

GLOSSARY

100-year floodplain	Land that becomes or will become submerged by a flood that has a chance to occur every 100 years.
7Q10	Seven-day low flow average with a 10-year recurrence interval.
acre-foot	The volume that would cover one acre to a depth of one foot.
aerodynamic diameter	A term used to describe particles with common aerodynamic properties, which avoids the complications associated with varying particle sizes, shapes, and densities. For example, PM ₁₀ is defined in 40 CFR Part 50 as consisting of particles 10 micrometers or less in aerodynamic diameter, meaning particles that behave aerodynamically like spherical particles of unit density (1 gram per cubic centimeter) having diameters of 10 micrometers or less.
aerosol	A suspension of fine solid or liquid particles in a gas.
aesthetics	The perception of appearance of features in relation to one's sense of beauty.
air dispersion model	A computer program that incorporates a series of mathematical equations used to predict downwind concentrations in the ambient air resulting from emissions of a pollutant. Inputs to a dispersion model include the emission rate; characteristics of the emission release such as stack height, exhaust temperature, and flow rate; and atmospheric dispersion parameters such as wind speed and direction, air temperature, atmospheric stability, and height of the mixed layer.
air quality	The cleanliness of the air as measured by the levels of pollutants relative to standards or guideline levels established to protect human health and welfare. Air quality is often expressed in terms of the pollutant for which concentrations are the highest percentage of a standard (e.g., air quality may be unacceptable if the level of one pollutant is 150% of its standard, even if levels of other pollutants are well below their respective standards).
alluvial	Relating to clay, silt, sand, gravel, or similar detrital material deposited by running water.
alternative	One of two or more things, courses, or propositions to be chosen.
ambient	The surrounding environment or atmosphere.
ambient noise	Background noise associated with a given environment. Ambient noise is typically formed as a composite of sounds from many near and far sources, with no particular dominant sound.
ancillary	Subsidiary or supplementary.
anion	A negatively charged ion.
anticline	A geologic fold that is arch-like in form, with rock layers dipping outward from both sides of the axis, and older rocks in the core. The opposite of syncline.

approximate original contours	Surface configuration achieved by backfilling and grading of the mined area, such that the reclaimed area closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain.
aquatic	Characteristics of or pertaining to water.
aquifer	A subsurface saturated rock unit (formation, group of formations, or part of a formation) of sufficient permeability to transmit groundwater and yield usable quantities of water to wells and springs.
aquitard	Low permeability units that can restrict the flow of groundwater from one aquifer to another.
archaeological resources	Material remains of past activity.
area of potential effect (APE)	The geographic region that may be impacted as a result of the construction and operation of the Proposed Action or alternatives.
arterial highway	Highway generally characterized by its ability to quickly move a relatively large volume of traffic, but often with restricted capacities to serve abutting properties. The arterial system typically provides for high travel. The rural and urban arterial highway systems are connected to provide continuous through movements.
artesian	Groundwater conditions in which water in wells rises above its level in the aquifer, including conditions in which groundwater rises to the ground surface or above.
ash	The mineral content of a product remaining after complete combustion.
ash management unit	Area designated within the generation facility boundary for the management of ash for beneficial use or storage.
attainment	Those areas of the U. S. that meet National Ambient Air Quality Standards as determined by measurements of air pollutant levels.
attenuate	To lessen the amount of force, magnitude, or value of something.
A-weighted scale	Assigns a weight to sound frequencies that is related to how sensitive the human ear is to each sound frequency. Frequencies that are less sensitive to the human ear are weighted less than those for which the ear is more sensitive. A-weighted measurements indicate the potential damage a noise might cause to hearing.
baghouse	An air pollution control device that filters particulate emissions, consisting of a bank of bags that function like a vacuum cleaner bag to intercept particles that are mostly larger than 10 micrometers in aerodynamic diameter.
baseline	Existing conditions of the environment.
bedrock	The rock of Earth's crust that is below the soil and largely unweathered.
bench	A leveled area near the pit that provides a safe location for the equipment to operate.
beneficiation	The process of washing or otherwise cleaning coal to increase the energy content by reducing the ash content.

