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CHAPTER 5 – DETAILED DISCUSSION OF SIGNIFICANT IMPACTS

5.0 INTRODUCTION

In accordance with the Proponent's Environmental Assessment (PEA) Checklist issued by the California Public Utilities Commission (CPUC) on November 24, 2008, this section:

- identifies the potentially significant impacts that will result from the construction, operation, and maintenance of the San Diego Gas & Electric Company (SDG&E) Tie Line (TL) 649 Wood-to-Steel Replacement Project (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 IMPACTS

Based on the findings in Chapter 4 – Environmental Impact Assessment, the Proposed Project is not likely to result in significant impacts to any resource areas after implementation of the Project Design Features and Ordinary Construction/Operating Restrictions. Therefore, no applicant-proposed measures are provided. Chapter 3 – Project Description provides the Project Design Features and Ordinary Construction/Operating Restrictions that have been proposed as part of the Proposed Project.

5.2 DESCRIPTION OF PROJECT ALTERNATIVES AND IMPACT ANALYSIS

5.2.0 Introduction

Section 15126.6, subdivisions (a) and (f)(2)(A) of the California Environmental Quality Act (CEQA) Guidelines (Title 14 California Code of Regulations) and Assigned Commissioner's Ruling on Application 01-07-004 (dated October 16, 2002) do not require a review of alternatives when a project will not result in significant environmental impacts after mitigation, as is the case with the Proposed Project. However, the CPUC has adopted an "Information and Criteria List" to determine whether applications for projects are complete, which specifies the information required from any applicant for a project subject to CEQA. As the lead agency, the CPUC requires applicants for a Permit to Construct or a Certificate of Public Convenience and Necessity to describe a reasonable range of alternatives within the PEA.

This section summarizes and compares the environmental advantages and disadvantages of the Proposed Project and the alternatives considered. In accordance with CPUC requirements, SDG&E evaluated a reasonable range of alternatives that meet most of the project objectives.

This environmental alternatives analysis evaluates the No Project Alternative, the Underground Alternative, and the State Route (SR-) 905 Alternative for the Proposed Project. Each alternative is evaluated for its feasibility and ability to fulfill the Proposed Project objectives, as well as its ability to reduce environmental impacts compared to the Proposed Project. Table 5-1:

Alternatives Considered lists each alternative that was considered during the evaluation process. Alternatives to the Proposed Project that were evaluated, including the No Project Alternative, are summarized in the following subsections. Feasible alternatives that were considered but eliminated because they did not meet the Proposed Project objectives or reliability requirements are discussed briefly in Sections 5.2.3 No Project Alternative, 5.2.5 Underground Alternative, and 5.2.6 State Route 905 Alternative.

Table 5-1: Alternatives Considered

Alternative	Evaluated or Eliminated		
No Project Alternative	Eliminated Prior to Environmental Review		
Proposed Project	Evaluated		
Underground Alternative	Eliminated Prior to Environmental Review		
SR-905 Alternative	Eliminated Prior to Environmental Review		

5.2.1 Methodology

The alternatives were considered based on their ability to meet the engineering requirements and the Proposed Project objectives. Because the No Project Alternative, Underground Alternative, and SR-905 Alternative did not meet all of the Proposed Project objectives, no environmental review was conducted.

5.2.2 Proposed Project Objectives

The Proposed Project is intended to meet several objectives identified by SDG&E. The overall objective of the Proposed Project is to increase the fire safety and service reliability of TL 649. The Proposed Project is designed to protect the electric system against wildfire damage and reduce the potential for the power line to be an ignition source. Specifically, the Proposed Project has the following three objectives:

- 1. Increase the fire safety and service reliability of TL 649.
- 2. Minimize potential adverse environmental effects.
- 3. Locate proposed facilities within existing utility corridors to the extent feasible.

Each of these Proposed Project objectives is more thoroughly described in Chapter 2 – Project Purpose and Need.

