

APPENDIX 1

GLOSSARY AND ACRONYMS

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% chance of occurrence in any given year.

AAC

All-aluminum conductor.

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.

ac

auxiliary alternating current.

ACE

Assessment of Chemical Exposure.

ac-ft

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.

ACHP

U.S. Advisory Council on Historic Preservation.

ACSR

Aluminum Conductor, Steel Reinforced.

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."

Aggradation (Of a Stream Channel Bed)

Raising of stream bed elevation, caused by sediment supply in excess of sediment-transport capacity.

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.

Algae

A collective term for several taxonomic groups of primitive chlorophyll-bearing plants which are widely distributed in fresh and salt water and moist lands. This term includes the seaweeds, kelps, diatoms, pond scums, and stoneworts.

Alignment

The centerline of a transmission right-of-way established by survey. It is tied to recorded monuments so that its exact location can be determined in relation to private and public property ownership.

Alluvium (alluvial)

Sediments (or relating to such) deposited and/or landforms originated by flowing watercourses.

Ambient

Surrounding on all sides, encompassing.

Ambient Air

Any unconfined portion of the atmosphere; the outside air.

Ambient Noise Level

Noise from all sources, near and far. ANL constitutes the normal or existing level of environmental noise at a given location.

Angle Towers

Heavier and stronger towers used where a transmission line makes a turn.

ANL

Ambient Noise Level.

ANSI

American National Standards Institute.

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.

APEFZ

Alquist-Priolo Earthquake Fault Zone.

APM

Applicant proposed measure.

APN

Assessor Parcel Number, given to a parcel, or a specified area, of land by County tax assessors.

AQAP

Air Quality Attainment Plan; equivalent to Air Quality Management Plan (AQMP), which outlines rules and regulations for improving and maintaining the quality of air in the region.

AQMD

Air Quality Management District.

Aquifer

A water bearing stratum of permeable rock, sand, or gravel.

ARB

Air Resources Board.

Arcing

A discharge of electric current crossing a gap between two electrodes.

Arroyo

A watercourse (as a creek or stream) in an arid region, a water-carved gully or channel.

ASME

American Society of Mechanical Engineers.

ASTM

American Society for Testing Materials.

ATC

Authority to Construct. A permit required by local air quality regulatory agencies before construction of a major emission source is started.

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.

Attainment

Meeting the standards established by the state and federal governments for criteria air pollutants.

Attenuate

To lessen the amount, force, magnitude, or value of something.

Average

As a measure, the sum of the measurements (over a specified period) divided by the number of measurements.

Avifauna

Birds.

A-Weighting

A frequency measure of noise that simulates human perception.

Backfill

Earth that is replaced after a construction excavation.

Backhoe

A self-propelled machine with an arm equipped with a toothed shovel that scoops earth as the shovel is pulled toward the machine.

BACT

Best Available Control Technology; the most improved devices or air emission reduction technology currently available for controlling pollutant emissions.

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.

BIA

U.S. Bureau of Indian Affairs.

Biota

Living organisms.

BLM

U.S. Bureau of Land Management.

BMP

Best Management Practice.

BOD

Biological Oxygen Demand; the free oxygen-removing capability of biologically derived materials in the environment.

BOR

U.S. Bureau of Reclamation.

B.P.

Before Present.

BPA

Bonneville Power Administration.

bpd

Barrels per day.

Brackish

Pertaining to water, generally estuarine, in which the salinity ranges from 0.5 to 17 parts per thousand by weight.

Btu

British thermal unit, a measurement of energy, the amount of energy that can be obtained as heat by combusting approximately 1/1000 cubic feet of natural gas.

Bundled

An assembly of two or more conductors operating in a single phase, used as a single conductor.

CAAQS

California Ambient Air Quality Standard; see AAQS.

CAISO

California Independent System Operator.

CAL OSHA

California Occupational Safety and Health Administration.

Calcareous

Consisting of or containing calcium carbonate.

Caltrans

California Department of Transportation.

