Executive Summary

Introduction and Project Overview

San Diego Gas & Electric Company (the applicant or SDG&E) filed an application (No. A.12-05-020), including a Proponent's Environmental Assessment (PEA), with the California Public Utilities Commission (CPUC) on May 18, 2012, for a Certificate of Public Convenience and Necessity (CPCN) to construct the South Orange County Reliability Enhancement Project (proposed project). The CPUC is lead agency for review of the proposed project, pursuant to the California Environmental Quality Act (CEQA), and prepared a Final Environmental Impact Report (EIR).

The proposed project would serve customers within the applicant's South Orange County Service Area (see Figure 1-1 in Chapter 1, "Introduction" of Exhibit 1). The applicant estimates that construction would take approximately 64 months and, if approved and construction began in 2016, the proposed project could be operational in 2021.

Description of the Proposed Project

The primary components of the proposed project would include:

- Rebuilding and upgrading the 138/12-kilovolt (kV), 60-megavolt ampere (MVA), air-insulated Capistrano Substation as a 230/138/12-kV 700-MVA gas-insulated substation (GIS) that would be named "San Juan Capistrano Substation;"¹
- Replacing a single-circuit 138-kV transmission line between the applicant's Talega and Capistrano substations with a new double-circuit 230-kV transmission line (approximately 7.8 miles long);
- Relocating several transmission line segments (approximately 1.8 miles, total) adjacent to the Talega and Capistrano substations to accommodate the proposed Capistrano Substation expansion and new 230-kV line; and
- Relocating several 12-kV *distribution lines*² segments (approximately 6 miles) into underground *conduit*³ and overhead on existing and new structures located between the Capistrano Substation and Prima Deshecha Landfill.

A complete description of the proposed project and associated figures are provided in Chapter 2, "Project Description" of Exhibit 1.

Approach to Environmental Review

As the lead agency, the CPUC must determine, through the CEQA process, whether the proposed project would result in significant impacts to the environment, and whether those impacts could be avoided, eliminated, compensated for, or reduced to less than significant levels. This EIR will become part of a body of evidence that the CPUC will use in deciding whether to approve SDG&E's application.

¹ Substation capacity is typically expressed in terms of MVA for alternating current (AC) electrical system.

² According to CPUC General Order No. 131-D, *distribution lines* are electrical lines that operate at voltages below 50 kV (CPUC 1995).

³ The term *conduit* refers to protective tubing through which electrical transmission and distribution cables would be installed. Polyvinyl chloride (PVC) conduit is typically used for power line installations.

The CPUC published a Draft EIR and accepted public comments on the Draft EIR. As further explained in Chapter 2 "Public Review Process" of the Final EIR, in response to public comments on the Draft EIR, a new alternative was identified. A Recirculated Draft EIR was prepared to evaluate this new alternative, Alternative J – SCE 230-kV Loop-in to Trabuco Substation, and additional significant impacts on biological resources, cultural resources, and land use and planning from construction and operation of the proposed project that were not previously disclosed in the Draft EIR. The CPUC published a Recirculated Draft EIR which contained only selected sections and accepted public comments on the revisions to the Draft EIR. The CPUC has responded to comments on the Draft EIR and Recirculated Draft EIR, conducted additional analysis as necessary, and modified mitigation measures as appropriate. If the CPUC approves the project, CPUC staff would closely monitor the applicant's compliance with the requirements imposed by the mitigation measures.

Objectives of the Proposed Project

The CPUC has developed objectives for the proposed project. The proposed project should:

- 1. Reduce the risk of instances that could result in the loss of power to customers served by the South Orange County 138-kV System through the 10-year planning horizon;
- 2. Replace inadequate equipment at Capistrano Substation; and
- 3. Redistribute power flow of the applicant's South Orange County 138-kV System such that operational flexibility is increased.

A complete discussion of the objectives of the proposed project is provided in Chapter 1, "Introduction" of the Draft EIR in Exhibit 1.

Environmental Impacts

This EIR addresses all potentially significant environmental impacts identified during the public scoping and public comment process. Table ES-1 summarizes the environmental impact for each resource and the mitigation measures implemented for the significant impacts.

