GLOSSARY

The following glossary contains technical terms and acronyms used in the PEA. It is provided here for quick reference and convenience.

µg/m³: Micrograms per cubic meter.
3-D: Three dimensional.

ABAG: Association of Bay Area Governments.
ac: Alternating current.

A-weighted Sound Level (dBA):
The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made. A-weighting de-emphasizes the low and very high frequency components of the sound in a manner similar to the response of the average human ear. A-weighted sound levels correlate well with subjective reactions of people to noise and are universally used for community noise evaluations.

Airborne Sound:
Sound that travels through the air, as opposed to structure-borne sound.

Air Switch:
A device designed to open and close electrical circuit. The device is rated in amperes and is capable of interrupting its rated current in air at rated voltage.

Ambient Noise:
The prevailing general noise existing at a location or in a space, which usually consists of a composite of sounds from many sources near and far.

BAAQMD: Bay Area Quality Management District.
BMP: Best Management Practices.

Breaker:
A switch that automatically interrupts an electric circuit under an infrequent abnormal condition.

Bus:
A conductor or group of conductors that serve as a common connection for two or more circuits.
CAA: Federal Clean Air Act.
Caltrans: California Department of Transportation.
CARB: California Air Resources Board.
CDFA: California Department of Food and Agriculture.
CDFG: California Department of Fish and Game.
CDMG: California Department of Mines and Geology (now CGS).
CEQA: California Environmental Quality Act.
CESA: California Endangered Species Act.
CFGC: California Fish and Game Code.
CGS: California Geologic Survey (formerly CDMG).
CNDDDB: California Natural Diversity Data Base.
CNPS: California Native Plant Society.
CO: Carbon Monoxide.
Corps: U.S. Army Corps of Engineers.
CRHR: California Register of Historic Resources.
CRLF: California Red-legged Frog.
CRT: Cathode Ray Tube.
CTS: California Tiger Salamander.
CWA: Clean Water Act.
CWHR: California Wildlife Habitat Relationships.

Capacitor:
(condenser) A device, the primary purpose of which is to introduce capacitance into an electric circuit. Capacitors are usually classified according to their dielectrics (e.g., air capacitors, mica capacitors, paper capacitors).

Circuit:
A complete path of electric current; a source of electric energy. On a transmission line, each circuit consists of three separate conductors or bundles of conductors.

Circuit Breaker:
A device designed to open and close a circuit by nonautomatic means and to open the circuit automatically on a pre-determined overcurrent, without injury to itself when properly applied within its rating.

Community Noise Equivalent Level (CNEL):
The $L_{eq}$ of the A-weighted noise level over a 24-hour period with a 5 dB penalty applied to noise levels between 7 p.m. and 10 p.m. and a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m.
**Conductor:** A material capable of transmitting another form of energy. The electrical wire on a transmission line.

**Current:** The rate of flow of an electric charge.

**dbh:** Diameter at breast height.

**DES:** Department of Energy Services.

**DPS:** Distinct population segment.

**DTSC:** California Department of Toxic Substances Control.

**Day-Night Sound Level (L_{eq}):**
The L\textsubscript{eq} of the A-weighted noise level over a 24-hour period with a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m.

**Dead Tank Breaker:**
A device in which circuit interruption occurs in a dead tank which is grounded. (Same as circuit breaker)

**Decibel (dB):**
The decibel is a measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power and intensity) with respect to a standardized quantity.

**Double-Circuit:**
To place two separate electrical circuits (for alternating current, each circuit consists of three separate conductors or bundles of conductors) on the same transmission structures.

**EDR:** Environmental Data Resources.

**EPA:** Environmental Protection Agency.

**ESA:** Endangered Species Act.

**ESU:** Evolutionally Significant Unit.

**Energy Equivalent Level (L_{eq}):**
The level of a steady noise that would have the same energy as the fluctuating noise level integrated over the period of interest. L\textsubscript{eq} is widely used as a single-number descriptor of environmental noise. L\textsubscript{eq} is based on the logarithmic or energy summation, and it places more emphasis on high noise level periods than does L\textsubscript{50} or a straight arithmetic average of noise level over time. This energy average is not the same as the average sound pressure levels over the period of interest, but must be computed by a procedure involving summation or mathematical integration.
FCC: Federal Communications Commission.

Frequency (Hz):
The number of oscillations per second of a periodic noise (or vibration) expressed in Hertz (Hz). Frequency in Hertz is the same as cycles per second.

g: Gravity.
GIS: Geographic Information System.
GPS: Global Positioning System.

Hertz (Hz):
A unit of electromagnetic wave frequency that is equal to one cycle per second.

Insulator:
A material that is a poor conductor of electricity. A device made of an electrical insulating material and used for separating or supporting conductors.

kV: Kilovolt.
KOP: Key Observation Point.

LCD: Liquid crystal display.
LOP: Local oversight program.

Lay Down Area:
Area near work site where construction supplies are temporarily placed.

M: Magnitude.
mA: Milliamperes.
M_b: Magnitude (body wave).
MCE: Maximum credible earthquake.
M_R: Magnitude (Richter).
MRZ: Mineral resource zone.
M_s: Magnitude (surface wave).
msl: Means sea level.
M_w: Moment magnitude.
**Megawatt (MW):**
A measure of electric power. One thousand kilowatts or one million watts.

