## J. Glossary, Acronyms, Abbreviations

**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.

**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.

AB - Assembly Bill.

AC - Alternating current.

ACE - Assessment of Chemical Exposure.

**ACEC** – Area of Critical Environmental Concern – Areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to historic, cultural, or scenic values, fish and wild-life resources or other natural systems or processes, or to protect life and safety from natural hazards (FLPMA Section 103 (a), 1976).

**ACHP** – U.S. Advisory Council on Historic Preservation.

**ACOE** – U.S. Army Corps of Engineers.

**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.

ACSR – Aluminum Conductor, Steel Reinforced.

**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.

**ALJ** – Administrative Law Judge.

**ALS** – Advanced life support.

**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.

AMR - American Medical Response.

ANSI - American National Standards Institute.

APE - Area of Potential Effect.

**APM** – Applicant Proposed Measure.

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

**AQMP** – Air Quality Management Plan.

**ARB** – Air Resources Board.

ARLs - Additional Reserve Lands.

**ARMC** – Arrowhead Regional Medical Center.

ARPA - Archeological Resources Protection Act.

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

ATCM - Airborne Toxic Control Measures.

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

**B.P.** – Before Present.

**BA** – Biological Assessment.

**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.

**BGEPA** – Bald and Golden Eagle Protection Act.

**BIA** - Bureau of Indian Affairs.

**BLM** – Bureau of Land Management, an agency of the U.S. Department of the Interior and NEPA Lead Agency for this EIR/EIS.

**BMP** – Best Management Practice.

**BNSF** – Burlington Northern Santa Fe.

**BO** – Biological Opinion.

CAA – Clean Air Act.

CAAA - Clean Air Act Amendments.

**CAAQS** – California Ambient Air Quality Standard; see AAQS.

**CAGN** – Coastal California gnatcatcher.

**CAISO** – California Independent System Operator.

**CalEPA** – California Environmental Protection Agency.

**CALFIRE** – California Department of Forestry and Fire Protection.

**Cal-IPC** – California Invasive Plant Council.

**Caltrans** – California Department of Transportation.

**CARB** – California Air Resources Board, sometimes abbreviated as ARB.

**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.

CBC - California Building Code.

**CCR** – California Code of Regulations.

CDCA - California Desert Conservation Area.

**CDF** – California Department of Forestry and Fire Prevention.

CDFG - California Department of Fish and Game.

**CDFW** – California Department of Fish and Wildlife.

**CDMG** – California Division of Mines and Geology.

**CDPH** – California Department of Public Health.

**CEC** – California Energy Commission.

**CEC** – Certificate of Environmental Compatibility (Arizona permitting process under Arizona Corporation Commission).

**CEE** – Customer Energy Efficiency.

**CEQ** – Council on Environmental Quality.

**CEQA** – California Environmental Quality Act.

**CESA** – California Endangered Species Act.

CFR – U.S. Code of Federal Regulations.

**CGS** – California Geological Survey.

**CIWMB** – California Integrated Waste Management Board.

**Class I** – Significant impact; cannot be mitigated to a level that is not significant.

Class II – Significant impact; can be mitigated to a level that is not significant.

Class III - Adverse impact, but not significant.

Class IV - Beneficial impact.

**CNDDB** – California Natural Diversity Database.

**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 p.m. and 10 dB from 10 p.m. to 7 a.m.).

**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.

**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.

**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.

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

**CPCN** – Certificate of Public Convenience and Necessity.

CPUC - California Public Utilities Commission.

**CRHR** – California Register of Historical Resources.

CRIT - Colorado River Indian Tribe.

**CRMP** – Cultural Resource Management Plan.

**CSLC** – 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.

**CSP** – Concentrating Solar Power.

**Cultural Resource** – Places or objects important for scientific, historical, and religious reasons to cultures, communities, and individuals.

**CVAG** – Coachella Valley Association of Governments.

**CVCC** – Coachella Valley Conservation Commission.

**CVMSHCP** – Coachella Valley Multiple Species Habitat Conservation Plan.

CWA - Clean Water Act.

**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.

DC - Direct current.

