

CHAPTER 9: GLOSSARY

Aerodynamics: The study of the forces exerted on and the flow around solid objects moving relative to a gas, especially the atmosphere.

Aesthetics: Referring to the perception of beauty.

Affected Environment: Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as the result of a proposed human action.

Aggregate: Mineral materials such as sand, gravel, crushed stone, or quarried rock used for construction purposes.

Air Quality Standards: The level of pollutants prescribed by regulation that may not be exceeded during a specified time in a defined area.

Allotment: The area designated for use by a prescribed period of time.

American Indian Religious Freedom Act of 1978 (AIRFA): This act requires Federal agencies to consult with Tribal officials to ensure protection of religious cultural rights and practices.

Animal Unit (AU): A measure of numbers of livestock equivalent to a mature cow. One AU equals 1,000 pounds live weight, or one cow, horse, or mule; five sheep or swine; six goats.

Animal Unit Month (AUM): A measure of forage or feed sufficient to feed one Animal Unit for 30 days; usually expressed relative to acres of land.

Archaeological Resources Protection Act: A Federal law, passed in 1979 (16 USC 1B, Pub. L. 96-95) to protect archaeological resources on public and Indian lands.

Archaeological Site: Any location where humans have altered the terrain or discarded artifacts during prehistoric or historic times.

Archaeology: A scientific approach to the study of human ecology, cultural history, and cultural process.

Area of Potential Effect: The area in which disturbance to cultural resources may occur and within which a systematic cultural resource inventory is required.

Artifact: An object produced or shaped by human workmanship of archaeological or historical interest.

Attainment Area: An area which the U.S. Environmental Protection Agency (EPA) has designated as being in compliance with one or more of the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter. Any area may be in attainment for some pollutants but not for others.

Average Daily Traffic (ADT): The average volume of vehicles at a given point or section of highway over a 24-hour period.

Avian Monitoring Study: A study done to characterize and monitor the quality of avian species. Avian monitoring studies are used in the preparation of impact assessments, as well as in many circumstances in which human activities carry a risk of harmful effects on avian species natural environment.

Avian Power Line Interaction Committee (APLIC): Committee that works in partnership with other utilities, resource agencies and the public to develop and provide educational resources, identify and fund research, develop and provide cost-effective management options, and serve as the focal point for avian interaction utility issues.

Arizona Pollution Discharge Elimination System (AZPDES) Permit: Federal regulation (40 CFR Parts 122 and 125) administered by the State of Arizona that requires permits for the discharge of pollutants from any point source into the Waters of the United States regulated through the Clean Water Act, as amended.

Arizona State Historic Preservation Office (SHPO): The State Historic Preservation Office manages the National Register of Historic Places program of the National Park Service in Arizona. The program surveys, inventories, and registers historical properties; monitors State, Federal, and local government activities which affect cultural and historic resources; provides advice on preservation methods; promotes public education on historical properties; and supports municipal and county historic preservation commissions to advance the State's economic, social, and educational objectives.

Aquifer: A permeable underground formation that yields usable amounts of water to a well or spring. The formation could be sand, gravel, limestone, and/or sandstone.

Array (turbine): The positioning and spatial arrangement of wind turbines relative to each other.

Background: The distant part of a landscape. The landscape area located from four miles to infinity from the viewer.

Bald and Golden Eagle Protection Act (BGEPA): A Federal law enacted in 1940 and amended several times, prohibits anyone, without a permit from the Secretary of the Interior, from “taking” bald and golden eagles, including their parts, nests, or eggs.

Batch Plant: Mixing plant that produces batches of concrete or aggregate-asphalt mixture, off-site or at the site of another plant.

Berm: A mound or bank of earth, used especially as a barrier or to provide insulation.

Best Management Practices (BMPs): Structural and/or management practices employed before, during, and after construction to protect receiving-water quality. These practices provide techniques to either reduce soil erosion or remove sediment and pollutants from surface runoff.

Biological Assessment (BA): An evaluation of potential effects of a proposed project on proposed, endangered, threatened, and sensitive animal and plant species and their habitats. Information prepared by, or under the direction of, a Federal agency to determine whether a proposed action is likely to adversely affect listed species or designated critical habitat, jeopardize the continued existence of species that are proposed for listing, or adversely modify proposed critical habitat.

Borrow Pit: A pit or excavation area used for gathering earth materials (borrow) such as sand or gravel.