Capacitor

A device to store an electrical charge, usually made of two or more conductors separated by a nonconductor (dielectric) such as glass, paper, air, oil, or mica. A capacitor will not pass direct current; its impedance for alternating current frequencies is inversely proportional to frequency.

CAPCOA

California Air Pollution Control Officers Association.

CARB

California Air Resources Board, sometimes abbreviated as ARB.

Cargill

Cargill Salt Company.

Cathodic Protection

An anticorrosion technique for metal installations; pipelines, tanks, and buildings in which weak electric currents are established to offset the current associated with metal corrosion.

Cathodic Protection Rectifier

The rectifier converts alternating current power supply into direct current output. This output is connected to a buried anode which produces an electrical current through the soil and into the pipeline, which is thus placed under cathodic protection.

CCAA

California Clean Air Act.

CCD

Census County Division.

CCID

Central California Irrigation District.

CCR

California Code of Regulations.

CDF

California Department of Forestry and Fire Prevention.

CDFG

California Department of Fish and Game.

CDHS

California Department of Health Services.

CDMG

California Division of Mines and Geology.

CDPR

California Department of Parks and Recreation.

CDWR

California Department of Water Resources.

CEC

California Energy Commission.

CEQA

California Environmental Quality Act.

CFR

U.S. Code of Federal Regulations.

cfs

cubic feet per second.

Channel Lining

Artificial hardening of the sides and/or bed of a stream channel to prevent erosion. Concrete, soil cement and rock riprap are typical channel linings.

Circuit

A configuration of electrically connected devices permitted the flow of an electric current. The term single circuit in this report means one three-phase circuit composed of three conductors, each corresponding to a different phase. Double circuit means two three-phase circuits. Most often, circuits operate independently of one another.

Class I

Significant impact; cannot be mitigated to a level that is not significant (in regards to environmental impacts).

Class II

Significant impact; can be mitigated to a level that is not significant (in regards to environmental impacts).

Class III

Adverse impact, but less than significant.

Class IV

Beneficial impact.

CNDDDB

California Natural Diversity Data Base.

CNEL

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 pm and 10 dB from 10 pm to 7 am).

CNPS

California Native Plant Society.

CO

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

COD

Chemical Oxygen Demand; the free oxygen-removing (combining) capability of chemical substances in liquid.

Colluvial

Pertaining to rock detritus and soil accumulated at the foot of a slope.

Concentration

The relative content of a component (as dissolved or dispersed material) and measured by weight or volume of material per unit of volume of the medium.

Concentration, Average

The average of a series of measurements of concentration.

Concentration, Maximum

The highest individual or average measurement of concentration.

Conductor

Rubber coated aluminum or copper wires that carry an electric current. Most common is aluminum cable steel reinforced (ACRS).

Continental Deposition

Deposits of alluvial material within continental boundaries, non-marine.

Control Area

A portion of the interconnected electricity system grid whose operations and procedures are controlled and managed by a single utility. This utility typically owns most of the facilities in its control area and is responsible for the physical interaction with neighboring control areas.

Control Panel

An assembly of indicators and recording instrument; pressure gauges, warning lamps, and other visual or audible signals for monitoring and controlling a system.

Corona

A faint glow adjacent to the surface of electrical conductor at high voltage.

Corps

U.S. Army Corps of Engineers. See also USACE.

Corridor

A broad strip of land (varying between 2 and 5 miles wide in most cases) that could contain one or more transmission line routes connecting two termini.

Corrosivity

Is an estimate of the potential for soil-induced chemical action that dissolves or weakens uncoated shell.

COTP

California Oregon Transmission Project.

CPCN

Certificate of Public Convenience and Necessity.

CPUC

California Public Utilities Commission.

CPUC General Order No. 95

California Public Utilities Commission regulation that establishes minimum design and construction standards for overhead electric transmission lines.

CRB

California Reclamation Board.

CRHR

California Register of Historical Resources.

CRMP

Cultural Resource Management Plan.

Cryptogamic

A type of soil consisting of a surface layer of moss, lichen, and algae

CSC

California Species of Concern.

