

Contents

- A. Mitigated Negative Declaration**..... A-1
 - A.1 Introduction A-1
 - A.2 Project Description A-3
 - A.3 Alternatives..... A-3
 - A.4 Environmental Determination A-3

- B. Initial Study**..... B.1-1
 - B.1 Project Description B.1-1
 - B.1.1 Project Title..... B.1-1
 - B.1.2 Project Sponsor’s Name and Address B.1-1
 - B.1.3 Lead Agency Name and Address B.1-1
 - B.1.4 Lead Agency Contact Person and Phone Number B.1-1
 - B.1.5 Project Location B.1-2
 - B.1.6 Surrounding Land Uses and Setting B.1-2
 - B.1.7 General Plan Designation..... B.1-3
 - B.1.8 Zoning..... B.1-4
 - B.1.9 Project Overview..... B.1-4
 - B.1.10 Project Components..... B.1-8
 - B.1.11 Project Construction..... B.1-14
 - B.1.12 Operation and Maintenance B.1-35
 - B.1.13 Applicant-Proposed Measures..... B.1-36
 - B.1.14 Permits and Approvals..... B.1-42
 - B.2 Environmental Determination B.2-1
 - B.2.1 Environmental Factors Potentially Affected B.2-1
 - B.2.2 Environmental Determination B.2-1
 - B.3 Initial Study Checklist..... B.3-1
 - B.3.1 Aesthetics..... B.3-2
 - B.3.2 Agriculture and Forestry Resources..... B.3-15
 - B.3.3 Air Quality B.3-18
 - B.3.4 Biological Resources B.3-34
 - B.3.5 Cultural Resources B.3-63
 - B.3.6 Geology and Soils..... B.3-78
 - B.3.7 Greenhouse Gas Emissions..... B.3-90
 - B.3.8 Hazards and Hazardous Materials B.3-101
 - B.3.9 Hydrology and Water Quality B.3-109
 - B.3.10 Land Use and Planning B.3-117
 - B.3.11 Mineral Resources B.3-122
 - B.3.12 Noise..... B.3-124
 - B.3.13 Population and Housing B.3-133
 - B.3.14 Public Services..... B.3-135
 - B.3.15 Recreation..... B.3-140
 - B.3.16 Transportation/Traffic B.3-142

| | |
|--|---------|
| B.3.17 Utilities and Service Systems..... | B.3-153 |
| B.3.18 Mandatory Findings of Significance..... | B.3-160 |

| | |
|--|------------|
| C. Mitigation Monitoring Plan | C-1 |
|--|------------|

Tables

| | | |
|----------------|---|---------|
| Table B.1-1: | Existing and Designated Land Uses | B.1-4 |
| Table B.1-2: | Distribution Relocation Summary | B.1-10 |
| Table B.1-3: | Vault Dimensions | B.1-12 |
| Table B.1-4: | Existing SDG&E Staging Facilities | B.1-16 |
| Table B.1-5: | Temporary Workspace Requirements | B.1-17 |
| Table B.1-6: | Construction Equipment Requirements..... | B.1-19 |
| Table B.1-7: | Construction Personnel Requirements..... | B.1-21 |
| Table B.1-8: | Construction Truck Trip Summary | B.1-22 |
| Table B.1-9: | On-Road Vehicle Trips..... | B.1-22 |
| Table B.1-10: | Proposed Construction Schedule..... | B.1-24 |
| Table B.1-11: | Applicant Proposed Measures | B.1-37 |
| Table B.1-12: | Permit, Approval, and Consultation Requirements | B.1-42 |
| Table B.3.3-1 | San Diego Monthly Average Temperatures and Precipitation | B.3-18 |
| Table B.3.3-2 | National and California Ambient Air Quality Standards..... | B.3-20 |
| Table B.3.3-3 | Attainment Status for the San Diego Air Basin..... | B.3-21 |
| Table B.3.3-4 | Background Ambient Air Quality Data..... | B.3-21 |
| Table B.3.3-5 | Emissions Significance Thresholds..... | B.3-28 |
| Table B.3.3-6 | Estimated Uncontrolled Maximum Daily and Annual Construction Emissions..... | B.3-28 |
| Table B.3.3-7 | Estimated Controlled Maximum Daily and Annual Construction Emissions..... | B.3-29 |
| Table B.3.4-1 | Special-Status Species that Could Occur in the Project Vicinity | B.3-40 |
| Table B.3.5-1 | Paleontological Sensitivity/ Resource Potential Categories..... | B.3-72 |
| Table B.3.6-1 | Significant Active and Potentially Active Faults within 50 miles of the Proposed Project | B.3-83 |
| Table B.3.7-1 | United States and California Greenhouse Gas Emissions (million metric tons CO ₂ e.) | B.3-92 |
| Table B.3.7-2 | Project Greenhouse Gas Emissions..... | B.3-99 |
| Table B.3.12-1 | Summary of Acoustical Terms..... | B.3-124 |
| Table B.3.12-2 | Measured Ambient Noise Levels, dBA..... | B.3-125 |
| Table B.3.12-3 | City of San Diego Municipal Code One-Hour Average Sound Level Limits..... | B.3-127 |
| Table B.3.12-4 | Typical Noise Levels for Construction Equipment..... | B.3-128 |
| Table B.3.12-5 | Duct Bank Construction and Vault Installation 12-hour Composite Noise Levels..... | B.3-129 |
| Table B.3.13-1 | Existing Conditions – Population, Housing, and Employment | B.3-133 |
| Table B.3.16-1 | Study Area Roadway Characteristics and Existing Traffic Conditions | B.3-143 |
| Table B.3.16-2 | City of San Diego CEQA Significance Thresholds: Allowable Change Due to Project Impacts | B.3-146 |
| Table C-1 | Mitigation Monitoring Plan | C-3 |

