Windsor Substation Project

Supplement to the Proponent's Environmental Assessment

Prepared for Pacific Gas and Electric Company

Prepared by TRC Solutions, Inc.
80 Stone Pine Road, Suite 200
Half Moon Bay, CA 94019

May 2011

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GLOSSARY

ambient noise: the prevailing general noise existing at a location or in a space, usually consisting of a composite of sounds from many sources near and far.

A-weighted sound level: 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. Community noise evaluations universally use A-weighted sound levels because they correlate well to subjective reactions of people. Noise evaluations are generally taken in root mean square units, using meters with calibrated standardized time responses.

conductor: any metallic material, usually in the form of wire, cable, or bar, suitable for carrying an electric current.

community noise equivalent level: is a 24-hour average metric for community noise exposure involving a 24-hour average of the 1-hour equivalent sound levels that differentiates between daytime and nighttime noise exposures with a 5 dBA penalty for L_{eq} between 7 p.m. and 10 p.m. and 10-dBA penalty for noise between the hours of 10pm and 7am. CNEL is generally about 4.5 dBA higher than the daily L_{eq} for the same location due to the mathematic effect of the penalties.

day-night sound level: the L_{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.

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

emissions: substances discharged into the air.

kilovolt: the electrical unit of potential difference equal to 1,000 volts.

level of service: a qualitative measure describing operational conditions within a traffic stream and motorists' perception of those conditions. LOS ratings typically range from LOS A, which represents free flow conditions, to LOS F, which is characterized by forced flow, heavy congestion, stop-and-go traffic, and long queues forming behind breakdown points.

noise: unwanted sound. Sound is usually measured via the logarithmic decibel scale referenced to the minimum threshold pressure for audibility (20 micro Pascals). A change of 3 dB is equal to a doubling of sound pressure. A change of 10 dB represents a 10x change in sound pressure but is perceived as a doubling of sound. Five dB is considered to be a definite noticeable change in sound level.

seismicity: the frequency, intensity, and distribution of earthquake activity in a given area.

sensitive receptors: facilities or land uses that include people who are particularly susceptible to the affects of air pollution, including children, the elderly, and people with illnesses. Schools, hospitals, and residential areas are all examples of sensitive receptors.

ACRONYMS

Acronym/ Abbreviation	Definition
ACOE	U.S. Army Corps of Engineers
APM(s)	Avoidance and Protection Measure(s)
BAAQMD	Bay Area Air Quality Management District
bgs	below ground surface
BMP(s)	best management practice(s)
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CTS	California tiger salamander
dBA	A-weighted sound level
kV	kilovolt
LOS	Level of Service
NCRA	North Coast Railroad Authority
NRCS	Natural Resources Conservation Service
NWPRR	Northwestern Pacific Railroad
PEA	Proponent's Environmental Assessment
PM_{10}	particulate matter less than 10 microns in equivalent diameter
PUE	Public Utility Easement
ROW	right-of-way
SMART	Sonoma Marin Area Rail Transit District
TSP	Tubular Steel Pole
UCMP	University of California Museum of Paleontology
USGS	U.S. Geological Survey
USFWS	U.S. Fish and Wildlife Service

Acronym/ Abbreviation	Definition
VOC(s)	Volatile Organic Compounds