5.2.3 No Project Alternative

CEQA requires an evaluation of the No Project Alternative so that decision makers can compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project (CEQA Guidelines, Section 15126.6(e)). Under the No Project Alternative, the existing TL 649 wood poles along the Proposed Project route would not be replaced with galvanized steel poles.

The No Project Alternative is feasible; however, it would not meet Objective 1 since the No Project Alternative would not address the fire safety concerns or provide the opportunity to

increase the service reliability of the power line. In addition, the No Project Alternative would not meet Objective 2 because it would entail continued operation and maintenance of wood poles in a high fire risk area; therefore, the potential environmental impacts from a fire associated with baseline environmental conditions would remain the same, rather than be minimized. The No Project Alternative would keep the existing power line within existing utility corridors and would be consistent with Objective 3. Because the No Project Alternative would not meet Objective 1 or 2, it was eliminated prior to environmental review.

5.2.4 Proposed Project

The Proposed Project will involve the replacement of the existing wood poles along TL 649 from approximately Black Coral Way and Sea Lavender Way east and south to just north of Otay Mesa Road with new steel poles. The majority of the existing 69 kilovolt (kV) conductor will be transferred to the new poles, and the 12 kV distribution conductor will be replaced or transferred to the new poles. The portion of TL 649 that is currently in an underground configuration under SR-125 will be replaced with new 69 kV conductor in an overhead configuration. The new poles will typically be replaced within approximately 10 feet of the existing pole locations and within the existing rights-of-way (ROWs). Construction of the Proposed Project will result in the temporary disturbance of approximately 19 acres.

The Proposed Project is feasible and meets all of the Proposed Project objectives. The Proposed Project will meet Objective 1 because it will remove the existing wood poles in a high fire risk area, and install new steel poles that will be able to better withstand wildfire damage. The Proposed Project will also meet Objective 2 because the temporary disturbance area and the potential to impact resources is less than the underground and SR-905 alternatives. Compared to the No Project Alternative, the Proposed Project will result in more temporary and permanent disturbance and impacts to resources, but will reduce the impact from potential fires in the area. The Proposed Project will also meet Objective 3 because the new steel poles will be installed within existing ROWs. Because the Proposed Project is feasible and will meet all of the objectives, it was evaluated for environmental impacts to each resource area. A detailed analysis of the Proposed Project is feasible and meets all of the Proposed Project objectives, the Proposed Project was selected as the preferred alternative.

5.2.5 Underground Alternative

The Underground Alternative would involve replacing the existing TL 649 from approximately Black Coral Way and Sea Lavender Way east and south to just north of Otay Mesa Road with a new, completely underground 69 kV power line. The Underground Alternative would include the removal of the same existing wood structures that will be removed as part of the Proposed Project; however, the Underground Alternative would require modification of the easement to allow for an underground configuration. The Underground Alternative would include new underground cable installation along the current TL 649 route, including new splice vaults and cable poles, as needed. Construction of the Underground Alternative would result in the temporary and permanent disturbance of approximately 27 acres. In addition, the Underground Alternative would likely require extensive blasting; impact vegetation, cultural, and water resources; and potentially impact existing underground gas and water utilities.

The Underground Alternative is not feasible because the site is not suitable for underground construction, which would likely require extensive blasting of rock to install the underground duct banks. The Underground Alternative would meet Objective 1 because it would remove the existing wood poles in a high fire risk area, and the underground power line would be able to withstand wildfire damage better than the wood poles. The Underground Alternative would not meet Objective 2 because the temporary and permanent disturbance areas and the potential to impact resources is greater than that of the Proposed Project. The Underground Alternative would meet Objective 3 because it would be installed in an existing utility corridor; however, modification to the easements would be required to allow for an underground configuration. Because the Underground Alternative is not feasible and would not meet Objective 2, it was eliminated prior to environmental review.