Figures

Figures B.1-1 through B.1-24 are located at the end of Section B.1, Project Description.

| | | |
|---------|--|--------|
| B.1-1 | Project Location Map | |
| B.1-2 | Project Overview Map | |
| B.1-3a | Detailed Project Components | |
| B.1-3b | Detailed Project Components | |
| B.1-3c | Detailed Project Components | |
| B.1-3d | Detailed Project Components | |
| B.1-3e | Detailed Project Components | |
| B.1-3f | Detailed Project Components | |
| B.1-3g | Detailed Project Components | |
| B.1-3h | Detailed Project Components | |
| B.1-3i | Detailed Project Components | |
| B.1-3j | Detailed Project Components | |
| B.1-3k | Detailed Project Components | |
| B.1-4 | Land Use Map | |
| B.1-5 | Existing System Configuration | |
| B.1-6 | Proposed System Configuration | |
| B.1-7 | Vine Substation Initial Arrangement | |
| B.1-8 | Vine Substation Ultimate Arrangement | |
| B.1-9 | Vine Substation Profile View | |
| B.1-10 | Typical 12-kV Underground Duct Bank | |
| B.1-11 | Typical 12-kV Underground Vault | |
| B.1-12 | Typical Switch and Capacitor Pad | |
| B.1-13 | Typical 12-kV Switch | |
| B.1-14 | Typical 12-kV Capacitor | |
| B.1-15 | Typical Existing 69-kV Wood Pole | |
| B.1-16 | Typical Existing Stub Guy Pole | |
| B.1-17 | Typical Proposed 69-kV Tubular Steel Pole | |
| B.1-18 | Typical Telecommunications Underground Duct Bank | |
| B.1-19 | Typical Telecommunication Underground Handhole | |
| B.1-20 | Typical Underground Construction Process within Roadways | |
| B.1-21 | Typical 12-kV Underground Installation Photographs | |
| B.1-22 | Typical Type 3327 Vault and Installation Photographs | |
| B.1-23 | Typical Jack-and-Bore Installation | |
| B.1-24 | Typical Overhead Conductor Installation | |
| B.3.1-1 | KOP 1 – California Street (1) Existing View and Simulation of Proposed Vine Substation | B.3-11 |
| B.3.1-2 | KOP 2 – California Street (2) Existing View and Simulation of 69-kV Loop-in | B.3-12 |
| B.3.1-3 | KOP 3 – Southbound I-5 Existing View and Visual Simulation of Proposed Vine Substation | B.3-13 |
| B.3.1-4 | KOP 4 – Pacific Highway Existing View and Simulation of Proposed Vine Substation | B.3-14 |
| B.3.3-1 | Windrose from San Diego International Airport (2009-2013) | B.3-19 |
| B.3.4-1 | Hydrologic Features | B.3-39 |
| B.3.6-1 | Regional Active Faults and Historic Earthquakes | B.3-82 |

Appendices

- 1 List of Preparers
- 2 References
- 3 Air Quality Emission Calculations
- 4 Public Notice Materials

Acronyms List

| | |
|----------|--|
| AAQS | Ambient air quality standards |
| AB | Assembly Bill |
| ACSR | Aluminum-clad steel reinforced |
| ADT | Average daily traffic |
| AIA | Airport Influence Area |
| ALUCP | Airport Land Use Compatibility Plan |
| APLIC | Avian Power Line Interaction Committee |
| APM | Applicant-Proposed Measure |
| ARB | Air Resources Board |
| BACT | Best available control technology |
| BMPs | Best Management Practices |
| BNSF | Burlington Northern Santa Fe |
| CAA | Clean Air Act |
| Cal/EPA | The California Environmental Protection Agency |
| Cal/OSHA | The California Occupational Safety and Health Administration |
| CalARP | California Accidental Release Prevention Program |
| CARB | California Air Resources Board |
| CAAQS | California Ambient Air Quality Standards |
| CCAA | Clean Air Act |
| CCCC | California Climate Change Center |
| CCR | California Code of Regulations |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CERCLA | California Environmental Response, Compensation, and Liability Act |
| CESA | California Endangered Species Act |
| CFGF | California Fish and Game Code |
| CGS | California Geological Survey |
| CI | Coccidioides immitis |
| CMLUCA | California Military Land Use Compatibility Analysis |
| CNEL | Community Noise Equivalent Level |
| CNPS | California Native Plant Society |
| CO | Carbon Monoxide |
| CPUC | California Public Utilities Commission |
| CRHR | California Register of Historical Resources |
| CUPA | Certified Unified Program Agency |
| CVC | California Vehicle Code |
| CWA | Clean Water Act |
| CY | Cubic yards |
| DEH | Department of Environmental Health |
| DPM | Diesel particulate matter |