Resource	Environmental Impacts and Mitigation Measures
Aesthetics	Less than Significant with Mitigation
	MM AES-1: Architectural Review of San Juan Capistrano Substation.
	MM AES-2: Minimize Clearing and Ground Disturbance and Restore Disturbed Areas to
	Pre-Project Conditions.
	MM AES-3: Screen or Effectively Locate Laydown Areas.
	MM AES-4: Glare and Color Contrast Reduction for Transmission Structures and
	Conductors.
	MM AES-5: Shield or Downcast Construction Lighting.
Agriculture and Forestry	Less than Significant
Resources	
Air Quality	Significant
	MM AQ-1: Oxides of Nitrogen (NOX) Credits.
Biological Resources	Less than Significant with Mitigation
	MM BR-1: Limit Construction to Designated Areas and Protect Riparian, Aquatic, and
	Wetland Areas.
	MM BR-2: Biological Monitoring.
	MM BR-3: Preconstruction Surveys.

 Table ES-1: Summary of Environmental Impacts and Mitigation Measures

Resource	Environmental Impacts and Mitigation Measures
	MM BR-4: Limit Removal of Native Vegetation Communities and Trees.
	MM BR-5: Avian Safe Building Standards.
	MM BR-6: Migratory Birds and Raptors Impact Reduction Measures.
	MM BR-7: Coastal Cactus Wren Avoidance.
	MM BR-8: Western Burrowing Owl Impacts Reduction Measures.
	MM BR-9: Invasive Plant Control Measures.
	MM BR-10: Mitigation Plan Development.
Cultural Resources	Significant
	MM CUL-1: Supplemental Worker Training for Cultural Resource.
	MM CUL-2: Construction Monitoring Plan.
	MM CUL-3: Qualified Cultural Resources Consultants.
	MM CUL-4: Native American Consultation and Participation Planning.
	MM CUL-5: Additional Cultural Resources Surveys.
	MM CUL-6: Qualified Paleontological Consultants.
	MM CUL-7: Paleontological Monitoring and Treatment Plan.
	MM CUL-8: Preservation of Former Utility Structure at Capistrano Substation.
Geology, Soils, and Mineral	Less than Significant with Mitigation
Resources	MM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction
	Potential and Implement Recommended Design Measures.
Greenhouse Gases	Less than Significant
Hazards and Hazardous Materials	Less than Significant with Mitigation
	MM HAZ-1: Hazardous Substances Contamination Prevention Plan.
	MM HAZ-2: Contaminated Materials from MCB Camp Pendleton.
	MM HAZ-3: Worker Safety Training.
	MM HAZ-4: Fire Prevention and Emergency Response Plan.
	MM HAZ-5: Discovery of an Unrecorded Oil or Gas Well.
Hydrology and Water Quality	Less than Significant with Mitigation
nyulology and water quality	MM WQ-1: Pesticide Application.
Land Use and Planning	Less than Significant with Mitigation (a)
Noise and Vibration	Less than Significant with Mitigation
	MM NV-1: Nighttime and Weekend Construction Noise Controls.
	MM NV-2: Low-Noise Substation Equipment and Noise Barriers.
	MM NV-2: Construction Vibration Control Measures.
	MM NV-3. Construction Violation Control Measures. MM NV-4: Corona Noise Reduction during Wet Weather Conditions.
	MM NV-4. Colona Noise Reduction during wet weather Conditions. MM NV-5. Noise Control Plan.
Population and Housing	Less than Significant
Public Services and Utilities	Less than Significant with Mitigation
Public Services and Otilities	MM PS-1: Water Efficiency Plan.
Recreation	Less than Significant
	Less than Significant with Mitigation
Transportation	MM TR-2 ^(b) : Helicopter Safety Plan and External-Load Training Program.
Transportation	
	MM TR-3: Notification and Monitoring of Helicopter Use.
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	MM TR-3: Notification and Monitoring of Helicopter Use. MM TR-4: City of San Juan Capistrano and City San Clemente Traffic Engineer and Parks and Recreation Review.
	MM TR-3: Notification and Monitoring of Helicopter Use. MM TR-4: City of San Juan Capistrano and City San Clemente Traffic Engineer and Parks and Recreation Review. MM TR-5: Content Requirements of the Traffic Control Plan.
	MM TR-3: Notification and Monitoring of Helicopter Use. MM TR-4: City of San Juan Capistrano and City San Clemente Traffic Engineer and Parks and Recreation Review.
Cumulative	MM TR-3: Notification and Monitoring of Helicopter Use. MM TR-4: City of San Juan Capistrano and City San Clemente Traffic Engineer and Parks and Recreation Review. MM TR-5: Content Requirements of the Traffic Control Plan.
Cumulative Notes:	MM TR-3: Notification and Monitoring of Helicopter Use. MM TR-4: City of San Juan Capistrano and City San Clemente Traffic Engineer and Parks and Recreation Review. MM TR-5: Content Requirements of the Traffic Control Plan.