benthic invertebrates	An animal lacking a spinal column and living on lake and stream bottoms.
berm	A mound or wall of earth.
best management practice (BMP)	A practice, or combination of practices, that is determined to be the most effective, practical means of preventing or reducing non-point source pollution to a level compatible with maintaining water quality.
biocide	A substance (e.g., chlorine) that is toxic or lethal to many organisms and is used to treat water.
biomass	The amount of living matter, as in a unit area or volume of habitat.
blasting	Use of explosives to loosen consolidated overburden materials or lignite.
blowdown	Portion of circulating cooling tower water (or steam or water removed from a boiler) removed to maintain the amount of dissolved solids and other impurities at an acceptable level.
boiler	A pressurized system in which water is vaporized to steam, the desired end product, by heat transferred from a source of higher temperature, usually the products of combustion from burning fuels.
brackish	Water that has high concentrations of salts, but that may still be suitable for some uses.
brine	Water saturated with salt.
building downwash	The downward movement of an elevated plume toward the area of low pressure created on the lee side of a structure in the wake around which the air flows.
capacity factor	The percentage of energy output during a period of time, compared to the energy that would have been produced if the equipment operated at its maximum power throughout the period.
carbon dioxide (CO ₂)	A colorless, odorless, nonpoisonous gas that results from fossil fuel combustion and is normally a part of the ambient air.
carbon monoxide (CO)	A colorless, odorless, poisonous gas produced by incomplete fossil fuel combustion.
carcinogenic	Capable of producing or inducing cancer.
cation	A positively charged ion.
census tract	A small, relatively permanent statistical subdivision of a county. Census tracts, which average about 4,000 inhabitants, are designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions.
Class I area	Under the Clean Air Act, a Class I area is one in which visibility is protected more stringently than under the national ambient air quality standards, with only a small increase in pollution allowed. Class I areas include national parks, wilderness areas, monuments, and other areas of special national and cultural significance. Only very slight deterioration of air quality is allowed in Class I areas.

Class II area	Most of the country not designated as Class I is designated as Class II. Class II areas are generally cleaner than air quality standards, and moderate increases in new pollution are allowed after a regulatory mandated impacts review.
Clean Water Act	Primary federal law governing water pollution. The Clean Water Act's (CWA's) goals include eliminating toxic substance releases to water, eliminating additional water pollution, and ensuring that surface waters meet standards necessary for human sports and recreation (see National Pollutant Discharge Elimination System).
coal gasification	A process that converts coal into a gaseous product, which involves crushing coal into a powder and heating the powder in the presence of steam and oxygen in a reducing or sub-stoichiometric atmosphere. After impurities (e.g., sulfur) are removed, the gas can be used as a fuel or further processed and concentrated into a chemical or liquid fuel.
Combined-cycle electric power plant	A power plant that uses both a steam turbine generator and a combustion turbine generator at one location to produce electricity.
combustion turbine (CT)	A gas turbine that burns natural gas, fuel oil, or other similar fuels and drives a turbine and generator to produce electricity, and is typically used as the primary generator of electricity in a combined cycle installation.
combustor	Equipment in which coal or other fuel is burned at high temperatures.
conductivity	The ability to carry an electrical charge in ions. The conductivity of aqueous solutions is increased by dissolved salts, and thus is a measure of the amount of ionized salts in solution.
confined aquifer	An aquifer that is bounded by two confining units, and in which the water level in wells usually rises above the top of the aquifer.
confining unit	A geologic formation or bed that has lower permeability than layers above and below it, and therefore restricts vertical water movement. (Confining units are also called aquitards.)
conservative	As applied to calculations or estimates, assumptions that would tend to over-estimate the calculated or estimated impact or cause the impact to be at the high end of the plausible range.
contaminant	A substance that contaminates (pollutes) air, soil, or water. It may also be a hazardous substance that does not occur naturally or that occurs at levels greater than those that occur naturally in the surrounding environment.
contamination	The intrusion of undesirable elements (unwanted physical, chemical, biological, or radiological substances; or matter that has an adverse effect) to air, water, or land.
contiguous	Adjacent or touching.
continuous equivalent sound level	Steady-state decibel level which would produce the same A-weighted sound energy over a stated period of time as an equivalent sound over time.
conveyor system	Method used to transport material in a continuous fashion, consisting of a drive, belt, pulleys, and conveyor stands. Material is placed on the belt and is moved by rotating the belt over pulleys.

