overlap occur, cumulative impacts are not anticipated to be significant.

Drainage Patterns (Question 8c and 8d)

As outlined in Section 5.9.4.4, construction of the Proposed Project would not result in substantial effects to the existing drainage patterns within the Proposed Project area. Impacts are therefore anticipated to be less than significant. BMPs would be implemented during construction to contain sediment and protect water quality. Limited grading and earth-moving activities during construction are designed to return runoff to existing drainage patterns without increasing runoff, and no grading within creeks or drainages would occur that could alter flow. The Proposed Project would therefore not result in significant adverse effects in this regard. Concurrent construction with either the Del Sur Residential or Commercial/Professional developments would increase cumulative potential for erosion or siltation. However, construction activities would similarly be subject to BMPs that would reduce the risk of erosion or sedimentation. The Del Sur parcels have already been subject to site development (i.e. grading) and sedimentation and stormwater control infrastructure is already in place in preparation for final construction. No additional alteration of drainage patterns is anticipated, and any potential future cumulative adverse effects would be less than significant.

Mudflow Effects (Question 8j)

As outlined in Section 5.9.4.11, the risk that the Proposed Project would contribute to the occurrence of mudflows or be affected by a mudflow is less than significant. None of the projects outlined within Table 5.18-1 located in close proximity to the Proposed Project are located within areas containing steep slopes that could be subject to mudflow conditions. Thus, the Proposed Project is not anticipated to contribute to any cumulatively considerable adverse effects relating to the exposure to a potential mudflow.

Operation and Maintenance*Water Quality (Question 8a)*

Operations and maintenance effects on water quality would not represent a substantial change from existing conditions. Increased equipment at the expanded Artesian Substation would slightly increase the potential for impacts to water quality from spills or leaks; however compliance with existing regulations would ensure that impacts, if any, would be less than significant. No other projects listed in Table 5.18-1 are considered likely to cause a significant impact to water quality, and would be subject to the same regulations governing water quality as is the Proposed Project. Operation and maintenance of the Proposed Project is therefore not anticipated to contribute to cumulatively considerable adverse impacts to water quality.

5.18.8.9 Noise

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to Noise during construction or operations and maintenance:

- Effects associated with public airports (Question 12e), and
- Effects associated with private airports (Question 12f).

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criterion relating to Noise during construction:

- Substantial permanent increase in ambient noise (Question 12c).

In addition, as outlined in Section 5.12, Noise, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criterion:

- Exposure to excessive ground-borne vibration or noise (Question 12b).

Therefore, there is no potential for cumulative impacts associated with these significance criteria. The remaining noise-related impacts are discussed below for construction, operation, and maintenance of the Proposed Project.

Construction

Generation of Noise and Vibration (Questions 12a, 12b, and 12d)

As outlined in Section 5.12, Noise, construction of the Proposed Project would have less than significant impacts relating to generation of noise and ground-borne vibration. Construction of the Proposed Project would generate noise and ground-borne vibration, as would construction of the projects outlined in Table 5.18-1. However, most of the projects outlined in Table 5.18-1 are not located in the immediate vicinity of the Proposed Project and are therefore not likely to combine with Proposed Project-generated noise or vibration to create significant adverse effects. However, the Del Sur Commercial/Professional Development is located in close proximity to the Artesian Substation site. Therefore, construction noise from the Proposed Project and Del Sur could be cumulatively considerable. The only sensitive land use in close proximity to both projects is the multi-family residential development located south of the Artesian Substation (west of the De Sur Commercial Development). The multi-family residential structures are approximately 250 feet from the center of the Artesian Substation site and as close as approximately 100 feet from the Del Sur commercial parcel. Both projects would be subject to allowable construction hour requirements, which limit the adverse effects of construction noise on nearby noise sensitive areas. Cumulative impacts, if any, are anticipated to be less than significant.

Operation and Maintenance

Generation and Substantial Increases of Noise and Compliance with Noise Codes (Questions 12a, 12c, and 12d)

Operation and maintenance of the Proposed Project would have less than significant impacts relating to noise generation. Specifically, the expanded Artesian Substation is not anticipated to generate noise in excess of established local Noise Codes (refer to Section 5.12.4.2). Operations and maintenance of the power line and distribution line elements of the Proposed Project would be consistent with existing conditions. None of the projects listed within Table 5.18-1 are anticipated to result in substantial noise increases that would combine with Proposed Project-generated operations noise (expanded Artesian Substation). Therefore, no significant cumulative adverse impacts are anticipated.

5.18.8.10 Population and Housing

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to population and housing during construction or operations and maintenance:

- Displacement substantial numbers of existing housing (Question 13b), and
- Displacement of substantial numbers of people (Question 13c).

In addition, operation and maintenance of the Proposed Project is not anticipated to have any impacts on population and housing. Therefore, there is no potential for cumulative impacts associated with these significance criteria or operation and maintenance of the Proposed Project. The remaining population and housing-related impacts are discussed below for construction of the Proposed Project.