Breaker: A switching device that is capable of closing or interrupting an electrical circuit under over-load or short-circuit conditions as well as under normal load conditions.

Bus: A set of two or more electrical conductors that serve as common connections between load circuits and each of the phases (in alternating current systems) of the electric power source.

Carbon monoxide (CO): A colorless, odorless gas that is toxic if breathed in high concentrations over an extended period. Carbon monoxide is listed as a criteria air pollutant under Title I of the Clean Air Act.

Clean Air Act (CAA): This act establishes national ambient air quality standards and requires facilities to comply with emission limits or reduction limits stipulated

Clean Water Act (Section 404): The Federal Water Pollution Control Act Amendments of 1972 (33 USC 401 et seq.) is the enabling legislation for protection of Waters of the United States by the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency.

Code of Federal Regulations (CFR): A compilation of the general and permanent rules published in the Federal Register by the executive departments and agencies of the United States. It is divided into 50 titles that represent broad areas subject to Federal regulation. Each volume of the CFR is updated once each calendar year and is issued on a quarterly basis.

Color: The property of reflecting light of a particular wavelength that enables the eye to differentiate otherwise indistinguishable objects. A hue (red, green, blue, yellow, and so on), as contrasted with a value (black, white, or gray).

Cone of Depression: A depression in the water table that develops around a pumped well.

Contrast: Diversity or distinction of adjacent parts. Effect of striking differences in form, line, color, or texture of a landscape.

Corona/corona noise: The electrical breakdown of air into charged particles. The phenomenon appears as a bluish-purple glow on the surface of and adjacent to a conductor when the voltage gradient exceeds a certain critical value, thereby producing light, audible noise (described as crackling or hissing), and ozone.

Council on Environmental Quality (CEQ): Established by the National Environmental Policy Act (NEPA), the CEQ consists of three members appointed by the President. A CEQ regulation (Title 40 CFR 1500-1508, as of July 1, 1986) describes the process for implementing NEPA, including preparation of Environmental Assessments and Environmental Impacts Statements, and the timing and extent of public participation.

Criteria Pollutants: An air pollutant that is regulated by the NAAQS. The EPA must describe the characteristics and potential health and welfare effects that form the basis for setting or revising the standard for each regulated pollutant. Criteria pollutants include sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter.

Culvert: A pipe or covered channel that directs surface water through a raised embankment or under a roadway from one side to the other.

Cumulative Impact: The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Day-night noise level (Ldn): The day-night average sound level. It is the average A-weighted sound level over a 24-hour period that gives additional weight to noise that occurs during the night (10:00 p.m. to 7:00 a.m.).

Decibel (dB): A standard unit for measuring the loudness or intensity of sound. In general, a sound doubles in loudness with every increase of ten decibels.

Decibel, A-Weighted [dB (A)]: A measurement of sound approximating the sensitivity of the human ear and used to characterize the intensity of loudness of a sound.

Decommissioning: All activities necessary to take out of service and dispose of a facility after its useful life.

Direct Effects: The immediate effects on the social, economic, and physical environment caused by the construction and operation of a highway. These impacts are usually experienced within the right-of-way or in the immediate vicinity of the highway or another element of the proposed action.

Dispersed Recreation: Outdoor recreation in which visitors are diffused over relatively large areas. Where facilities or developments are provided, they are primarily for access and protection of the environment rather than comfort or convenience of the user.

Distance Zones: Landscape areas denoted by specified distances from the observer. Used as a frame of reference in which to discuss landscape attributes or the scenic effect of human activities in a landscape.

Electric and Magnetic Fields (EMF): The invisible lines of force associated with the production, transmission, and use of electric power, such as those associated with high-voltage transmission lines, secondary power lines, and home wiring and lighting. EMFs are present around any electrical device.

Electromagnetic Fields: Electromagnetic fields are generated when charged particles (e.g., electrons) are accelerated. Charged particles in motion produce magnetic fields. Electromagnetic fields are typically generated by alternating current in electrical conductors. They are also referred to as EM fields.

Eligible Cultural Resource: A cultural resource that has been evaluated and reviewed by an agency and the State Historic Preservation Officer and recommended as eligible for inclusion in the National Register of Historic Places, based on the criteria of significance.

Endangered Species: Any species (plant or animal) that is in danger of extinction throughout all, or a significant part of, its range. Requirements for declaring a species endangered are found in the Endangered Species Act.