cooling tower	A structure that cools heated condenser water by circulating the water along a series of louvers and baffles through which cool, outside air convects naturally or is forced by large fans.
cooling tower drift	The dispersion and deposition of wet or dry aerosols emitted from natural or mechanical draft cooling towers.
cooling water	Water that is heated as a result of being used to cool steam and condense it to water.
corona noise	Noise caused by partial discharges on insulators and in air surrounding electrical conductors of overhead power lines. Corona noise level is dependent on weather conditions.
criteria	Standards on which a judgment or decision may be based.
croplands	Lands used for growing agricultural crops such as soybeans and corn.
cultural resources	Archaeological sites, historical sites (e.g., standing structures), Native-American resources, and paleontological resources.
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 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	A-weighted equivalent decibel level for a 24-hour period with an additional 10-dB.
decibel (dB)	A unit for expressing the relative intensity of sounds on a logarithmic scale from zero for the average least perceptible sound to about 130 for the average level at which sound causes pain to humans.
deciduous	Shedding leaves at a certain season.
demand-side management	Activities which influence electricity use on the customer's side of the meter.
density	Ratio of a substance's weight relative to its volume.
dissolution	Process of dissolving a substance into a liquid.
disturbed area	Any area where vegetation, topsoil, or overburden is removed or upon which spoil is placed.
diversions	The amount of water taken from a stream, spring, or well by channel, embankment, or other man-made structure constructed for the purpose of diverting water from one area to another.
dragline	An electric-powered excavating machine used for digging or removal of overburden with a large capacity bucket that is lowered and raised by dragging in, paying out, hoisting, and lowering the wire rope attached to the bucket.
drawdown	The process by which the water table adjacent to a well is drawn down after active pumping from an aquifer.

dredged material	Material that is dredged or excavated from waters of the United States, including wetlands.
duct firing	Supplemental firing of fuel in burners within a heat recovery steam generator (HRSG) as a means of increasing steam production or temperature and, correspondingly, power generated by a steam turbine.
ecosystem	A community and its environment treated together as a functional system of complementary relationships involving the transfer and circulation of energy and matter.
effects	The consequences or results of an action; synonymous with impacts. Includes direct effects caused by an action that occur at the same time and place, and indirect effects caused by an action that are later in time or further removed in distance but still reasonably foreseeable. Potential effects can be adverse, beneficial, cumulative, irretrievable, irreversible, long-term, or short-term.
effluent	Waste stream flowing into the atmosphere, surface water, groundwater, or soil.
electric and magnetic fields (EMF)	Two types of energy fields which are emitted from any device that generates, transmits, or uses electricity.
emergent	Erect, rooted herbaceous plants, such as cattails and bulrush, which dominate wetlands.
emission	A material discharged into the atmosphere from a source operation or activity.
endangered species	Any species in danger of extinction throughout all or a significant portion of its range or territory.
environmental justice	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, local, and tribal programs and policies. Executive Order 12898 directs Federal agencies to make achieving environmental justice part of their missions by identifying and addressing disproportionately high and adverse effects of agency programs, policies, and activities on minority and low-income populations.
epicenter	Area on the earth's surface directly above the focus of an earthquake.
equivalent sound (L_{eq})	Weighting imposed on the equivalent sound levels occurring during nighttime.
erosion	The process by which particles of soils or other material are removed and transported by water, wind, and/or gravity to some other area.
evaporation	A physical process by which a liquid is transformed into a gaseous state.
evapotranspiration	The amount of water removed from a land area by the combination of direct evaporation and plant transpiration.
fault	A fracture or fracture zone in rock along which the sides have been displaced vertically or horizontally relative to one another.

fecal coliforms	A large and varied group of bacteria flourishing in the intestines and feces of warm-blooded animals, including man. Large amounts of fecal bacteria in water indicate sewage, feedlot, or other animal waste pollution.
fill material	Material used for the primary purpose of replacing an aquatic or wetland area with dry land, or changing the bottom elevation of a waterway.
floodplain	Flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding.
flue gas	Residual gases after combustion that are vented to the atmosphere through a flue or chimney.
fluvial	Relating to, or produced by, stream or river action.
fly ash	The small ash particles that are carried out of a combustor with the flue gas.
formation	The primary unit associated with formal geological mapping of an area. Formations possess distinctive geological features and can be combined into “groups” or subdivided into “members.”
fossil fuel	Coal, including lignite, oil, or natural gas, formed from vegetation and animals under high pressure and temperatures during a past geological age.
fragipan horizon	A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard and has a higher bulk density than the horizon or horizons above.
frequency	The number of cycles of completed occurrences per unit of time of a sound wave, most often measured in Hertz.
fresh water	Water with a low concentration of salts (typically less than 1,000 parts per million of dissolved solids).
fugitive dust	Particulate matter composed of soil; can include emissions from haul roads, wind erosion of exposed surfaces, and other activities in which soil is removed and redistributed.
fugitive emissions	Air pollutant emissions that cannot be traced to a particular point source.
gasification	Conversion process of fuel to gas or a gas-like phase.
Gaussian	Concentrations of pollutants downwind of a source are assumed to form a normal distribution (i.e., bell-shaped curve) from the centerline of the plume in the vertical and lateral directions.
generation facility	Electrical power generating station.
geographic	Belonging to or characteristic of a particular region.
geologic sequestration	CO ₂ capture and storage in deep underground geologic formations.