CSLC

California State Lands Commission.

Cultural Resource

Places or objects important for scientific, historical, and/or religious reasons to cultures, communities, and individuals.

CVP

Central Valley Project.

CWA

Clean Water Act.

Cyclonic

A large air mass circulating counterclockwise, in northern hemisphere.

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 intensities to which the human ear is sensitive.

dc

direct current.

Dead-end Towers

The structures at the termination point of a transmission line, or at the overhead/underground transition point.

Decibel (Db)

A logarithmic unit that measures the pressure levels of sounds.

DEIR

Draft Environmental Impact Report (see EIR).

DEIS

Draft Environmental Impact Statement (see EIS).

Densification

The process of compacting soil (or making denser); reorganization of the soil structure to a closer packing of soil particles.

Designated Floodway

Floodways designated by the State Reclamation Board; 100-year floodplains occurring near urban or other developed areas that would be significantly damaged if flooded.

Detention Dam

Structural restraining flow of river or creek, primarily used for flood control.

Diffusion Model

A model, calculated by formula, graphs, or computer, which estimates the dilution of an air pollutant as it is carried downwind. The models are based on physical principles with various simplifications to aid solvability.

Dip-Slope

Steepest vertical angle on the dipping formation.

DOE

U.S. Department of Energy.

DOI

U.S. Department of the Interior; a federal Department that includes the following agencies: BLM, USFWS, Bureau of Mines, Bureau of Reclamation, etc.

DOT

U.S. Department of Transportation.

DRA

(CPUC's) Division of Rate Payers Advocates; now Office of Rate Payers Advocates (ORA).

DSM

Demand Side Management, for example, home insulation, energy efficient appliances, etc.

DWR

California Department of Water Resources.

Easement

An interest in land owned by another that entitles its holder to a specific limited use or enjoyment. A right to make limited use of another's property.

ECP

Erosion Control Plan.

EDD

(California) Employment Development Department.

EIR

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

EIR/S

Environmental Impact Report and Statement, prepared as a single document for submission to both the state and federal governments and for public review. See EIR and EIS.

EIS

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

EMF

Electric and Magnetic Field.

Emission

Unwanted substances released by human activity into air or water.

Emission, Primary

An emission that is treated as inert (non-reactive).

Emission, Secondary

Unwanted substances that are chemical byproducts of reactive primary emissions.

Emission Control Device

Any piece of equipment that reduces the release of any air pollutant into the atmosphere; see BACT.

Emission Limit

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

EMT

Emergency Medical Training.

EPA

U.S. Environmental Protection Agency; a federal agency that works to protect the environment.

EPRI

Electric Power Research Institute.

EQAP

Environmental Quality Assurance Program; a generic term for mitigation monitoring.

Erosion Control Plan

Overall project construction and post-construction practices implemented to control erosion on slopes and in creeks and streams.

Escarpment

A long cliff or steep slope separating two comparatively level or more gently sloping surfaces and resulting from erosion or faulting.

ESH

Environmentally Sensitive Habitat; an area designated by governmental agencies as requiring special administration or protection.

ESHA

Environmentally Sensitive Habitat Area; an area designated by governmental agencies as requiring special administration or protection.

Estuary

Widening area at seaward end of river where its current is met and influenced by ocean tides.

Ethnohistoric

Ethnological information collected during historic times, for instance, that from the Spanish mission registers.

Export Capability

The capacity or extent to which a utility or electric control area can sell electric power outside its electric system at a given time or during a given set of conditions using all available facilities.

FAA

Federal Aviation Administration.

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.

fbg

feet below grade.

FCC

Federal Communication Commission.

FEIR

Final Environmental Impact Report. The Final EIR includes all comments made to the Draft EIR as well as the responses of the proposer to those comments and is submitted to the state government and the public for review of a proposed project.

FEIR/S

Final Environmental Impact Report/Statement; last version of document submitted to both state and federal governments. See FEIR.

FEMA

Federal Emergency Management Agency.

FERC

Federal Energy Regulatory Commission.