Endangered Species Act of 1973 (ESA): This act requires consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service to determine if endangered or threatened species or their habitats will be impacted by a proposed activity and what, if any, mitigation measure are needed to address the impacts.

Environmental Impact Statement (EIS): A document required of Federal agencies by the National Environmental Policy Act for major proposals or legislation that will or could significantly affect the environment.

Environmental Justice: The fair treatment of people of all races, cultures, incomes, and educational levels with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Ephemeral Stream: Streams that contain running water only sporadically, such as during and following storm events.

Equivalent sound level (Leq): For sounds that vary with time, Leq is the steady sound level that would contain the same total sound energy as the time-varying sound over a given time.

Erosion: The wearing away of the land surface by wind and water.

Federal Land Policy and Management Act of 1976: This act requires the Secretary of the Interior to issue regulations to manage public lands and the property located on those lands for the long term.

Floodplain: The lowlands adjoining inland and coastal waters and relatively flat areas, including at a minimum that area inundated by a one percent or greater chance flood in any given year. The base floodplain is defined as the 100-year (1.0 percent) floodplain. The critical action floodplain is defined as the 500-year (0.2 percent) floodplain.

Foreground: The part of a scene or landscape that is nearest to the viewer. Detailed landscape generally found from the observer to one-half mile away.

Form: Structure, mass, or shape of a landscape or of an object. Landscape form is often defined by edges or outlines of landforms, rockforms, vegetation patterns, waterforms, or the enclosed spaces created by these attributes.

Fugitive Dust: The dust released from activities associated with construction, manufacturing, or transportation.

Gauss (G): The unit most commonly used in the United States to measure magnetic fields.

Groundwater: Water within the earth that supplies wells and springs.

Harmonic Mean: The harmonic mean (formerly sometimes called the subcontrary mean) is one of several kinds of average. Typically, it is appropriate for situations when the average of rates is desired.

Hazardous Material: Any material that poses a threat to human health and/or the environment. Hazardous materials are typically toxic, corrosive, ignitable, explosive, or chemically reactive.

Hertz (Hz): The unit of measurement of frequency, equivalent to one cycle per second.

Historic Properties: Any prehistoric or historic districts, sites, buildings, structures, or objects included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. They include artifacts, records, and remains that are related to and located within such properties.

Immediate Foreground: The detailed feature landscape found within the first few hundred feet of the observer, generally, from the observer to 300 feet away. This distance zone is normally used in project level planning, not broad scale planning.

Indicator Species: A plant or animal species related to a particular kind of environment. Its presence indicates that specific habitat conditions are also present.

Indirect Effects: Effects caused by a given action occurring later in time or farther removed in distance but that are reasonably foreseeable (e.g., induced changes to land-use patterns, population density, and growth rate).

Irretrievable: Applies to losses of production, harvest, or commitment of renewable natural resources. For example, some or all of the timber production from an area is irretrievably lost during the time an area is used as a Winter sports site. If the use is changed, timber production can be resumed.

Irreversible: Describes the loss of future options; applies primarily to the effects upon or use of nonrenewable resources, such as mineral or cultural resources, or to those factors, such as soil productivity, that are renewable only over long periods of time.

Key Observation Point (KOP): An element of the contrast rating system used by Federal agencies to analyze the potential visual impact of proposed projects and activities. The rating is done from the most critical viewpoints, or Key Observation Points. Factors that should be considered in selecting KOPs are: angle of observation, number of viewers, length of time the project is in view, relative project size, season of use, and light conditions.

Kilovolt (kV): The electrical unit of power that equals 1,000 volts.

Landscape Character: Particular attributes, qualities, and traits of a landscape that give it an image and make it identifiable or unique.

Lead (Pb): A gray-white metal that is listed as a criteria air pollutant. Health effects from exposure to lead include brain and kidney damage and learning disabilities. Sources include leaded gasoline and metal refineries.

Level of Service: A qualitative measure describing operational conditions in a traffic stream and their perception by motorists and/or passengers.

Line: An intersection of two planes; a point that has been extended; a silhouette of form. In landscapes, ridges, skylines, structures, changes in vegetation, or individual trees and branches may be perceived as a line.

Management Indicator Species (MIS): MIS are identified in the Forest Service Land and Resource Management Plans of each national forest and are generally identified to represent species and habitat types that occur within the national forest boundary and/or because they are thought to be sensitive to National Forest System management activities.

Maximum Modification: A Visual Quality Objective meaning man's activity may dominate the characteristic landscape but should appear as a natural occurrence when viewed as background.