global warming	The theory that certain gases such as carbon dioxide, methane, and chlorofluorocarbon in the earth's atmosphere effectively restrict radiation cooling, thus elevating the earth's ambient temperatures or creating a greenhouse effect.
greenhouse gas (GHG)	Gas that contributes to the greenhouse effect by absorbing infrared radiation and ultimately warming the atmosphere. GHGs include water vapor, nitrous oxide (NO _x), methane, CO ₂ , ozone (O ₃), halogenated fluorocarbons, hydrofluorocarbons, and per-fluorinated carbons.
groundwater	Water within a geologic stratum that supplies wells and springs.
habitat	The environment occupied by individuals of a particular species, population, or community.
hazardous air pollutant (HAP)	Air pollutants that are not covered by ambient air quality standards but that present, or may present, a threat of adverse health or environmental effects. These include an initial list of 189 chemicals designated by Congress that is subject to revision by the EPA.
hazardous waste	A by-product of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity) or appears on special Environmental Protection Agency lists.
haze	Atmospheric moisture, dust, smoke, and vapor suspended to form a partly opaque condition.
heat rate	Amount of heat required (usually in Btu) to produce an amount of electricity (usually in kW-hr).
heavy metals	Natural trace elements such as lead, mercury, cadmium, and nickel, that are leachable and potentially toxic.
herbicide	Any substance or mixture of substances intended to prevent the growth of or destroy unwanted plants or vegetation.
heterogeneity	The quality or state of consisting of dissimilar ingredients or constituents.
highwall	The face of exposed overburden and lignite in an open cut of a surface mine.
historic property	Prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places.
historic site	A site that is more than 50 years old.
hydrology	A science dealing with the properties, distribution, and circulation of water on the surface of the land, in the soil and the underlying rocks, and in the atmosphere.
impacts	The consequences or results of an action; synonymous with effects.
impoundment	A body of water confined by a dam, dike, floodgate, or other barrier.

industrial and/or process waste	Any liquid, solid, semisolid, or gaseous waste generated when manufacturing a product or performing a service. Examples include cutting oils; paint sludges; equipment cleanings; metallic dust sweepings; used solvents from parts cleaners; and off-specification, contaminated, or recalled wholesale or retail products. The following wastes are not industrial process wastes: uncontaminated packaging materials, uncontaminated machinery components, general household waste, landscape waste, and construction or demolition debris.
infiltration	The process of water entering the soil at the ground surface and the ensuing movement downward. Infiltration becomes percolation when water has moved below the depth at which it can return to the atmosphere by evaporation or evapotranspiration.
infrastructure	The underlying foundation of basic framework, as in a system or organization.
integrated gasification combined-cycle (IGCC)	A process that uses synthesis gas derived from coal to drive a gas combustion turbine and exhaust gas from the gas turbine to generate steam from water to drive a steam turbine.
integrated resource planning	A utility planning process that evaluates supply-side resources and demand-side resources on a level field to reliably meet the future energy needs of customers.
irretrievable commitments	Those resources that are lost for a period of time.
irreversible commitments	Those resource commitments that cannot be reversed, except perhaps in the extreme long term.
issue	An expressed concern regarding the scope and analyses included in an EIS.
landfill	Waste disposal method where waste material is stockpiled until the landfill is full, at which time the material is buried and reclaimed in accordance with the applicable regulations for that type of landfill.
laydown area	Material and equipment storage area during the construction phase of a project.
leachate	Solution or product obtained by leaching, in which a substance is dissolved by the action of a percolating liquid.
level of service (LOS)	Measure of traffic operation effectiveness on a particular roadway facility type.
lignite	A brownish-black coal in which the alteration of vegetal matter has proceeded farther than peat, but not so far as sub-bituminous coal.
lignite seam	A distinct layer of lignite with the potential to be mined
lithic scatters	Concentrations of waste flakes resulting from the manufacture of stone tools.
lithological	Pertaining to the study of rocks and rock formations.
loam	A soil composed of a mixture of clay, silt, sand, and organic matter.
long-term	Occurring over or involving a relatively long period time.