Construction

Construction of the Proposed Project is anticipated to have less than significant impacts relating to induced population growth in the Proposed Project area. Construction of the Proposed Project, while lasting approximately 30 months, would only include up to approximately 70 employees at one time, which would not constitute a substantial increase in employment in the area. Furthermore, the Proposed Project would primarily employ workers who are already living within the City and County of San Diego. Additionally, the Proposed Project would not provide access to previously inaccessible areas, extend public services to previously un-served areas, or cause new development elsewhere, outside of the San Diego County area. Therefore, construction of the Proposed Project is not anticipated to combine with other projects to create cumulatively significant impacts relating to population growth.

5.18.8.11 Public Services

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to public services during construction:

- Schools, parks, and other public facilities (Questions 14a[iii - v]).

In addition, as outlined in Section 5.14, Public Services, there is no potential for impacts during operation and maintenance of the Proposed Project. Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria and the above listed criteria are not discussed further herein. The remaining public services-related impacts are discussed below for construction, operation, and maintenance of the Proposed Project.

Construction

Police and Fire Protection Services (Question 14a [i and ii])

While construction of the Proposed Project would have less than significant impacts relating to the operation of police and fire protections services, these impacts are not associated with any increased demand for these services, or any direct impacts to these services that would require

new or expanded facilities. While some of the projects outlined within Table 5.18-1 (such as residential development projects) could increase demand for these services or require the construction of new or expanded facilities, the Proposed Project would not contribute to any cumulatively considerable effect because the Proposed Project would not result in similar impacts to these services. Therefore, no cumulative impacts are anticipated for police and fire protection services.

5.18.8.12 Transportation and Traffic

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to transportation and traffic:

- Changes to air traffic control patterns (Question 16c), and
- Impacts to public transit (Question 16f).

In addition, as outlined in Section 5.16, Transportation and Traffic, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criteria:

- Hazards due to design features (Question 16d);
- Inadequate emergency access (Question 16e); and
- Public Transit and Alternate Transportation (Question 16f).

Therefore, there is no potential for cumulative impacts associated with these significance criteria for operations and maintenance. The remaining traffic and transportation-related impacts are discussed below for construction, operation and maintenance of the Proposed Project.

Construction

Traffic Congestion and LOS (Question 14a and 14b)

Construction of the Del Sur Commercial and Residential projects would generate traffic, in a similar manner as the Proposed Project. Due to the proximity of these three projects, overlapping construction would result in a cumulative increase in trips on the local transportation system. However, as shown in Table 5.16-2, existing LOS along the local transportation system in the vicinity of the Artesian Substation and the Del Sur development projects is B or higher. Therefore, a substantial increase in traffic or lane closures would be required to cause significant deterioration of LOS. While it is unlikely that construction traffic would result in sufficient increases in traffic or lane closures to cause such a deterioration of LOS, the Proposed Project construction traffic represents a very small fraction of the existing traffic volume and the Proposed Project's contribution to any cumulative increase in traffic would be less than significant.

Design Hazards (Question 14d)

The Proposed Project would result in less than significant impacts during construction within and over public roadways, as discussed further in Section 5.16.4.5. SDG&E would utilize guard

structures for conductor stringing over roadways and encroachment permits would include traffic control plans that would ensure work is completed in a safe manner, in accordance with applicable local regulations. None of the projects outlined in Table 5.18-1 would involve construction within roadways in the immediate vicinity of the Proposed Project at the same time. Therefore, any cumulative impacts associated with temporary design hazards would be less than significant.

Emergency Access (Question 14e)

Construction of the Proposed Project would result in less than significant impacts to emergency access, as further discussed in Section 5.16.4.6. SDG&E would comply with traffic control requirements in the traffic control plan, to ensure that emergency vehicle access is maintained, and that impacts to emergency-related traffic flow are minimized. None of the projects outlined in Table 5.18-1 would involve construction within roadways in the immediate vicinity, or during the same timeframe, as the Proposed Project. For example, while the TL 633 underground conversion project would result in similar impacts to emergency access during construction within existing roadways, the effects would not be cumulative with the Proposed Project as the construction activities are not anticipated to overlap. Therefore, any cumulative impacts associated with emergency access would be less than significant.

Public Transit and Alternate Transportation (Question 14f)

While the Proposed Project would have less than significant effects on existing bike lanes during underground substation getaway construction, the three projects that could have overlapping construction with the Proposed Project would not likely have similar effects on the same or immediately adjacent bike lanes. Therefore, cumulative impacts are not anticipated.

Operation and Maintenance

Traffic Congestion and LOS (Question 14a and 14b)

The Proposed Project would result in less than significant impacts relating to traffic congestion and LOS during operation and maintenance activities due to very small increases in facility inspections (refer to Section 5.16.4.2 and 5.16.4.3). Within the vicinity of the Proposed Project, a number of planned projects (such as the Del Sur Residential, Commercial, and Town Center developments) could result in significant increases in traffic (daily trips). However, the Proposed Project's operation traffic would be less than one trip per day¹ and would therefore not substantially contribute to any cumulatively significant deterioration of LOS that could result once the three Del Sur development projects are completed and under operation. Therefore, the Proposed Project's impacts would not be cumulatively considerable.