Megawatt (MW): The electrical unit of power that equals one million watts or one thousand kilowatts.

Middleground: A term used in the management of visual resources, or scenery. It refers to the visible terrain beyond the foreground where individual trees are still visible but do not stand out distinctly from the stand.

Migratory Bird Treaty Act (MBTA): Establishment of a Federal prohibition, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention for the protection of migratory birds or any part, nest, or egg of any such bird." (16 U.S.C. 703)

Mitigation: The alleviation of adverse impacts on environmental resources by avoidance through project redesign or project relocation, by protection, or by adequate scientific study.

Mitigation Measures: Specific design commitments made during the environmental evaluation and study process that serve to moderate or lessen impacts deriving from a proposed action. In accordance with CEQ Regulations, mitigation includes avoidance, minimization, rectification, reduction, and compensation.

Modification: A Visual Quality Objective meaning man's activity may dominate the characteristic landscape but must, at the same time, utilize naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground.

Nacelle: The housing that protects the major components (e.g., generator and gear box) of a wind turbine.

National Ambient Air Quality Standards (NAAQS): Air quality standards established by the Clean Air Act, as amended. The primary National Ambient Air Quality Standards specify maximum outdoor air concentrations of criteria pollutants that would protect the public health within an adequate margin of safety. The secondary National Ambient Air Quality Standards specify maximum concentration that would protect the public welfare from any known or anticipated adverse effects of a pollutant.

National Environmental Policy Act (NEPA): This Act (42 U.S.C. 4341, passed by Congress in 1975) established a national policy designed to encourage consideration of the influences of human activities (e.g., population growth, high-density urbanization, industrial development) on the natural environment. NEPA also established the CEQ. NEPA procedures require that environmental information be made available to the public before decisions are made. Information contained in NEPA documents must focus on the relevant issues in order to facilitate the decision-making process.

National Historic Preservation Act of 1996 (NHPA): This act requires Federal agencies to prepare a detailed statement on the environmental impacts of their proposed major actions significantly affecting the quality of the human environment.

National Forest Management Act: A Law passed in 1976 as an amendment to the Forest and Rangeland Renewable Resources Planning Act, requiring the preparation of forest plans and the preparation of regulations to guide that development.

National Register of Historic Places (NRHP): The NRHP is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.

National Resources Conservation Service (NRCS): Formerly the Soil Conservation Service, NRCS is a department in the U.S. Department of Agriculture responsible for administering the Farmland Protection Policy Act.

National Wetlands Inventory (NWI): A series of maps produced by U.S. Fish and Wildlife Service (USFWS) to show wetlands and deepwater habitats to illustrate reconnaissance level information on the location, type, and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology, and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

Native American Graves Protection and Repatriation Act (NAGPRA): This act established the priority for ownership or control of Native American cultural items excavated or discovered on Federal or Tribal land after 1990 and the procedures for repatriation of items in Federal possession. The act allows the intentional removal from or excavation of Native American cultural items from Federal or Tribal lands only with a permit or upon consultation with the appropriate tribe.

Nitrogen dioxide (NO₂): A toxic reddish brown gas that is a strong oxidizing agent, produced by combustion (as of fossil fuels). It is the most abundant of the oxides of nitrogen in the atmosphere and plays a major role in the formation of ozone.

Nonattainment Area: An area that the EPA has designated as not meeting (that is, not being in attainment of) one or more of the NAAQS for criteria pollutants. An area may be in attainment for some pollutants, but not others.

Non-renewable Resources: Resources that are in limited supply, such as oil, coal, and natural gas.

Noxious Weeds: Plant species that have been designated by State or national agricultural authorities as a plant that is injurious to agricultural and/or horticultural crops and/or humans and livestock. Most have been introduced into a foreign ecosystem either by accident or mismanagement, but some are also native species. Typically they are plants that are grow aggressively, multiply quickly, and adversely affect desirable plants, or are somehow injurious to livestock or humans either by contact or when ingested.

Occupational Health and Safety Administration (OSHA): Congress created the Occupational Safety and Health Administration under the Occupational Safety and Health act on December 29, 1970. Its mission is to prevent work-related injuries, illnesses, and deaths.

Ozone (O₃): A strong-smelling, reactive toxic chemical gas consisting of three oxygen atoms chemically attached to each other. It is formed in the atmosphere by chemical reactions involving nitrogen oxide and volatile organic compounds. The reactions are energized by sunlight. Ozone is a criteria air pollutant under the Clean Air Act and is a major constituent of smog.