FHA

Federal Highway Administration.

Firm Capacity

A predetermined quantity of power that is offered to customers under contracts guaranteeing no interruption.

Firm Purchases

Contractual procurement of electric energy that is intended to have assured availability to the customer.

Firm Wheeling Services

The guaranteed use of one's utility's electric transmission system to transmit power generated or owned by another utility.

Floodplain

Level land that may be submerged by floodwaters. Often a plain built up by stream deposition.

Flora

Plants or plant life.

FLPMA

Federal Land Policy Management Act.

FRA

Federal Railway Administration.

Friable

Easily crumbled or pulverized.

FTE

Full-time equivalent.

Fugitive Dust

Airborne pulverized soil particles.

FWS

U.S. Fish and Wildlife Service.

g

(a) gram; (b) gravities, a unit of acceleration equal to that produced on free falling bodies at the earth's equator.

General Scour

Degradation of a channel bed as a result of imbalance of channel sediment-transport capacity and supply during a single stream flow.

Generation

The production of electricity from other forms of energy such as combustion, falling water or thermal transfer.

Generation Capacity

Maximum electric production limit for which a generator is rated. The maximum limit fluctuates with changes in temperature or other environmental circumstances, depending on the type of machine.

Gin Poles

A portable hoist consisting of three poles supporting a block and tackle. Used in areas difficult for heavy cranes.

GIS

Geographic Information System.

gpd

Gallons per day; a measure of flow rate.

gWh

Gigawatt-hour; A measure of electric energy. One million kilowatt-hours.

Gypsiferous

Containing gypsum, an evaporitic mineral found in dry lakebeds. Also, describes soils that are present through most of the foothills portions of the project, especially in the Tumey and Ciervo Hills. The strength of these soils for foundation support is generally low and may be seriously deficient, if saturated.

Hazard Index

The estimated exposure to a given substance being discharged from a facility divided by the acceptable exposure level for that substance summed over all pollutants.

HC

Hydrocarbons; a mixture of hydrocarbon compounds usually referred to in the vapor state.

Herpetofauna

Biological term for amphibians and reptiles.

Herpetologist

Person who studies amphibians and reptiles.

HF

High frequency.

High flow

High volumes of water, as into an estuary, produced by copious runoff after period of heavy rainfall.

Hoist

An apparatus for hoisting or raising into position.

Horsepower

A unit of power equivalent to 33,000 foot-pounds per minute or 745.7 watts of electricity.

HUD

U.S. Department of Housing and Urban Development.

Hydrocarbons, Nonmethane

Mixture or concentration of hydrocarbons with the methane fraction ignored. One of many formulations for reactive hydrocarbons.

Hydrocarbons, Reactive

Mixture or concentration of hydrocarbons with fraction assumed to be nonreactive removed from consideration. See VOC.

Hydrocompaction

Collapse of soil structures due to loss of strength during saturation.

Hz

Hertz.

IEEE

Institute of Electrical and Electronic Engineers.

Import Capability

The capacity or extent to which a utility or electric control area can purchase electric power from outside its electric system at a given time or during a given set of conditions using all available facilities.

Imports

The purchase of electricity by a utility from another utility outside its electric system.

INIRC

International Non-Ionizing Radiation Committee.

Insulator (string)

The device connecting conductors to transmission towers that also insulate the conductors from one another, the tower, or other grounded surfaces. Generally, insulators are porcelain discs that hang in a string and support one or more conductors.

Inventory, Emission

A list of daily or annual emissions, listed by pollution source category (e.g., trains, refineries, agriculture, etc.).

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.

IPPs

Independent Power Producers.

IRPA

International Radiation Protection Association.

ISCST

Industrial Source Complex (short term); an EPA-approved computer air quality module.

ISO

Independent System Operator.

Isobath

Contour line that is at equal depth along its length.

kcmil

Thousand circle mils; refers to wire size.

km²

Square kilometer.

KOP

Key Observation Point; one or a series of points on a travel route or at a use area where the view of the proposed project would be most revealing.

kV

Kilovolt. A measure of electric voltage, one thousand volts.

kV/m

Kilovolts per meter (see kV).

