

## GLOSSARY

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**100-Year Flood** A stream flow caused by a discharge that is exceeded, on the average, only once in 100 years. A 100-year flood has a 1 percent chance of occurrence in any given year.

#### A

**A** ampere or amp. A unit of measure of the rate of current in an electrical conductor.

**AADT** annual average daily trip; number of vehicles traveling on a roadway for a year divided by 365 days.

**AAQS** Ambient Air Quality Standard; a federal and state measure of the level of air contamination that is not to be exceeded in order to protect human health.

**Acoustical usage factor** percent of the hour that a piece of equipment is operating at high power or in the vicinity of a sensitive receptor

**Acre-foot** A unit of measure for water demand and supply. The volume of 1 acre-foot would cover 1 acre to a depth of 1 foot and is equal to 325,851 gallons.

**ADT** Average Daily Trip; number of vehicles traveling per normal day on a roadway.

**Aerosol** Wet or dry small particles in the atmosphere. Also called “particulate matter.”

**Air Quality Standard** The specified average concentration of an air pollutant in ambient air during a specified time period, at or above which level the public health may be at risk; equivalent to AAQS.

**Ambient Air** Any unconfined portion of the atmosphere; the outside air.

**Ambient Noise Level** Noise from all sources, near and far. The normal or existing level of environmental noise at a given location.

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APCD	Air Pollution Control District; a regional government bureau responsible for attainment and management of air quality standards through permitting and regulating of the emission sources.
Atmospheric Stability	The resistance to or enhancement of vertical and horizontal air movement, which regulates the amount of air exchange and affects pollution concentration or dispersion.
Average	As a measure, the sum of the measurements (over a specified period) divided by the number of measurements.
A-Weighting	A frequency measure of noise which simulates human perception.

### B

Backfill	Earth that is replaced after a construction excavation.
Baseline	A set of existing conditions against which change is to be described and measured.
Berm	A narrow shelf, path, or ledge typically at the top or bottom of a slope; also, an earthen, mounded wall.
BMP	Best Management Practice; defined in the Forest Practices Guidelines Related to Water Quality, state administrative code rule 02 NCAC 60C.0102 (4): “a practice, or combination of practices, that is determined to be an effective and practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.”

### C

CAAQS	California Ambient Air Quality Standard; see AAQS
Class I Bikeway (Bike Path)	Paved right-of-way for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in roadway right-of-way or exclusive right-of-way. Bike paths provide critical connections in the city where roadways are absent or are not conducive to bicycle travel.
Class II Bikeway (Bike Lane)	Defined by pavement striping and signage used to allocate a portion of a roadway for exclusive or preferential bicycle travel. Bike lanes are

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one-way facilities on either side of a roadway. Whenever possible, bike lanes should be enhanced with treatments that improve safety and connectivity by addressing site-specific issues, such as additional warning or way finding signage.

### Class III Bikeway (Bike Route)

Provide shared use with motor vehicle traffic within the same travel lane. Designated by signs, bike routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand. Whenever possible, bike routes should be enhanced with treatments that improve safety and connectivity, such as the use of “sharrows,” or shared lane markings to delineate that the road is a shared-use facility.

### CNEL

Community Noise Equivalent Level. Community Noise Equivalent Level; the averaging of noise levels on a measurement scale of decibels that increases the actual noise measurement, to account for an increased sensitivity to noise during late evening, nighttime, and morning hours (the increments are 5 dB from 7 to 10 p.m. and 10 dB from 10 p.m. to 7 a.m.).

### CO

Carbon monoxide; a colorless, odorless, toxic gas produced by incomplete combustion of carbon in fossil fuels.

### CO<sub>2e</sub>

A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

### Collector Roadway

Roadway that conveys traffic from local roads to arterials. Usually shorter than arterials but longer than local roads. Frequently allows traffic to circulate in residential, commercial, industrial, and civic areas.

### Color

The light reflecting off of an object at a particular wavelength that creates hue (green, indigo, purple, red, etc.) and value (light to dark hues).