**DCA** – Development and Coordination Agreement.

**Decibel (Db)** – A logarithmic unit which measures the pressure levels of sounds.

**DEIR** – Draft Environmental Impact Report (see EIR).

**DES** – Department of Economic Security.

**DHS** – Department of Health Services.

**DOC** – California Department of Conservation.

**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.

**DPM** – diesel particulate matter.

**DPR** – Department of Pesticide Regulation.

**DPV2** – Devers–Palo Verde 500 kV Transmission Line No. 2 (the Proposed Project).

**DRECP** – Desert Renewable Energy Conservation Plan.

**DTSC** – Department of Toxic Substances Control.

**DWMA** – Desert Wildlife Management Area.

**DWR** – California Department of Water Resources.

**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/EIS** – Environmental Impact Report and Environmental Impact 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.

**EMT** – Emergency Medical Training.

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

**EPRI** – Electric Power Research Institute.

**ESA** – Endangered Species Act.

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

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.

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 Lead Agency to those comments and is submitted to the state government and the public for review of a proposed project.

FEIS - Final Environmental Impact Statement.

FEMA – Federal Emergency Management Agency.

FERC – Federal Energy Regulatory Commission.

FHWA – Federal Highway Administration.

Flora - Plants or plant life.

**FLPMA** – Federal Land Policy and Management Act.

FRA – Federal Railway Administration.

**FS** – Facilities Study.

**FTE** – Full-time equivalent.

Fugitive Dust – Airborne pulverized soil particles.

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

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

**Gen-Tie** – Transmission line connecting a generator to the electric grid.

**GIS** – Geographic Information System.

gpd – Gallons per day; a measure of flow rate.

**GPS** – Global positioning system.

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

Herpetofauna – Biological term for reptiles.

**HF** – High frequency.

**HMA** – Housing Market Area; see Socioeconomics.

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

**HOV** – High-occupancy vehicle.

**Hz** – Hertz; a measure of frequency in cycles per second.

**I-10** – Interstate 10.

I-15 - Interstate 15.

**IEEE** – Institute of Electrical and Electronic Engineers.

**IID** – Imperial Irrigation District.

**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.

**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.

IOU - Investor Owned Utility.

IRPA – International Radiation Protection Association.

**ISO** – Independent System Operator.

kcmil – Thousand circular mils; refers to conductor size.

km<sup>2</sup> – 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/cm** – Kilovolts per centimeter.

kV/m - Kilovolts per meter.

**KVPs** – Key viewpoints.

kWh - Kilowatt-hour.

**L10** – An average of noise levels that are exceeded 10 percent of the time during the measurement period.

**Lateral Erosion** – Horizontal movement of a channel bank, or channel widening, caused by water transport of bank material.

**lbs/day** – Pounds per day.

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

**Lead Agency** – The agency responsible for preparation of the CEQA or NEPA document. For the proposed DPV2 Transmission Line Project, the CPUC is the Lead Agency under CEQA and the BLM is the Lead Agency under NEPA.

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

**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 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.

LTPP – Long Term Procurement Plan.

**LUST** – Leaking underground storage tank.

**m** – Meter, length equal to 39.37 inches.

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

mG – Milligauss. A measure of magnetic field strength.

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.

MP - Milepost.

MPA - Municipal Planning Area.

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

**MVA** – Megavolt-amperes, 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** – Megavolt-amperes reactive.

**MW** – Megawatt; a measure of electric power equal to 1,000 kilowatts or 1,000,000 watts.

**Mw** – Moment magnitude; measurement by which earthquakes are measured.

**MWD** – Metropolitan Water District.

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

**NAHC** – Native American Heritage Commission.

**NEPA** – National Environmental Policy Act.

NERC - North American Electricity Reliability Council.

**NESC** – National Electrical Safety Code.

NHPA - National Historic Preservation Act.

Nitrogen Oxides – A gaseous mixture of nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>) and symbolically represented as NO<sub>3</sub>).

**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.

NO<sub>2</sub> – Nitrogen dioxide. A molecule of one nitrogen and two oxygen atoms. Results usually from further oxidation of nitric oxide (NO) in the atmosphere. Ozone accelerates the conversion.

NOI - Notice of Intent.

**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  $L_{50}$ .

**Non-Utility Owned Generation** – Generation which is possessed by an entity not in the business for the sale of electricity at retail.

**NOP** – Notice of Preparation.

**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.

**NPDES** – National Pollutant Discharge Elimination System.

**NPS** – National Park Service (an agency of the U.S. Department of the Interior).

NRC – United States Nuclear Regulatory Commission.