KVPs

Key viewpoints.

kWh

Kilowatt-hour.

L₁₀

An average of noise levels that are exceeded 10 percent of the time during the measurement period.

L_{eq}

Average level of sound determined over a specific period of time.

L_{dn}

The average ambient noise level in dBA with levels between 10 p.m. and 7 a.m. increased by 10 dBA.

Lateral Erosion

Horizontal movement of a channel bank, or channel widening, caused by water-transport of bank material.

Laydown Areas

A temporary area provided during construction to allow workers space for storage and handling equipment.

Lead Agency

For the proposed Los Banos-Gates 500 kV Transmission Project, the CPUC is the State Lead Agency.

Lead Line/Sock Line

A smaller cable attached to conductors, which is used to guide them through the insulators during the stringing and tension phases of construction.

LFZ

Likely Fault Zone.

Liquefaction

The process of making or becoming liquid (soils).

LIRP

Local Integrated Resource Plan.

Load Centers

Major areas of electricity consumption such as large cities or large industrial facilities.

Load Shedding

The process of deliberately removing electric loads from a power system in response to an abnormal condition in order to maintain the integrity of the system.

Local Scour

Lowering of a channel bed as a result of a local disturbance to flow, such as bridge piers, a sudden drop or a sharp channel bend.

LOS

Level of Service; a measure of roadway congestion, ranging from A (free flowing) to F (highly congested).

Low Flow

Low rate of water flow due to scant rainfall and low runoff.

Low-Flow Incisement

Formation of a local, small channel inside a larger stream channel as a result of low-discharge flows.

LFPD

Livermore-Pleasanton Fire Department.

LUST

Leaking underground storage tank.

m

Meter, length equal to 30.48 inches.

Macroinvertebrate

Pertaining to invertebrates that are visible to the naked eye.

Macroalgae

Pertaining to large algae, such as kelp, as distinguished from microscopic algae.

Median

The mid-value is a series of values, with half having greater value and half lower value. To be distinguished from "average."

MEI

Maximum Exposed Individual; see Air Quality.

mG

Milligauss. A measure of magnetic strength.

MGD

Million gallons per day.

Microclimate

Distinctive climate within a small geographic area.

Microphytic Crust

A thin layer of mosses, lichens, and other non-flowering organisms found at the soil surface that serve as an important link in the soil nutrient cycle.

Micron

One millionth of a meter.

Microwave

Radio communications which are of sufficiently short wavelength (or high frequency) as to be focused on a line-of-sight between sending and receiving equipment. These radio signals carry information for control purposes.

Milligauss (mG)

Measurement of magnetic field strength.

Mixing Height

The distance from the ground to a daytime (temperature) inversion layer.

MMI

Modified Mercalli Intensity (scale); subjective numerical index describing the severity of an earthquake in terms of its observed effects on humans, man-made structures, and the earth's surface.

Monitoring Station

A mobile or fixed site equipped to measure instantaneous or average ambient air pollutant concentrations.

MOU

Memorandum of Understanding.

MP

Milepost.

mph

Miles per hour.

MTC

Metropolitan Transportation Commission.

Multipathway Pollutants

Pollutants that pose a risk to public health through individual inhalation, ingestion (from food, water, or soil) or dermal absorption.

MVA

Megavoltamperes, is defined as the apparent power of the line. MVA is composed of both real power (measured in megawatts or MW) and reactive power (measured in megavoltamperes reactive or MVAR). The cable circuit rating (expressed in MVA) is the apparent power rating.

MVAR

Megavoltamperes reactive.

MW

Megawatt; a measure of electric power. One thousand kilowatts or one million watts.

Mw

Moment magnitude; measurement by which earthquakes are measured.

NAAQS

National Ambient Air Quality Standards; see AAQS.

NACE

National Association of Civil Engineers.

NAHC

Native American Heritage Commission.

Native Generation

Electricity generation within a utilities service area.

NEPA

National Environmental Policy Act.