### Conduit

Ducts, pipes, or tubes of certain metals, plastics or other materials (including pull wires and concrete encasement where required) acceptable for the installation and protection of electric wires and cables.

### Conductor

Object or a type of material capable of carrying electric current. The term conductor also refers to a single wire strung as part of a circuit on a transmission, distribution, or power line.

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Corona	The electrical breakdown of air into charged particles caused by the electrical field at the surface of conductors, insulators, and hardware of energized lines.
Corona discharges	Corona discharges result from ionization of the air surrounding a conductor and form at the surface of a conductor when the electric field intensity on the conductor surface exceeds the breakdown strength of air.
Cultural Modification	Any human-caused (anthropogenic) change in the land form, water form, vegetation, or the addition of a structure which creates a visual contrast in the basic elements (form, line, color, texture) of the naturalistic character of a landscape. Cultural modifications can contribute to or detract from the unity of the landscape.
Cultural Resource	Places or objects important for scientific, historical, and religious reasons to cultures, communities, and individuals. Recognized in the State of California as non-renewable resources that require management to assume their benefit to present and future Californians.
Current	The movement of electric charges.

## D

dBA	The A-weighted decibel scale representing the relative insensitivity of the human ear to low-pitched sounds; decibels are logarithmic units that compare the wide range of sound intensives to which the human ear is sensitive.
Dead-end Structure	a structure where overhead conductors mechanically terminate.
Decibel (Db)	A logarithmic unit which measures the pressure levels of sounds.
Distance Zones	Distance zones are based on the position of the viewer in relation to the landscape. They are measured from one static point, such as the location of a key view. There are three defined distance zones: <ul style="list-style-type: none"><li>• Foreground: 0.25–0.5 mile from the viewer</li><li>• Middle ground: Extends from the foreground zone to 3–5 miles from the viewer</li><li>• Background: Extends from the middle ground zone to infinity</li></ul>
Distribution Line	CPUC General Order 131-D distinguishes between distribution lines ("designed to operate under 50 kilovolts"), power lines ("designed to

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operate between 50 and 200 kilovolts"), and transmission lines ("designed to operate at or above 200 kilovolts").

**Distribution Underbuilt** A lower voltage distribution line placed underneath a higher voltage transmission line on the same structure or set of structures.

### E

**EIR** Environmental Impact Report; an environmental impact assessment document prepared in accordance with the California Environmental Quality Act (CEQA).

**EIS** Environmental Impact Statement; an environmental impact in accordance with the National Environmental Policy Act (NEPA).

**Electrical arcing** An electric discharge that occurs when electrons are able to jump a gap in a circuit

**Electromagnetic interference**

Disruption of operation of any electronic equipment resulting from EMF, including radio, television, computers, and implanted medical devices

**Emission** Unwanted substances released by human activity into air or water.

**Emission Threshold** A regulatory standard that restricts the discharge of an air pollutant into atmosphere.

**Environmentally Sensitive Habitat Area**

Defined in Section 30107.5 of the California Coastal Act of 1972 (CCA) as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments"

### F

**Fault** A fracture or zone of fractures in rock strata which have undergone movement that displaces the sides relative to each other, usually in a direction parallel to the fracture. Abrupt movement on faults is a cause of most earthquakes.

**Fault conditions** Abnormal conditions that can cause high electrical currents to flow, such as conductors coming into contact with one another during high winds.