Paleontological Resources: Any remains, trace, or imprint of a plant or animal that has been preserved in the earth's crust since some past geologic time.

Paleontology: The study of plant and animal life that existed in former geologic times, particularly through the study of fossils.

Partial Retention: A Visual Quality Objective which in general means man's activities may be evident but must remain subordinate to the characteristic landscape.

Particulate matter (PM₁₀ and PM_{2.5}): Fine solid or liquid particles, such as dust, smoke, mist, fumes, or smog found in air or emissions. The size of the particulates is measured in micrometers (µm). One micrometer is 1 millionth of a meter or 0.000039 inch. Particle size is important because the U.S. Environmental Protection Agency has set standards for PM_{2.5} and PM₁₀ particulates.

Perennial Streams: A stream that typically has running water on a year-round basis.

Potable Water: Water that is safe for drinking and cooking.

Programmatic Agreement (PA): A document that records the terms and conditions agreed upon to resolve the potential adverse effects of a Federal agency program, complex undertaking, or other situations in accordance with Section 800.14 (b), "Programmatic Agreements," of 36 CFR Part 800, "Protection of Historic Properties."

Range: Land on which the principle natural plant cover is composed of native grasses, forbs, and shrubs that are valuable as forage for livestock and big game.

Range Management: The art and science of planning and directing range use intended to yield the sustained maximum animal production and perpetuation of the natural resources.

Record of Decision (ROD): A concise public document that records a Federal agency's decision(s) concerning a proposed action for which the agency has prepared, or cooperated in the preparation of an EIS. The Record of Decision (ROD) is prepared in accordance with the requirements of the CEQ NEPA regulations (40 CFR 1505.2).

Renewable Energy: Alternative energy sources such as wind power or solar energy that can keep producing energy indefinitely without being used up.

Resource Evaluation Area: The geographical region that would be expected to be affected in some way by a proposed action and alternatives.

Resource Protection Measures (RPM): Mitigation measures built into a project's design and construction standards that (1) avoid impacts by not taking a certain action or parts of an action; (2) minimize impacts by limiting the degree or magnitude of the action and its implementation; (3) rectify impacts by repairing, rehabilitating or restoring the affected environment; or (4) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action.

Right-of-way: Land acquired by purchase, gift, or eminent domain to build and maintain a public road, bridge, railroad, or public utility.

Riparian: Relating to, living in, or located on the bank of a river, lake or tidewater.

Rock Crusher: A machine designed to reduce large rocks into smaller rocks, gravel, or rock dust. Crushers may be used to reduce the size, or change the form of, waste materials so they can be more easily disposed of or recycled, or to reduce the size of a solid mix of raw materials

Rotational Speed: The rate (in revolutions per minute) at which a turbine blade makes a complete revolution around its axis. Wind turbine speeds can be fixed or variable.

Rotor: The portion of a modern wind turbine that interacts with the wind. It is composed of the blades and the central hub to which the blades are attached.

Rotor Diameter: The diameter of the circular area that is swept by the rotating tip of a wind-turbine blade. It is equal to twice the blade length.

Runoff: The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and may eventually enter streams.

Scenery Integrity: State of naturalness or, conversely, the state of disturbance created by human activities or alteration. Integrity is stated in degrees of deviation from the existing landscape character in a national forest.

Scenery Management: The art and science of arranging, planning, and designing landscape attributes relative to the appearance of places and expanses in outdoor settings.

Scoping: An early, open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

Section 7 of the Endangered Species Act (ESA): The section of the Endangered Species Act that requires all Federal agencies, in “consultation” with the U.S. Fish and Wildlife Service, to ensure that their actions are not likely to jeopardize the continued existence of listed species or result in destruction or adverse modification of critical habitat.

Section 106 National Historic Preservation Act: Section 106 of the National Historic Preservation Act and its implementing regulations (36 CFR 800) require Federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The purpose of the Section 106 process is to identify, evaluate, and protect cultural resources eligible for listing in the NRHP that may be affected by Federal actions or undertakings (16 U.S.C. §470 et seq.).

Sedimentation: The process of deposition of sediment, especially by mechanical means from a state of suspension in water.

Sensitive Species: Those plants and animals for which population viability is a concern, as shown by a significant current or predicted downward trend in populations or density and significant or predicted downward trend in habitat capability.