**NAAQS:** National Ambient Air Quality Standards.
**NCSN:** Northern California Seismic Network.
**NESC:** National Electric Safety Code.
**NGMHMP:** National Ground Motion Hazard Mapping Project.
**NOAA:** National Oceanic and Atmospheric Administration.
**NO$_2$:** Nitrogen dioxide.
**NO$_x$:** Oxides of Nitrogen.
**NPDES:** National Pollutant Discharge Elimination System.
**NWIC:** Northwest Information Center.

**O$_3$:** Ozone.

**Octave Band—1/3 Octave Band:**
One octave is an interval between two sound frequencies that have a ratio of two. For example, the frequency range of 200 Hz to 400 Hz is one octave, as is the frequency range of 2,000 Hz to 4,000 Hz. An octave band is a frequency range that is one octave wide. A standard series of octaves is used in acoustics, and they are specified by their center frequencies. In acoustics, to increase resolution, the frequency content of a sound or vibration is often analyzed in terms of 1/3-octave bands, where each octave is divided into three 1/3-octave bands.

**P$_b$:** Lead.
**PEA:** Proponent’s Environmental Assessment.
**PG&E:** Pacific Gas and Electric Company.
**PGA:** Peak ground acceleration.
**ppb:** Parts per billion.
**ppm:** Parts per million.

**Peak Demand:**
The electric load on any system is arbitrarily divided into four categories: 1) Minimum load, which is the single-lowest level of demand a utility has met and defines the portion of the load that is met 100 percent of the time; 2) Intermediate load, which is the level of demand that a utility has met between 25 and 85 percent of the time; 3) Peak load, which is met approximately 25 percent of the time; and 4) Maximum load, which is the single highest load met during any interval.

**PM$_{10}$:** Particular matter or fugitive dust less than 10 microns in diameter.
**PM$_{2.5}$:** Particular matter or fugitive dust less than 2.5 microns in diameter.

**RGA:** Regional growth allocations.

**ROG:** Reactive organic gasses.

**ROW:** Right-of-way.

**RWQCB:** Regional Water Quality Control Board.

**Relay Protection:**
Device/s installed on a system to detect trouble and complete a circuit to electrically trip their associated circuit breakers or contactors when necessary to isolate the trouble spot.

**SO$_2$:** Sulfur dioxide.

**SOD:** Sudden Oak Death.

**SPCC:** Spill prevention, control, and countermeasures.

**SWCA:** Sonoma County Water Agency.

**SWPPP:** Storm Water Pollution Prevention Plan.

**SWRCB:** State Water Resources Control Board.

**Sock Line:** A small cable used to pull in the conductor.

**Sound Pressure Level (SPL):**
The sound pressure level of sound in decibels is 20 times the logarithm to the base of 10 of the ratio of the RMS value of the sound pressure to the RMS value of a reference sound pressure. The standard reference sound pressure is 20 micro-Pascals as indicated in ANSI S1.8-1969, “Preferred Reference Quantities for Acoustical Levels.”

**Sound Transmission Class (STC):**
STC is a single number rating, specified by the American Society for Testing and Materials, which can be used to measure the sound insulation properties for comparing the sound transmission capability, in decibels, of interior building partitions for noise sources such as speech, radio, and television. It is used extensively for rating sound insulation characteristics of building materials and products.

**Staging Area:** Place where construction equipment and supplies are temporarily stored.

**Structure-Borne Sound:**
Sound propagating through building structure. Rapidly fluctuating elastic waves in gypsum board, joists, studs, etc.
**Statistical Distribution Terms:**
$L_{50}$ is a statistical descriptor of the typical average background noise (or vibration) levels observed during a measurement period, normally made up of the summation of a large number of sound sources distant from the measurement position and not usually recognizable as individual noise sources. Generally, the prevalent source of this residual noise is distant street traffic. $L_{50}$ is not strongly influenced by occasional local motor vehicle pass-bys. However, it can be influenced by stationary sources, such as air conditioning equipment.

**Substation:**
(Transmission and distribution) An assemblage of equipment for purposes other than generation or utilization, through which electric energy in bulk is passed for the purpose of switching or modifying its characteristics. Service equipment, distribution-transformer installations, and other minor distribution or transmission equipment are not classified as substations.

**Surge Arrestors:**
A transient water of current, potential, or power in the electric circuit.

**Switch Structure:**
Structure designed to support electrical switch or apparatus to maintain safe clearances from other equipment and from ground for operating personnel.

**TSP:**
Tubular steel pole.

**Tension Site:**
A site where the tensioner and the reels of conductors are located. The conductor is fed from the reels through the tensioner to travelers on the transmission lines structures on to the puller located at other end of the pull.

**Transformer:**
A device employing the principle of mutual induction to convert variations of current in a primary circuit into variations of voltage and current in a secondary circuit.

**Transmission:**
A general term for the process by which incident flux leaves a surface or medium on a side other than the incident side.

**UCMP:** University of California Museum of Paleontology.
**USFWS:** U.S. Fish and Wildlife Service.
**USGS:** U.S. Geological Survey.
UST: Underground storage tank.

VOC: Volatile organic compound.

Voltage:
Electric potential, or potential difference between two points in a conducting wire. Electromotive force equivalent to the pressure that causes water to flow in a pipe.

WGCEP: Working Group on California Earthquake Probabilities.