Table ES-1: Summary of Environmental Impacts and Mitigation Measures

The mitigation measures identified to reduce significant impacts are detailed in Table 4-1 in Chapter 4, "Mitigation Monitoring, Compliance, and Reporting Plan" of the Final EIR.

Alternatives

Alternatives to the proposed project have been identified and evaluated in accordance with CEQA Guidelines. CEQA Guidelines (§15126.6[a]) state:

An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project.

CEQA Guidelines (§15364) define feasibility as:

....capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Alternatives evaluated in this EIR were identified in the PEA, by the CPUC, or by the public. The alternatives evaluated met the following screening criteria: meets most of the basic objectives of the project, lessens a significant impact, and is feasible. In total, 12 alternatives were evaluated, including reduced scope, alternative substation locations and transmission routes, and the No Project alternative (Chapter 3, "Description of Alternatives"; Exhibit 1). These alternatives include:

- 1. Alternative A No Project;
- 2. Alternative B1 Reconductor Laguna Niguel–Talega 138-kV Line;
- 3. Alternative B2 Use of Existing Transmission Lines;
- 4. Alternative B3 Phased Construction of Alternatives B1 and B2;
- 5. Alternative B4 Rebuild South Orange County138-kV System;
- 6. Alternative C1 SCE 230-kV Loop In to Capistrano Substation;
- 7. Alternative C2 SCE 230-kV Loop In to Capistrano Substation Alternative Route;
- 8. Alternative D SCE 230-kV Loop In to Reduced-Footprint Substation at Landfill;
- 9. Alternative E New 230-kV Line Operated at 138-kV;
- 10. Alternative F 230-kV Rancho Mission Viejo Substation; and
- 11. Alternative G New 138-kV San Luis Rey-San Mateo Line and San Luis Rey Substation Expansion.
- 12. Alternative J SCE 230-kV Loop-in to Trabuco Substation

Cumulative Impacts and Other CEQA Considerations

CEQA Guidelines require that potential cumulative impacts be assessed by developing either a list of past, present, and probable future projects that would produce related or cumulative effects in combination with the proposed project or a summary of projections contained in adopted general plans or related planning documents. The discussion of cumulative impacts presented in Chapter 6, "Cumulative Impacts and Other CEQA Considerations," (Exhibit 1) describes the potential cumulative impacts for each resource area addressed in Chapter 4, "Environmental Analysis" of the Draft EIR (Exhibit 1) An

analysis of whether the proposed project would result in growth-inducing impacts or significant and irreversible environmental changes is also presented in Chapter 6.

Major Conclusions of the Final EIR

The Final EIR resulted in the following major conclusions:

- **Two Significant Impacts.** Two significant and unavoidable adverse environmental impacts have been identified. Construction of the proposed project would result in a significant and unavoidable adverse environmental impact related to air emissions, as described in Section 4.3, "Air Quality," and a historic resource as described in Section 4.5, "Cultural Resources." (See Exhibit 1).
- Environmentally Superior Alternative. Among the alternatives considered in this EIR Alternative J – SCE 230-kV Loop In to Trabuco Substation at Landfill was found to be the Environmentally Superior Alternative compared to the proposed project and to the other alternatives.

Mitigation Monitoring, Compliance, and Reporting Program

A Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) was prepared for publication in the Final EIR. Chapter 4 "Mitigation Monitoring, Compliance, and Reporting Program" includes changes to the proposed project and mitigation measures that resulted from the public review of the Draft EIR and Recirculated Draft EIR. This page intentionally left blank.