Septic Tank: An underground storage tank for wastes from homes having no sewer line to a treatment plant. The wastes go directly from the home to the tank, where the organic waste is decomposed by bacteria and the sludge settles to the bottom. The effluent flows out of the tank into the ground through drains; the sludge is pumped out periodically.

Significant Impacts: Any number of social, environmental, or economic effects or influences that may occur as a result of the implementation of a transportation improvement. “Significant impacts” may include effects that are direct, secondary, or cumulative.

Soil Compaction: An increase in bulk density (weight per unit volume) and a decrease in soil porosity resulting from applied loads, vibration, or pressure.

Specific Yield: The ratio of the volume of water a rock or soil will yield by gravity drainage to the total volume of the rock or soil.

Spill Prevention, Control, and Countermeasures (SPCC) Plan: A plan implemented to help prevent any discharge of oil into navigable waters or adjoining shorelines.

Step-up Substation: A transformer substation in which the outgoing power from the transformers is at a higher voltage than the incoming power.

Storm Water Pollution Prevention Plan (SWPPP): A plan required to be implemented for construction projects disturbing more than one acre of land. Implementation of a SWPPP is a requirement to obtain a State pollutant discharge elimination system permit coverage for storm water discharges.

Substation: A facility where electric energy is passed for transmission, transformation, distribution, or switching.

Sulfur dioxide (SO₂): A gas formed from burning fossil fuels. Sulfur dioxide is one of the six criteria air pollutants specified under Title I of the Clean Air Act.

Sulfur hexafluoride (SF₆): A colorless, odorless gas considered by the Intergovernmental Panel on Climate Change to be one of the more potent greenhouse gases (GHGs) in the atmosphere. SF₆ is used in electrical equipment, such as circuit breakers.

Supervisory Control and Data Acquisition (SCADA): A software program used to communicate directly with individual wind turbines to monitor performance, report energy output, and trouble-shoot technical difficulties.

Surface Water: All bodies of water on the surface of the earth and open to the atmosphere, such as rivers, lakes, reservoirs, ponds, seas, and estuaries.

Switchgear: A group of switches, relays, circuit breakers, etc. used to control distribution of power to other distribution equipment and large loads.

Switchyard: Facility with circuit breakers and automatic switches to turn power on and off on different transmission lines. Switchyards are typically associated with substations.

Texture: The visual or tactile surface characteristics of something.

Traditional Cultural Property (TCP): A property or site that is eligible for inclusion on the National Register of Historic Places because of its association with cultural practices or beliefs of a living community that are rooted in that community's history and are important to maintaining the continuing cultural identity of the community.

Transmission Line: The structures, insulators, conductors and other equipment used to transfer electrical power from one point to another.

Transmissivity: The ability of an aquifer to transmit water.

Transformer: A device for transferring electric power from one circuit to another in an alternating current system. Transformers are also used to change voltage from one level to another.

Viewshed: The total landscape seen or potentially seen from all or a logical part of a travel route, use area, or water body.

Visual Management System (VMS): The planning methodology, published in 1974 that guided the management of visual resources on throughout lands managed by the Forest Service until the Scenery Management System was published in 1995.

Visual Quality Objective (VQO): A desired level of excellence based on physical and sociological characteristics of an area. Refers to degree of acceptable alteration of the characteristic landscape.

Visual Resource: The visible physical features of a landscape.

Waters of the United States: As defined by the Clean Water Act, Waters of the United States applies only to surface waters, rivers, lakes, estuaries, coastal waters, and wetlands. Waters of the United States include all interstate waters, intrastate waters used in interstate and/or foreign commerce, tributaries of the above, territorial seas at the cyclical high tide mark, and wetlands adjacent to all the above.

Water Table: The upper surface of groundwater. Below it, the soil is saturated with water.

Wetlands: Areas that are soaked or flooded by surface or groundwater frequently enough or long enough to support plants, birds, animals and aquatic life. Wetlands generally include swamps, marshes, bogs, estuaries, and other inland and coastal areas and are federally protected.

Wind Park: One or more wind turbines operating within a contiguous area for the purpose of generating electricity.

Worst Case Fresnel Zone Study: A study conducted to analyze a project's potential impacts to microwave paths in a given area.

Yaw: Side-to-side movement. For wind turbines, it refers to the angle between the axis of the rotor shaft and the wind direction. As this angle increases, the turbine's ability to capture the wind's energy decreases.