5.2.6 State Route 905 Alternative

The SR-905 Alternative would include the construction of a new approximately six-mile-long overhead or underground route, depending on City of San Diego and California Department of Transportation (Caltrans) requirements, along SR-905 to intercept the existing portion of TL 649 going to San Ysidro Substation from Otay Substation. In addition, the SR-905 Alternative would conceptually require the loop-in of an existing nearby power line into Otay Lake Substation to maintain area reliability and keep the Otay Lake substation energized. Further studies would be required to confirm that the loop-in would be feasible and would sufficiently maintain area reliability.

Construction of the SR-905 Alternative would result in up to approximately 22 acres of temporary and permanent impacts not including the aforementioned loop-in or any associated transmission upgrades. For the latter impacts, further studies would be required. If the line were installed underground, it would be located within the road franchise; if the line were installed overhead, new easements may be required.

The SR-905 Alternative may be feasible if the City of San Diego and Caltrans allow overhead installation, if SDG&E could obtain the required easements and permitting, and if Otay Lake Substation could be kept in service via the aforementioned loop-in of an existing power line. If however the City of San Diego and Caltrans were to require the SR-905 Alternative to be installed underground, the additional cost of construction would be considerable and likely render it infeasible. The SR-905 Alternative would meet Objective 1, since it would remove the portion of TL 649 located in a high fire risk area. The SR-905 Alternative would not meet Objective 2, since the temporary and permanent disturbance areas is greater than that of the Proposed Project, although it would primarily occur along an existing highway with less potential for sensitive resources than the Proposed Project, and it would require a loop-in of a nearby power line into Otay Lakes Substation, which would result in additional temporary and permanent impacts in areas with potential sensitive resources. If the SR-905 Alternative is installed overhead, it would not meet Objective 3 because the new route would not be constructed within existing utility corridors. Because the SR-905 Alternative may not be feasible, would not meet Objective 2, and may not meet Objective 3, it was eliminated prior to environmental review.

5.2.7 Conclusion

Three alternatives to the Proposed Project were evaluated against the Proposed Project objectives. The No Project, Underground Alternative, and SR-905 Alternative were evaluated and rejected based on their inability to meet all of the Proposed Project objectives. The Proposed Project was selected as the preferred alternative because it is feasible and meets all of the Proposed Project objectives.

5.3 GROWTH-INDUCING IMPACTS

5.3.0 Growth-Inducing Impacts

CEQA requires a lead agency to review and discuss ways in which a project could induce growth. CEQA Guidelines Section 15126.2(d) considers 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 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.

The growth-inducing potential of the Proposed Project could be considered significant if it were to stimulate population growth or an increase in population density in the County of San Diego, City of San Diego, City of Chula Vista, or other surrounding communities, above what is assumed in local and regional land use plans or in projections made by regional planning authorities. Significant growth impacts could also occur if the Proposed Project were to provide infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies. The Proposed Project will improve the reliability of the existing system by fire hardening, but will not increase housing, bring in new services, or increase the capacity of the existing infrastructure system. Therefore, the Proposed Project will not stimulate population growth or result in a new concentration of residents, businesses, or industries.

5.3.1 Growth Caused by Direct and Indirect Employment

Construction and operation of the Proposed Project itself will not affect employment patterns in the area. SDG&E will employ approximately 35 workers for the construction of the Proposed Project over an approximately seven month-long period. Most of the construction workers are expected to come from San Diego County and will not require lodging. Contractors from outside San Diego County may be mobilized to the job site for all or part of the construction phase of the Proposed Project and may stay at existing local hotels. There are sufficient hotels and other lodging facilities within close proximity to the Proposed Project area to accommodate the maximum number of crew members anticipated to construct the Proposed Project, as discussed in Section 4.13 Population and Housing.

Operation and maintenance activities are expected to decrease slightly as a result of the Proposed Project due to the lower maintenance requirements of the replacement steel poles. Therefore, operations and maintenance of the Proposed Project will not create new jobs. Because the

Proposed Project will not result in an increase in employment during the operation and maintenance phase, the Proposed Project will not increase the demand for new housing.