NERC

National Electric Reliability Council.

NESC

National Electrical Safety Code.

NHPA

National Historic Preservation Act.

NIEHS

National Institute of Environmental Health Sciences.

Nitrogen Oxides

A gaseous mixture of nitric oxide (NO) and nitrogen dioxide (NO₂) and symbolically represented as NO_x.

NO

Nitric oxide. A molecule of one nitrogen and one oxygen atom. Results usually from combustion of organic substances containing nitrogen and from recombination of nitrogen decomposed in air during high temperature combustion.

NO₂

Nitrogen Dioxide. A molecule of one nitrogen and two oxygen atoms. Result usually from further oxidation of nitric oxide (NO) in the atmosphere. Ozone accelerates the conversion.

NO_x

Nitrogen Oxides; poisonous and highly reactive gases produced when fuel is burned at high temperatures, causing nitrogen in the air to combine with oxygen.

Noise Level, Median

The level of noise exceeded 50 percent of the time. Usually specified as either the daytime or the nighttime median noise level. Also given the designation L₅₀.

Non-Firm Purchases

Electric energy purchases having limited or no assured availability.

Non-Utility Owned Generation

Generation which is possessed by a entity not in the business for the sale of electricity at retail.

NOP

Notice of Preparation.

NPDES

National Pollutant Discharge Elimination System.

NPP

Northwest Power Pool.

NPPA

Native Plant Protection Act.

NPS

National Park Service.

NRHP

National Register of Historic Places.

NRS

Northern Receiving Station.

NSR

New Source Review; see Air Quality.

NWR

National Wildlife Refuge.

O₃

Ozone; a colorless gas formed by a complex series of chemical and photochemical reactions of reactive organic gases, principally hydrocarbons with the oxides of nitrogen, which is harmful to the public health, the biota, and some materials.

OES

Office of Emergency Services.

OHV

Off-Highway Vehicle.

ORV

Off-Road Vehicles.

OSHA

U.S. Occupational Safety and Health Administration, a federal agency regulating the health safety of the work place.

Oxidant

A mixture of chemically oxidizing compounds formed from ultraviolet stimulated reactions in the atmosphere, with ozone a principal fraction.

Ozone

A molecule of three oxygen atoms (O₃). A principal component of "oxidant" in photochemically polluted atmospheres.

PA

Programmatic Agreement.

Pacific Intertie

A system of electric transmission links (also called interconnections) with the Pacific Northwest utilities in Southern Oregon and with Southern California utilities in Kern County.

PAH

Polyaromatic hydrocarbons; hazardous air pollutants.

Particulate Emissions

Solid (though sometimes microscopic) air pollutants such as dust and fine organic particles that are emitted by various sources or suspended by wind.

Particulate Matter (particulates)

Very fine sized solid matter or droplets, typically averaging one micron or smaller in diameter. Also called "aerosol."

PCBs

Polychlorinated biphenyls.

PEA

Proponent's Environmental Assessment; required by CPUC when filing application for CPNC.

Peak Ground Acceleration

Highest acceleration shown on an accellogram produced by an earthquake.

PGA

Peak ground acceleration.

PG&E Co.

Pacific Gas and Electric Company.

Ph

A measure of acidity or alkalinity.

Photochemical Pollutant

Reactive organic compounds (ROC) and nitrogen oxides (NO_x), photochemical pollutants that absorb energy from the sun and react chemically to form ozone (O₃).

Phytoplankton

Microscopic plants that form the base of the marine/aquatic food chain.

Pipeline Corridor

Fifty- to two hundred-foot strip of land for installation of the proposed Tuscarora pipeline. It can be part of a utility corridor containing other linear utility systems.

Planning Reserves

As required by WSCC Operating Criteria, WSCC member utilities must have standby generation capacity, in addition to existing demand requirements, to insure an adequate level of service.

