



CALIFORNIA PUBLIC UTILITIES COMMISSION



Estrella Substation and Paso Robles Area Reinforcement Project

Final Environmental Impact Report

Volume 1 - Main Body

Prepared by:



March 2023

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SCH #2018072071

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March 2023

Horizon Water and Environment. 2023. Estrella Substation and Paso Robles Area Reinforcement Project – *Final Environmental Impact Report*. (SCH #2018072071). March. (17.010.) Oakland, CA.

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Acronyms and Abbreviations

A

AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ADT	average daily traffic
AEDT	Aviation Environmental Design Tool
afy	acre-feet per year
AIDI	average outage duration
AIFI	average frequency of sustained outages
ALUP	airport land use plan
amsl	above mean sea level
APLIC	Avian Power Line Interaction Committee
APM	applicant proposed measure
Applicants	HWT, NEET West, and PG&E collectively
ASR	alternatives screening report
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measure

B

BAAQMD	Bay Area Air Quality Management District
BACT	best available control technology
BES	single bulk electric system
BESS	battery energy storage system
bgs	below ground surface
BMP	best management practices
BRTR	Biological Resources Technical Report
BS	Battery Storage

BTM	behind-the-meter
C	
C&I	commercial and industrial
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAIDI	average service restoration time
CAISO	California Independent System Operator
Cal EMA	California Emergency Agency
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CalARP	California Accidental Release Prevention
CalEEMod	California Emission Estimator Model
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recovery and Recycling
Caltrans	California Department of Transportation
CAMP	Construction Activity Management Plan
CARB	California Air Resources Board
CASGEM	California Statewide Groundwater Elevation Monitoring
CASIO	California Independent System Operator
CB	circuit breaker
CBC	California Building Standards Code
CBIA	California Building Industry Association
CCAA	California Clean Air Act
CCIC	Central Coast Information Center
CCR	California Code of Regulations
CCRWCQB	Central Coast RWQCB
CDC	U.S Centers for Disease Control
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CDOC	California Department of Conservation
CEA	Computerized Energy Analysis
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CESA	California Endangered Species Act

CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHP	California Highway Patrol
CI	<i>Coccidioides immitis</i>
CIWMA	California Integrated Waste Management Act
CIWMB	California Integrated Waste Management Board
City	City of Paso Robles
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
County	County of San Luis Obispo
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRLF	California red-legged frog
CRPR	California Rare Plant Rank
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWPP	community wildfire protection plan
cy	cubic yard
D	
dB	decibel
dba	A-weighted decibel
dbh	diameter at breast height
DEIR	draft environmental impact report
DER	distributed energy resources
DHS	California Department of Health Services
DIDF	Distribution Infrastructure Deferral Framework
DOGGR	California Division of Oil, Gas, and Geothermal Resources
DPA	Distribution Planning Area
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DTSC	California Department of Toxic Substances Control
DVMT	daily vehicle miles traveled

DWR	California Department of Water Resources
E	
EDD	California Employment Development Department
EIA	U.S. Energy Information Administration
EIR	environmental impact report
ELF	extremely low frequency
EMF	electromagnetic field
EMFAC	EMission FACtors
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
F	
FAA	Federal Aviation Administration
FEIR	final environmental impact report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FHSZ	fire hazard severity zone
FLAME Act	2009 Federal Land Assistance, Management, and Enhancement Act
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
FTM	front-of-the-meter
G	
GHG	greenhouse gas
GIS	gas insulated switch
G.O.	[CPUC] General Order
GPS	global positioning system
GSA	groundwater sustainability agency
GSPs	groundwater sustainability plan
H	
H ₂ S	hydrogen sulfide
HAP	hazardous air pollutant
HCP	habitat conservation plan
HDD	horizontal directional drilling
HFHSZ	high fire hazard severity zone
HFTD	high fire-threat district
HHZ	high hazard zone
HMBP	hazardous materials business plan

HOA	Homeowner’s association
Horizon	Horizon Water and Environment, LLC
HVAC	heating, ventilation, and air condition
HWCL	California Hazardous Waste Control Law
HWT	Horizon West Transmission, LLC
Hz	Hertz
I	
IARC	International Agency for Research on Cancer
IBC	International Building Code
ICAO	International Civil Aviation Organization
ICBO	International Conference of Building Officials
ICS	Incident Command System
IEPR	Integrated Energy Policy Report
IPaC	Information for Planning and Conservation
IPCC	International Panel on Climate Change
K	
KOP	key observation point
kV	kilovolt
kV/m	kilovolt per meter
L	
LACPH	Los Angeles County Public Health
Ldn	day night sound level
LDSP	light-duty steel pole
LED	light-emitting diode
Leq	equivalent sound level
Lmax	maximum sound level
Lmin	minimum sound level
LNG	liquefied natural gas
LRA	local responsibility area
LSM	less than significant with mitigation
LST	lattice steel tower
LTO	landing take off
LTS	less than significant
LUST	leaking underground storage tank
M	
MAIFI	average frequency of momentary outages