low income population	A community that has a proportion of low-income population greater than the respective average. Low income populations in an affected area should be identified with the annual statistical poverty thresholds from Bureau of the Census Current Population Reports, Series P-60, Income and Poverty.
magnitude (of an earthquake)	A quantity that is characteristic of the total energy released by an earthquake. Magnitude is determined by taking the common logarithm of the largest ground motion recorded on a seismograph during the arrival of a seismic wave type and applying a standard correction factor for distance to the epicenter. A one-unit increase in magnitude (e.g., from magnitude 6 to magnitude 7) represents a 30-fold increase in the amount of energy released.
makeup pond	Pond used to store makeup for cooling water.
Maximum contaminant level goal (MCLG)	The maximum concentration of a substance in drinking water at which there is no known or anticipated adverse effect on human health, and which allows an adequate margin of safety, as determined by the U.S. Environmental Protection Agency.
mean sea level	Average ocean surface height at a particular location for all stages of the tide over a specified time interval (generally 19 years).
Megawatt (MW)	Unit of power equal to one million watts or 1,000 kilowatts (kW). A power plant with 1 MW of capacity operating continuously for a year could supply electricity to approximately 750 households.
metamorphic rocks	Rocks that have undergone chemical or structural changes produced by an increase in heat and temperature or by replacement of elements by hot, chemically active fluids.
meteorology	The science dealing with weather and weather conditions.
minority	Individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.
minority population	Identified where either the affected area's minority population exceeds 50 percent or the affected area's minority population percentage is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.
mitigation	Efforts to lessen the severity or to reduce adverse impacts: including avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action; repairing, rehabilitating or restoring the affected environment; reducing or eliminating the impact over time by preservation; and compensating for the impact by replacing or providing substitute resources or environments.
mixing height	The height in the lower atmosphere within which relatively vigorous mixing of pollutant emissions occurs.
monitoring	Periodic or continuous determination of the amount of substances present in the environment.

National Ambient Air Quality Standards (NAAQS)	Uniform, national air quality standards established by the Environmental Protection Agency that restrict ambient levels of certain pollutants to protect public health (primary standards) or public welfare (secondary standards). Standards have been set for ozone, carbon monoxide, particulates, sulfur dioxide, nitrogen dioxide, and lead.
National Energy Policy	The National Energy Policy (NEP), developed by the National Energy Policy Development Group in 2001 with members of the President's cabinet, is based on three principles: provide a long-term, comprehensive energy strategy; advance new, environmentally-friendly technologies to increase energy supplies and encourage cleaner, more efficient energy use; and seek to raise the living standards of the American people, recognizing that to do so our country must fully integrate its energy, environmental, and economic policies.
National Environmental Policy Act	Signed into law on January 1, 1970, the National Environmental Policy Act (NEPA) declared a national policy to protect the environment and created the Council on Environmental Quality (CEQ) in the Executive Office of the President. To implement the national policy, NEPA requires that environmental factors be considered when federal agencies make decisions, and that a detailed statement of environmental impacts be prepared for all major federal actions significantly affecting the human environment.
National Oceanic and Atmospheric Administration	Department of Commerce agency focused on the condition of the oceans and atmosphere. NOAA divisions include the National Weather Service, the National Hurricane Center, and the National Marine Fisheries Service.
National Pollutant Discharge Elimination System	Provision of the Clean Water Act that prohibits discharge of pollutants into U.S. waters unless a special permit is issued by EPA, a state, or where delegated, a tribal government on a Native American reservation, abbreviated NPDES.
native species	Species normally indigenous to an area; not introduced by man.
new source performance standards (NSPS)	Regulation under Section 111 of the Clean Air Act enforcing stringent emission standards for power plants constructed on or after January 30, 2004.
nitrogen oxides (NO _x)	A product of combustion by mobile and stationary sources and a major contributor to the formation of ozone in the troposphere.
noise	Any sound that is undesirable because it interferes with speech and hearing; if intense enough, it can damage hearing.
nonattainment	An area that does not meet air quality standards set by the Clean Air Act for specified localities and time periods. Locations where pollutant concentrations are greater than the NAAQS.
nonpoint sources	Pollution sources that are diffuse and do not have a single point of origin or are not introduced into a receiving stream from a specific outlet. The pollutants are generally carried off the land by stormwater runoff.
notice of intent (NOI)	Notice that an environmental impact statement will be prepared and considered, and is published in the Federal Register as soon as practicable as an agency knows that an EIS is required for a proposed action.