PM₁₀

Particulate matter less than 10 micron in size, which is small enough to be inhaled deeply into the lungs and cause disease.

ppb

Parts per billion, a measure of the amount of one substance in a second, which is the carrier.

ppm

Parts per million, a measure of the amount of one substance found in a carrier.

ppt

Parts per thousand, a measure of the amount of one substance found in a carrier.

PSD

Prevention of Significant Deterioration; a federal set of limits on emissions of sulfur oxide and particulates to protect air quality in non-urban area.

psi

Pounds per square inch.

Psig

The gauge value of pressure in pounds per square inch.

PTO

Permit to Operate; Granted by the APCD after source testing and validation of permits.

PUD

Planned Unit Development.

Rating

Maximum operation limit of transmission or generation facilities, as established by WSCC and/or NPP operating and reliability criteria guidelines. Utility facilities and interconnections can be rated either for individual or simultaneous operation, where simultaneous operations take into consideration collective WSCC or NPP utilities.

RCRA

Resource Conservation and Recovery Act.

Reactive Power

A component of power production that is not sold.

Right-of-Way

See ROW.

Riparian

Area along the banks of a river or lake supporting specialized plant and animal species.

Riprap

A foundation constructed of broken stones or boulders loosely placed or thrown together, as in deepwater, on a soft bottom, or as a seawall to protect against erosion.

RMP

Resource Management Plan.

RNA

Research Natural Area.

ROC

Reactive Organic Compounds (see Air Quality) that are chemically sensitive to the ultraviolet light in sunlight.

Route

For this report, a strip of land of varying width up to 1,500 feet in which a transmission line right-of-way could be located. One or more routes could be located in a single corridor.

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.

RTU

Remote Terminal Units; a device that takes data from field transmitters that detect pressure, temperature and other parameters.

Ruderal

Growing where the natural vegetation cover has been disturbed.

RWQCB

Regional Water Quality Control Board.

SCAQMD

South Coast Air Quality Management District.

SCE

Southern California Edison Company.

SCF

Standard cubic foot; a measure of volume or rate of flow of liquid.

SCS

Soil Conservation Service.

SDG&E

San Diego Gas & Electric.

SEA

Significant Ecological Area; an area containing an ecosystem of value and requiring government protection.

Seedbank

The layer of topsoil containing native plant seed material, which is frequently used as a "seed bank" for revegetation of native plants.

SEIR

Supplemental Environmental Impact Report.

Seismicity

The relative frequency and distribution of earthquakes.

Self-Owned or Utility-Owned Generation

Generation which is possessed by a utility.

Sensitive Receptor

Land uses adjacent to or within proximity to the Proposed Project that could be impacted by construction, operation, and maintenance activities.

Series Capacitor

A device which neutralizes circuit reactance thereby providing for increased power limits and stability in an AC circuit. These are used to compensate for voltage drop along a transmission line. The load current produces the voltage rise through the series capacitors, so that compensation is automatic and varies with the load, improving the power carrying capabilities of the line.

SHPO

State Historic Preservation Office.

Shrink-Swell Potential

The expansion or contraction of primarily clay-rich soils during alternating wetting and drying cycles.

Shunt Capacitor

A device used to control voltage levels in an electric transmission circuit. These are generally located in substations and used to increase the voltage on the system, i.e., improve the power factor to lower line or equipment reactive loading.

SIP

State Implementation Plan (see Air Quality); 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.

Skylining

Extending above the horizon line.

SLC

State Lands Commission; the California agency that manages state-owned lands, such as the zone between mean high tide and the land lying offshore within the three-mile limit.

Slope Instability

Susceptibility of slopes to fail by creeping, slumping, flowing, sliding, and rock falls.

SMUD

Sacramento Municipal Utilities District

SO_x

Sulfur oxides. 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.

SO₂

Sulfur Dioxide; a corrosive and poisonous gas produced from the complete combustion of sulfur in fuels.

SP

State Park.

SPCC

Spill Prevention Containment and Counter measure.

SPEA

Supplemental Proponent's Environmental Assessment.

SR

State Route.

SRA

State Recreation Area.

SSZ

Special studies zone.