5.3.2 Growth Related to the Provision of Additional Electric Power

Regional Background

The population of San Diego County has increased every year since 1944. As a result, growth is part of the past, present, and expected future of the region. The San Diego Association of Governments (SANDAG) is the regional planning entity for the San Diego region and is composed of representatives from 18 cities and the County government. SANDAG serves as the forum for regional decision making. SANDAG makes strategic plans, obtains and allocates resources, and provides information on a broad range of topics pertinent to the region's quality of life.

The cities of San Diego and Chula Vista and the County of San Diego (cities and County) have designated SANDAG as the regional planning board, pursuant to a voter-approved proposition. The cities and County provide SANDAG with information about their general plans, local growth patterns, and land use regulations. In return, SANDAG generates regional management plans and population forecasts. As members of SANDAG, the cities and County review and approve all plans and forecasts prepared by SANDAG. The cities and County use SANDAG's findings to develop and shape their respective general plans and land use regulations. The County and each city are required to adopt a general plan, which must be updated on a regular basis. All general plans and subsequent amendments are subject to CEQA review.

SANDAG prepared a Regional Comprehensive Plan (RCP) in 2004 to provide policy guidance on accommodating the growth projected by SANDAG. A key element of the RCP is the Integrated Regional Infrastructure Strategy (IRIS), which outlines guidance for planning the region's infrastructure. The goal of the IRIS is to ensure internal consistency with respect to long-term regional infrastructure planning to meet the needs of the growth projected by SANDAG. The IRIS addresses the energy supply and delivery system as key infrastructure elements. As the primary utility that provides electric service to approximately 3.4 million people using approximately 1.4 million meters in its service area, which includes all of San Diego County and part of Orange County, SDG&E participates in and supports this aspect of the planning process. SANDAG has been preparing long-range forecasts of population, housing, and employment since the 1970s. SANDAG's forecasts represent the changes anticipated for the region based on the best available information. The forecast is produced by using established computer models that evaluate land use, demographics, regional and local economics, and transportation patterns. SANDAG forecasts utilize a complex set of assumptions, input data, computations, and model interactions.

The latest Regional Growth Forecast (RGF) was developed for 2050 and provides an update of expected growth from the previous model that was developed for 2030. The 2050 RGF is based on data from the 2008 estimate produced by the California Department of Finance as well as updated information for all model inputs.

The 2050 RGF predicts that economic and local population growth will continue at a steady rate through 2050, although at a slightly slower rate than in the previous 40 years. These updated

projections suggest that the region will approach 4.4 million residents, 1.9 million jobs, and 1.5 million housing units by 2050.

SANDAG does not consider the availability of energy as a driver of growth; however, its regional growth model recognizes the investment in energy infrastructure as necessary to support the implementation of the RCP. Only local government entities with jurisdiction over land use approvals can either directly cause or prevent growth. How and where development occurs within SDG&E's service area is dictated by the land use agencies with this authority. SDG&E responds to such development.

Proposed Project and Growth

The objectives of the Proposed Project are to increase fire safety and service reliability, minimize environmental impacts, and utilize existing utility corridors when feasible. The Proposed Project will not increase capacity or extend service into previously unserved areas that will directly or indirectly allow for an increase in population growth or population density. The Proposed Project will only serve to supply existing demand and improve fire safety and reliability while decreasing the operations and maintenance requirements of the existing facilities.

The Proposed Project will accommodate existing power demands within SDG&E's service territory, as well as those based on state and locally adopted plans and projections. SDG&E responds to projected development and forecasts, rather than inducing growth by extending infrastructure for future unplanned development. Therefore, the Proposed Project will not induce population growth or increase demand for housing in the vicinity of the Proposed Project.

5.4 REFERENCES

SANDAG. 2004. Regional Comprehensive Plan for the San Diego Region.

SANDAG. 2015. Series 12: 2050 Regional Growth Forecast – Historical Projection. Online. http://www.sandag.org/2050forecast. Site visited July 2, 2015.