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Fireshed	Regional landscapes that are delineated based on fire history, fire regime, vegetation, topography, and potential wildfire behavior. Firesheds are useful assessment tools for identifying high fire risk areas and predicting future fire behavior with the objective of reducing fire risk and protecting communities.
Flashover	unintended electric arc
Floodplain	Floodplains include, at a minimum, that area with at least a 1.0 percent chance of being inundated by a flood in any given year (that is, experiencing a 100-year flood). Floodplains include the base floodplain (those areas subject to 100-year floods) and the critical action floodplain (those areas with at least a 0.2 percent chance of being flooded in any given year, also known as a 500-year flood).
Flora	Plants or plant life.
Form	The unified mass or shape of an object that often has an edge or outline and can be defined by surrounding space. For example, a high-rise building would have a highly regular, rectangular form whereas a hill would have an organic, mounded form.
Fugitive Dust	Airborne pulverized soil particles.
<b>G</b>	
Glare	Sunlight or other brilliant luminary reflecting off a specular (mirror-like) surface. If the reflected rays of light reach a receptor, the intensity of the reflection can be distracting, discomforting, or debilitating.
Glint	A momentary flash of glare, which may be repetitious and attract the receptor's attention.
Gpd	Gallons per day; a measure of flow rate.
Greenhouse Gases	Natural or manmade gaseous constituents of the atmosphere that absorb and re-emit infrared radiation.
Ground Rod	A copper-coated metal rod that is hammered into the earth and connected to conductive objects to provide an electrical ground.
Groundwater	Water below the ground surface in a zone of saturation.

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### H

Hazard	Physical hazards include proximity to airports, wildland fire hazards, and objects that could induce current and voltage and result in shock hazards.
Hazardous Material	Any item or agent (biological, chemical, physical) that has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors if misused or released.
Hertz (Hz)	A unit of frequency equal to one cycle per second.

### I

Insulator	Object or a type of material not capable of carrying electric current. Examples include most gases, porcelain, glass, plastic.
Intactness	The integrity of visual order in the natural and built landscape, and the extent to which the landscape is free from visual encroachment.
Inversion	A layer of air in the atmosphere in which the temperature increases with altitude at a rate greater than normal (adiabatic). Pollutants tend to be trapped below the inversion.
Invertebrate	Animals that lack a spinal column.

### K

KOP	Key Observation Point; a location from which a viewer (traveler or neighbor) can see either iconic or representative landscapes, with or without the highway, of the project corridor. Usually there is at least one key view for each landscape unit. Used for visual simulations.
kV	kilovolt. A measure of electric voltage, one thousand volts.

### L

L <sub>10</sub>	An average of noise levels that are exceeded 10 percent of the time during the measurement period.
L <sub>50</sub>	An average of noise levels that are exceeded 50 percent of the time during the measurement period.
L <sub>90</sub>	An average of noise levels that are exceeded 90 percent of the time during the measurement period.

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L <sub>den</sub>	Day Evening Night Sound Level
L <sub>dn</sub>	The average ambient noise level in dBA with levels between 10 PM and 7 AM increased by 10 dBA.
Lead Agency	The agency responsible for preparation of the CEQA document.
L <sub>eq</sub>	Average level of sound determined over a specific period of time.
L <sub>max</sub>	maximum noise level
L <sub>min</sub>	minimum noise level
LCU	Landscape Character Unit; defined areas within the area of visual effect that have similar visual features and homogeneous visual character and frequently, a single viewshed. An “outdoor room.” Typically the spatial unit used for assessing visual impacts.
Line	The well-defined edges of shapes or masses created in the visual landscape by horizons, silhouettes, or human-made features. Perceived when there is a change in form, color, or texture and where the eye generally follows this pathway because of the visual contrast. For example, a city’s high-rises can be seen silhouetted against the blue sky and be seen as a skyline, a river can have a curvilinear line as it passes through a landscape, or a hedgerow can create a line where it is seen rising up against a flat agricultural field.
Liquefaction	The process of making or becoming liquid (soils).
Load Centers	Major areas of electricity consumption such as large cities or large industrial facilities.
Local Roadway	Roadway that serves as direct access to homes, businesses, and other such destinations and that are not classified as another type of roadway.
LOS	Level of Service; a measure of roadway congestion that measures the operational effectiveness of a roadway or intersection, ranging from A (free-flowing) to F (highly congested).
<b>M</b>	
Milligauss (mG)	Measurement of magnetic field strength.
Minor Arterial Roadway	A relatively high speed road, other than a principal arterial, that is usually used for through traffic on longer trips and can carry larger traffic volumes.