| | |
|----------------------------------|---|
| DPR | Department of Pesticide Regulation |
| DTSC | Department of Toxic Substances Control |
| EMF | Electromagnetic Fields |
| ESA | Environmental Site Assessment |
| FAA | Federal Aviation Administration |
| FEMA | Federal Emergency Management |
| FESA | Federal Endangered Species Act |
| FMMP | Farmland Mapping and Monitoring Program |
| FPPA | Farmland Protection Policy Act |
| GHG | Greenhouse gas |
| GO | General Order |
| GWP | Global Warming Potential |
| HAs | Hydrologic Areas |
| HCP | Habitat Conservation Plan |
| HFCs | Hydrofluorocarbons |
| HMBP | Hazardous Materials Business Plan |
| HMD | Hazardous Materials Division |
| HR | Hydrologic Region |
| HSAs | Hydrologic Subareas |
| HSWA | Hazardous and Solid Waste Act |
| HUs | Hydrologic Units |
| HWCL | Hazardous Waste Control Law |
| IBC | International Building Code |
| ICC | International Code Council |
| IEEE | Institute of Electrical and Electronics Engineers |
| IPCC | Intergovernmental Panel on Climate Change |
| IS | Initial Study |
| LOS | Level of Service |
| LSAA | Lake and Streambed Alteration Agreement |
| MBTA | Migratory Bird Treaty Act |
| MHPA | Multi-Habitat Planning Area |
| MMRP | Mitigation, Monitoring, and Reporting Program |
| MND | Mitigated Negative Declaration |
| MRZs | Mineral Resource Zones |
| MSCP | Multiple Species Conservation Program |
| MTS | Metropolitan Transit System |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NCCP | Natural Community Conservation Plan |
| NCP | National Contingency Plan |
| NCTD | North County Transit District |
| NFHL | National Flood Hazard Layer |
| NOAA | National Oceanic & Atmospheric Administration |
| NOI | Notice of Intent |
| NO _x /NO ₂ | Nitrogen Oxides/Nitrogen Dioxide |
| NPDES | National Pollution Discharge Elimination System |
| NPL | National Priorities List |
| NPPA | Native Plant Protection Act |

| | |
|----------------------------------|--|
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NSH | National Seismic Hazard |
| O ₃ | Ozone |
| OEHHA | Office of Environmental Health Hazard Assessment |
| OPR | Office of Planning and Research |
| OSHA | Occupational Safety and Health Administration |
| PEA | Proponent's Environmental Assessment |
| PERP | Portable Equipment Registration Program |
| PFCs | Perfluorocarbons |
| PGA | Peak ground acceleration |
| PI | Principal Investigator |
| PM | Particulate Matter |
| PM10 | Respirable particulate matter |
| PM2.5 | Fine particulate matter |
| PPV | Peak particle velocity |
| PRC | Public Resources Code |
| PRMP | Paleontological Resource Mitigation Plan |
| RCFZ | Rose Canyon Fault Zone |
| RCRA | Resource Conservation Recovery Act |
| RMS | Root mean square |
| ROWs | Rights-of-way |
| RPS | Renewable Portfolio Standard |
| RWQCB | Regional Water Quality Control Board |
| SANDAG | San Diego Association of Governments |
| SARA | Superfund Amendments and Reauthorization Act |
| SB | Senate Bill |
| SCIC | South Coastal Information Center |
| SDAPCD | San Diego Air Pollution Control District |
| SDFD | San Diego Fire-Rescue Department |
| SDNHM | San Diego Natural History Museum |
| SDRWQCB | San Diego Regional Water Quality Control Board |
| SEAP | Safety and Environmental Awareness Program |
| SLF | Sacred Lands File |
| SO _x /SO ₂ | Sulfur Oxides/Sulfur Dioxide |
| SPCC | Spill Prevention, Control, and Countermeasure Plan |
| SUSMP | Standard Urban Stormwater Mitigation Plan |
| SVP | Society of Vertebrate Paleontology |
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TACs | Toxic air contaminants |
| TL | Tie-line |
| TMDL | Total Maximum Daily Load |
| USACE | U.S. Army Corps of Engineers |
| USEPA | U.S. Environmental Protection Agency |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |
| VOC | Volatile Organic Compound |