NRHP - National Register of Historic Places.

NSR - New Source Review; see Air Quality.

 $O_3$  – See Ozone.

**OES** – Office of Emergency Services.

**OHV** – Off-highway vehicle.

**OPGW** – Optical ground wire.

**OPH** – Office of Historic Preservation.

**ORA** – (CPUC's) Office of Ratepayer Advocates.

**ORV** – Off-road vehicle.

**OSHA** – U.S. Occupational Safety and Health Administration, a federal agency regulating health and safety in the workplace.

**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 —  $O_3$ . 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.

**PA** – Programmatic Agreement.

**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 CPCN.

**pH** – A measure of acidity or alkalinity.

**Photochemical Pollutant** – Reactive organic compounds (ROC) and nitrogen oxides (NOx), photochemical pollutants that absorb energy from the sun and react chemically to form ozone (O<sub>3</sub>).

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

**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 microns in size, which is small enough to be inhaled deeply into the lungs and cause disease.

**PPA** – Power Purchase Agreement.

**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.

**ppt** – Parts per thousand, a measure of the amount of one substance found in a second, which is the 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.

RAS - Remedial Action Scheme.

**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.

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.

RMR - Reliability Must Run.

RNA - Research Natural Area.

**ROD** - Record of Decision.

**ROG** – Reactive organic gases.

**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.

**ROWs** – Rights-of-way.

**RTU** – Remote Terminal Unit; 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.

**SBC** – San Bernardino County.

SCAB - South Coast Air Basin.

**SCADA** – Substation Control and Data Acquisition.

**SCAG** – Southern California Association of Governments.

**SCAQMD** – South Coast Air Quality Management District.

**SCE** – Southern California Edison Company.

**SCS** – Soil Conservation Service.

**SDG&E** – San Diego Gas & Electric Company.

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

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

SHPO - State Historic Preservation Office.

**Shrink-Swell Potential** – The expansion or contraction of primarily clay-rich soils during alternating wetting and drying cycles.

**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.

SIS - System Impact Study.

**Skylining** – Extending above the horizon line.

**SO<sub>2</sub>** – Sulfur dioxide; a corrosive and poisonous gas produced from the complete combustion of sulfur in fuels.

**SOx** – 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.

**SPCC** – Spill prevention containment and counter measure.

**SPS** – Special Protection System.

SR - State Route.

**SRP** – Salt River Project.

**STEP** – Southwest Transmission Expansion Plan.

**Stream Scour** – Lowering of a stream bed during the passage of a single stream flow. Stream scour can be local in nature (see Local Scour) or more wide-spread (see General Scour).

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 SOx.

**Sulfur Oxides** – A gaseous mixture of sulfur dioxide (SO<sub>2</sub>) and sulfur trioxide (SO<sub>3</sub>) and symbolically represented as SOx. Can include particulate species such as sulfate compounds (-SO<sub>4</sub>).

**SVC** – Static VAR Compensation.

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

**TAC** – Toxic Air Contaminants.

**TC** – Transportation Corridor.

**TCM** – Transportation Control Measures.

**TCP** – traditional culture property.

TCP - Traffic Control Plan.

**TDS** – Total Dissolved Solids.

**TEAM** – Transmission Economic Assessment Methodology.

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

TO - Transmission Owner.

**tpd** – Tons per day.

**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/m<sup>3</sup> – Millionths of a gram per cubic meter, a unit of concentration in liquids or gases.

**USA** – Underground Service Alert.

**USACE** – U.S. Army Corps of Engineers.

**USDA** – U.S. Department of Agriculture.

**USFS** – U.S. Forest Service.

USFWS - U.S. Fish and Wildlife Service.

**USGS** – U.S. Geological Survey.

**Utility Corridor** – A strip of land, or an easement, on which utility facilities such as power lines and pipelines are constructed.

**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.

**VAC** – Visual absorption capacity.

**VAR** – Voltage ampere-reactive.

**Viscosity** – Term applied to a fluid indicating its resistance to sheer. In common terms, how "sticky" the fluid.

**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.

**VOC** – Volatile organic compounds.

vpd – Vehicles per day.

**VRM** – Visual Resource Management.

WA - Wilderness Area.

WATCH - Work Area Traffic Control Handbook.

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

**WECC** – Western Electricity Coordinating Council.

**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.

WHO - World Health Organization.

**WOD** – West of Devers.