¹ Maintenance inspections and work on circuit breakers occur every 3 years for a minor one day check and every 10 years for a major overhaul. The new 230/69kV transformers will require an electrical test every 5 years (lasting 1 day) and a tap changer inspection every 7 years (lasting 1-2 days). All other operation, maintenance, and inspection activities at the Artesian Substation site would be similar to existing activities. Therefore, over a 10 year period, the Artesian Substation site would experience approximately 7 additional maintenance events.

5.18.8.13 Utilities and Service Systems

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to utilities and service systems during construction or operations and maintenance:

- Wastewater treatment requirements (Question 17a),
- Wastewater treatment services (Question 17e), and
- Compliance with solid waste regulations (Question 17g).

In addition, as outlined in Section 5.17, Utilities and Service Systems, there is no potential for impacts during operation and maintenance of the Proposed Project associated with the following CEQA Appendix G significance criteria:

- New water and wastewater facilities (Question 17b); and
- Landfill capacity (Question 17f).

Therefore, there is no potential for cumulative impacts associated with these significance criteria or operations and maintenance. The remaining utilities and service system-related impacts are discussed below for construction of the Proposed Project.

Construction

New Water or Wastewater Facilities (Question 17b)

Construction of the Proposed Project will require the temporary use of potable and recycled water. It is anticipated that the water will be provided via existing infrastructure, which is located throughout the Proposed Project area. Similarly, construction water required during construction of other projects (such as the Del Sur commercial and residential development) would also obtain water via the extensive existing water infrastructure system. Therefore, any cumulative effect from water use is anticipated to be less than significant.

New or Expanded Stormwater Facilities (Question 17c)

The Proposed Project includes the expansion of an existing stormwater detention basin located immediately west of the Artesian Substation site. However, none of the projects listed in Table 5.18-1 would utilize the same stormwater detention basin. Any required stormwater system upgrades included with the other development projects listed in Table 5.18-1 (such as the Del Sur Development projects) would not affect the Artesian detention basin expansion, and as such any cumulative impacts relating to stormwater facilities would be less than significant.

Water Supply (Question 17d)

Construction of the Proposed Project will require approximately 10 million gallons of water. SDG&E anticipates obtaining this water from Olivenhain MWD, most of which will consist of recycled water. The Proposed Project's utilization of recycled water will minimize the Proposed Project's effect on water supply in the project vicinity. Each project listed in Table 5.18-1 will have to secure water rights prior to construction, and those rights would not have an effect on the Proposed Project's water use. Therefore, any cumulative impacts relating to water supply during construction would be less than significant.

Solid Waste and Landfill Capacity (Question 17f)

Construction of the Proposed Project would result in less than significant impacts to solid waste (landfill) capacity. Some of the projects listed in Table 5.18-1 (Del Sur Development projects) would have a potential to use some solid waste and landfill capacity during construction. However, as shown in Table 5.17-1, the existing local landfill system has ample capacity for the foreseeable future. Therefore, cumulative impacts to solid waste and landfill capacity, if any, would be less than significant.

Operation and Maintenance*New or Expanded Stormwater Facilities (Question 17c)*

The Proposed Project includes the expansion of an existing stormwater detention basin located immediately west of the Artesian Substation site. However, none of the projects listed in Table 5.18-1 would utilize the same stormwater detention basin. Any required stormwater system upgrades included with the other development projects listed in Table 5.18-1 (such as the Del Sur Development projects) would not affect the Artesian detention basin expansion, and as such any cumulative impacts relating to new or expanded stormwater facilities would be less than significant.

Water Supply (Question 17d)

Operation of the expanded Artesian Substation would require a small increase in water use for washing and maintenance of equipment. However, the small increase in water use is not expected to require new or expanded water entitlements. SDG&E would utilize existing water sources that are used for substation maintenance throughout SDG&E's system. Each project listed in Table 5.18-1 will have to secure water rights prior to construction and operation, and those rights would not have an effect on the Proposed Project's water use. Nor would the slight increase in substation water use affect any other project's water use or water rights/entitlements. Therefore, any cumulative impacts relating to water supply during construction would be less than significant.

5.18.9 Applicant Proposed Measures

While no potentially significant cumulative impacts are expected, the APMs included for reduction of impacts to biological resources, cultural resources, and noise would also serve to further reduce potential cumulative impacts as well.

5.18.10References

- California Energy Commission (CEC). 2013. *Energy Facility Status (Power Plant Projects Filed Since 1996)*. Downloaded September 25, 2015. Downloaded from: http://www.energy.ca.gov/sitingcases/all_projects.html.
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