MBTA	Migratory Bird Treaty Act
mG	milligauss
mgd	million gallons per day
MM	mitigation measure
MMT	million metric tons
MO	momentary outages
MRV	minor route variation
MRZ	mineral resource zone
MS4	municipal separate sanitary sewer system
MSA	metropolitan statistical area
msl	mean sea level
MT	metric ton
MUTCD	California Manual on Uniform Traffic Control Devices
MVA	megavolt amperes
MW	megawatt
MWh	megawatt-hour
N	
NAAAs	nonattainment areas
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NASA	National Aeronautics and Space Administration
NASS	National Agricultural Statistics Service
NCCP	natural community conservation plan
NEET West	NextEra Energy Transmission West, LLC
NEHRP	National Earthquake Hazards Reduction Program
NERC	National Electric Reliability Commission
NESC	National Electric Safety Code
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NHTSA	National Highway Traffic Safety Administration
NI	no impact
NIEHS	National Institute of Environmental Health Sciences
NIST	National Institute of Standards and Technology
NMFS	National Marine Fisheries Service
NO ₂	nitrogen dioxide
N ₂ O	nitrogen oxide
NO _x	nitrogen oxides

NOA	notice of availability
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOP	notice of preparation
NPD	Noise-Power-Distance
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	USDA Natural Resources Conservation Service
NSF	National Science Foundation
O	
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Occupational Safety and Health Administration
OPGW	optical ground wire
OPR	Governor’s Office of Planning and Research
P	
PEA	Proponent’s Environmental Assessment
PERP	Portable Equipment Registration Program
PFYC	potential fossil yield classifications
PG&E	Pacific Gas and Electric Company
PLR	Power Line Route
PM	particulate matter
PM ₁₀	PM with aerodynamic radius of 10 micrometers or less
PM _{2.5}	PM with aerodynamic radius of 2.5 micrometers or less
POS	parks and open space
POTT	permissive overreaching transfer tip
ppm	parts per million
PPE	personal protective equipment
PRC	Public Resource Code
PRJUSD	Paso Robles Joint Unified School District
Proposed Project	proposed Estrella Substation and Paso Robles Area Reinforcement Project
PRTR	paleontological resources technical report
PRWWTP	Paso Robles Wastewater Treatment Plant
PSHA	probabilistic seismic hazards assessment
PVC	polyvinyl chloride

R

RA	Residential Agriculture (zone)
RCO	regenerative catalytic oxidize
RCRA	Resource Conservation and Recovery Act
RFO	request for offer
RMP	risk management plan
ROG	reactive organic gas
RPS	California Renewables Portfolio Standard
RTA	Regional Transportation Authority
RWQCB	Regional Water Quality Control Board

S

SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SCADA	supervisory control and data acquisition
SE	Substation Expansion
SED	safety enforcement division
SEL	Schweitzer Engineering Laboratories
SF ₆	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SIP	state implementation plan
SLOCAPCD	San Luis Obispo County Air Pollution Control District
SLOCOG	San Luis Obispo Council of Governments
SMARA	Surface Mining and Reclamation Act of 1975
SO ₂	sulfur dioxide
SO	sustained outages
SPCC	spill prevention, control, and countermeasure
SR	state route
SRA	state fire responsibility area
SS	Substation Siting
SU	significant and unavoidable
SWCA	SWCA Environmental Consultants
SWMP	stormwater management plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board

T

TAC	toxic air contaminants
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TCP	traditional cultural property
TCR	tribal cultural resource
TMA	transportation management area
TMDL	total maximum daily loads
TRI	Toxic Release Inventory
TSP	tubular steel pole
TUSD	Templeton Unified School District
U	
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
US-LT RCD	Upper Salinas Las Tablas Resource Conservation District
USGS	U.S. Geological Survey
UST	Underground storage tank
UV	ultraviolet
UVLS	under-voltage load shedding
V	
VdB	vibration velocity in decibels
VHFHSZ	very high fire hazard severity zone
VMP	vegetation management program
VMT	vehicle miles traveled
VOC	volatile organic compound
W	
WDR	waste discharge requirement
WEAP	worker environmental awareness program
WHO	World Health Organization
WMP	wildfire mitigation plan
WSD	wildfire safety division
SYMBOLS	
°F	Fahrenheit

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