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**Mitigation** Under CEQA, mitigation includes: (1) Avoiding the impact altogether by not taking a certain action or parts of an action, (2) Minimizing impact by limiting the degree or magnitude of the action and its implementation, (3) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment, (4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, and (5) Compensating for the impact by replacing or providing substitute resources or environments.

### N

**NAAQS** National Ambient Air Quality Standards; see AAQS

**NOx** Oxides of nitrogen. Poisonous and highly reactive gases produced when fuel is burned at high temperatures, causing nitrogen in the air to combine with oxygen.

### O

**Once-through-cooling** Cooling systems that use water's cooling capacity a single time. These cooling systems draw substantial quantities of water and discharge them at higher temperatures back into the source water body. The California's State Water Resources Control Board (SWRCB) adopted the Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling in the year 2010 that requires 19 existing power plants to retire this "once-through" practice by the year 2020.

**Ozone (O<sub>3</sub>)** A colorless gas formed by a complex series of chemical and photochemical reaction of reactive organic gases, principally hydrocarbons, with the oxides of nitrogen, which is harmful to the public health, the biota, and some materials.

### P

**Paleontological Resource** The remains of ancient plants and animals that can provide scientifically significant information about the history of life on Earth.

**PEA** Proponent's Environmental Assessment; required by CPUC when filing application for CPCN.

**Peak-hour Traffic** Sum of traffic counts during four consecutive 15-minute periods that result in the highest volume of traffic for a one-hour period during either the AM or PM Peak Periods, usually 7 AM to 9 AM and 4 PM to 7 PM, respectively.

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PM <sub>2.5</sub>	Particulate matter equal to or less than 2.5 microns in diameter, which is small enough to be inhaled deeply into the lungs and cause disease.
PM <sub>10</sub>	Particulate matter equal to or less than 10 microns in diameter, which is small enough to be inhaled deeply into the lungs and cause disease.
Power Line	CPUC General Order 131-D distinguishes between distribution lines ("designed to operate under 50 kV"), power lines ("designed to operate between 50 and 200 kV"), and transmission lines ("designed to operate at or above 200 kilovolts").
ppb	Parts per billion; a measure of the amount of one substance found in a second, which is the carrier.
ppm	Parts per million; a measure of the amount of one substance found in a second, which is the carrier.
Principal Arterial Roadway	Roadway with separated directional travel lanes with limited access points and few or no at-grade intersections; designed to carry through traffic at high volume.
<b>R</b>	
Reconductor	Replace existing conductor with new conductor.
Riparian	Area along the banks of a river or lake supporting specialized plant and animal species.
ROW	Right-of-Way; an easement, lease, permit, or license across an area or strip of land to allow access or to allow a utility to pass through public or private lands.
<b>S</b>	
Scenic Vista	A scenic vista is a distant public view that is recognized or valued for its visual quality, located along or through an opening or corridor.
Sensitive Receptor	Land uses adjacent to or within proximity to the proposed project that could be impacted by construction, operation, and maintenance activities.
Sensitive Vegetation Communities/Habitats	Communities/habitats that are identified in local or regional plans, policies, or regulations, or by CDFW or USFWS