Stream Scour

Lowering of a streambed during the passage of a single stream flow. Stream scour can be local in nature (see Local Scour) or more widespread (see General Scour).

Stub Angles

The length of steel protruding from the foundation base to which transmission tower legs are attached.

Substrate

Geologic term describing soil or geologic layers underlying the ground surface.

Sulfates

Compounds in air or water that contain four oxygen atoms for each sulfur atom. See SO_x.

Sulfur Oxides

A gaseous mixture of sulfur dioxide (SO₂) and sulfur trioxide (SO₃) and symbolically represented as SO_x. Can include particulate species such as sulfate compounds (-SO₄).

Supplemental EIR

An EIR built on a previously certified Final EIR to account for potential final project or impact changes.

SWP

State Water Project.

SWPPP

Storm Water Pollution Prevention Plan.

TAC

Toxic Air Contaminants.

TANC

Transmission Agency of Northern California.

Tangent Towers

Towers used when the transmission line is straight (no angles).

TC

Transportation Corridor.

TCM

Transportation Control Measures.

TCP

Traffic Control Plans.

TDM

Transportation Demand Management; a system of analysis designed to reduce traffic levels and thereby reduce air pollution.

TDS

Total Dissolved Solids.

Terrestrial

Related to or living on land. Terrestrial biology deals with upland areas as opposed to shorelines or coastal habitats.

Three-Phase Circuit

A combination of circuits energized by alternating electromotive forces that differ in phase by one-third of a cycle (120-degrees).

tpd

Tons per day.

Transmission Service Customers

Wholesale electricity utilities or other entities that pay for the use of another utility's facilities to transmit electric power from one point to another.

TSP

Total Suspended Particulates; solid or liquid particles small enough to remain suspended in air. PM₁₀ is the portion of TSP that can be inhaled.

Turbidity

Cloudiness or muddiness of water, resulting from suspended or stirred up particles.

UBC

Uniform Building Code.

ug/m³

Millionths of a gram per cubic meter, a unit of concentration in liquids or gases.

UPRR

Union Pacific Railroad.

UPRS

Union Pacific Railroad System.

USA

Underground Service Alert.

USACE

U.S. Army Corps of Engineers.

USCS

Unified Soils Classification System.

USDA

U.S. Department of Agriculture.

USFS

U.S. Forest Service.

USFWS

U.S. Fish and Wildlife Service.

USGS

U.S. Geologic Survey.

Utility Corridor

A strip of land, or an easement, on which utility facilities such as powerlines and pipelines are constructed.

VAC

Visual absorption capacity.

V/C

Volume to Capacity ratio; a measure of the capacity of a roadway. When V/C is 100 percent, no more traffic can be accommodated.

Viscosity

Term applied to a fluid indicating its resistance to shear. In common terms, how "sticky" the fluid.

Visual Impact

A change in the perspective of the visual quality of a landscape resulting from a visual change or modification in the landscape. Visual impact can result from natural ecological changes, such as erosion, development activities, such as buildings or transmission lines, and land management activities such as timber harvesting or firebreaks.

Visual Sensitivity

Consideration of people's uses of various environments and their concerns for maintenance of scenic quality and open-space values; examples of areas of high visual sensitivity would be areas visible from scenic highways, wilderness areas, parks, recreational water bodies, etc.

VMT

Vehicle Miles Traveled; usually per day.

Voltage

The electric pressure of a circuit in an electric system measured in volts.

vpd

Vehicles per day; see Transportation.

VRM

Visual Resource Management.

WATCH

Work Area Traffic Control Handbook.

Watershed

The area contained within a drainage divide above a specified point on a stream.

Western (WAPA)

Western Area Power Administration.

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.

Wheeling

An electric operation wherein transmission facilities of one system are utilized to transmit power of another system.

WHO

World Health Organization.

WPCP

Water Pollution Control Plant.

WSA

Wilderness Study Area.

WSCC

Western System Coordinating Council.

WSF

Water Soluble Fraction.

WUG

Western Utility Group.

Zooplankton

Microscopic marine/aquatic animals generally carried within a water mass.