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Significant effect	Substantial, or potentially substantial, adverse change in the environment under CEQA.
Simulation	Two or three dimensional depictions of the visual character of a future state. Simulations range from artistic renderings to computer animations.
SIP	State Implementation Plan; a document required periodically from each county by EPA that indicates the progress and the planning of the county for improving the quality of its air.
SO <sub>2</sub>	Sulfur dioxide; a corrosive and poisonous gas produced from the complete combustion of sulfur in fuels.
SO <sub>x</sub>	Oxides of sulfur. The group of compounds formed during combustion or thereafter in the atmosphere of sulfur compounds in the fuel, each having various levels of oxidation, ranging from two oxygen atoms for each sulfur atom to four oxygen atoms.
Spark arrestor	A device that prevents the emission of flammable debris from the exhaust of an internal combustion engine where they could cause a spark
Stemming	material placed above an explosive charge in the drill hole that is used to keep the force of the blast from existing through the drill hole
Substation	A subsidiary station of an electricity generation, transmission, and distribution system where voltage is transformed from high to low, or the reverse, using transformers.
<b>T</b>	
Texture	The perceived coarseness of a surface that is created by the light and shadow relationship over the surface of an object. For example, a rough surface texture (e.g., a rocky mountainside) would have many facets resulting in a number of areas in light and shadow and, often, with distinct separations between areas of light and shadow. Conversely, a smooth surface texture (e.g., a beach) would have fewer facets, larger surface areas in light or shadow, and gradual gradations between light and shadow.
Topped Structure	a pole structure that is cut to a lower height above the ground and used to carry lower voltage distribution lines.
Transmission Line	CPUC General Order 131-D distinguishes between distribution lines ("designed to operate under 50 kilovolts"), power lines ("designed to

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operate between 50 and 200 kilovolts"), and transmission lines ("designed to operate at or above 200 kilovolts").

### Transposition

A change of conductor positions at intervals along a power or transmission line so that each conductor occupies the position of every other conductor for an equal distance in order to balance the inductance and electrical currents of the phases. Transpositions are made on lines that have voltages of 110 or more kilovolts.

## U

### Unity

The degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements.

### Utility Corridor

A strip of land, or an easement, on which utility facilities such as transmission, power, and distribution lines and pipelines are constructed.

## V

### V

volts; the standard unit of measure for voltage.

### Viewer Awareness

Viewer awareness is a measure of attention (level of observation based on routine and familiarity), focus (level of concentration), and protection (legal and social constraints on the use of visual resources). The greater the attention, the more viewers will be concerned about visual impacts.

### Viewer Exposure

Viewer exposure is a measure of proximity (the distance between viewer and the visual resource being viewed), extent (the number of viewers viewing), and duration (how long of a time visual resources are viewed). The greater the exposure, the more viewers will be concerned about visual impacts.

### Viewer Sensitivity

The degree to which viewers are sensitive to changes in the visual character of visual resources. It is the consequence of two factors, viewer exposure and viewer awareness.

### Viewshed

All of the surface area visible from a particular location (e.g., an overlook) or sequence of locations (e.g., a roadway or trail).

### Visual Character

The description of the visible attributes of a scene or object typically using artistic terms such as form, line, color, and texture.

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Visual Compatibility	Defined as the ability of environment to visually absorb the proposed project as a result of the project and the environment having compatible visual characters. The proposed project can be considered compatible or incompatible. By itself, compatibility of the impact should not be confused or conflated with the value of the impact.
Visual Contrast	The opposition or unlikeness of different forms, lines, colors, or textures in a landscape.
Visual Quality	What viewers like and dislike about visual resources that compose the visual character of a particular scene. Different viewers may evaluate specific visual resources differently based on their interests in natural harmony, cultural order, and project coherence. Neighbors and travelers may, in particular, have different opinions on what they like and dislike about a scene.
Viewer	A person who may be at any scenic vista, scenic highway, or public recreational area located within the project viewshed or an area where perceived visual intrusion is a distinct possibility.
Visual Resource	Components of the natural, cultural, or project environments which are capable of being seen.
Vividness	The visual power or memorability of the visual impression received from contrasting landscape elements as they combine in distinctive visual patterns.
Voltage	Electric potential expressed in volts.
<b>W</b>	
Watershed	The area contained within a drainage divide above a specified point on a stream.
Wetland	Lands transitional between obviously upland and aquatic environments. Wetlands are generally highly productive environments with abundant fish, wildlife, aesthetic, and natural resource values. For this reason, coupled with the alarming rate of their destruction, they are considered valuable resources, and several regulations and laws have been implemented to protect them.

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