overburden	Material that lies above the area of economic or scientific interest, such as the rock, soil, and ecosystem that lies above the coal seam.
oxidized overburden	Overburden which has been exposed to oxygen, resulting in the oxidation (loss of electrons) of many minerals.
ozone (O ₃)	A form of oxygen found naturally in the stratosphere and that provides a protective layer for shielding the Earth from ultraviolet radiation. Ozone occurring in the lower atmosphere is harmful and is classified as a criteria pollutant.
palustrine	Living or thriving in a marshy environment.
particulate matter (PM)	Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog, found in air or emissions.
particulates	Small particles of solid or liquid materials that, when suspended in the atmosphere, constitute an atmospheric pollutant.
peak demand	The maximum rate of electricity use, expressed in kW.
peaking capacity	Capacity that is available for use and used to meet peak load, but usually designed to operate for relatively short periods of time.
pedogenic	Having to do with soil horizons.
permeability	Rate at which fluids flow through the subsurface and reflects the degree to which pore space is connected.
pH	A measure of the relative acidity or alkalinity of a solution, expressed on a scale from 0 to 14, with the neutral point at 7. Acid solutions have pH values lower than 7, and basic (i.e., alkaline) solutions have pH values higher than 7.
piezometer	An instrument for measuring pressure or compressibility of a material subjected to hydrostatic pressure.
plume	A flowing, often somewhat conical, trail of emissions from a continuous point source.
point sources	A stationary location or fixed facility from which pollutants are discharged or emitted. Also, any single identifiable source of pollution, for example, a pipe, ditch, or stack.
postmining land use	The land use that is selected by the landowner for use after the mining and reclamation process has been completed.
potable water	Water that is safe and satisfactory for drinking and cooking.
potentiometric surface	Imaginary surface defined by the elevations to which the groundwater in an aquifer would rise in wells completed in the aquifer.
Prevention of Significant Deterioration (PSD)	An Environmental Protection Agency program in which federal or state permits are required that are intended to restrict emissions for new or modified sources in places where air quality is already better than required to meet primary and secondary ambient air quality standards.

prime farmland	Land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion.
proposed action	The activity proposed to accomplish a Federal agency's purpose and need. An EIS analyzes the environmental impacts of the Proposed Action. A proposed action includes the project and its related support activities (preconstruction, construction, and operation, along with post-operational requirements).
pulverized coal	Crushed coal used to fuel a coal power plant. Currently the principal electric generation technology in the US
qualitative	Analysis based on professional judgment of quality, generally lacking hard data.
quantitative	Analysis based on hard data or numbers that can generally be repeated.
recharge	The movement of water from an unsaturated zone to a saturated zone.
reclaimed effluent	Treated effluent, typically from a municipal wastewater treatment plant, that is beneficially reused. Examples of reuses include agricultural irrigation, dust control, watering of golf courses, cooling tower makeup, and other industrial uses.
reclamation	Restoration of land, water bodies, or other affected environmental resources to the original use, or equal to or better alternate use.
reconstructed soil	Overburden material that consists of suitable materials, based on physical and chemical parameters analyzed during a comparison of the native soils and the oxidized portion of the overburden material, selected to replace the native soils as a topsoil-substitute material.
record of decision (ROD)	The concluding document of the NEPA process, as based on the conclusions of the EIS process, which states the agency's decision for the preferred alternative, along with its rationale for its selection, including the major environmental reasons.
recycled	The process of reusing or reprocessing a material after its initial use.
reference concentrations	Estimates of continuous inhalation exposure to human populations (including sensitive subgroups) that are likely to be without an appreciable risk of deleterious effects during a lifetime.
region of influence (ROI)	The physical area that bounds the environmental, sociologic, economic, or cultural features of interest for the purpose of analysis.
revegetation	The process of establishing new vegetative cover.
Richter scale	A measure of earthquake magnitude developed by Charles Richter.
riparian	Pertaining to, situated, or dwelling on the bank of a river or other body of water.
ruderal area	Heavily disturbed land, such as along roadsides, where vegetation is typically weedy.
runoff	The portion of precipitation falling on the land that flows over the surface, rather than soaking into the surface.

saline	Describes water with high concentrations of salts (typically more than 10,000 parts per million dissolved solids), making it unsuitable for use.
scoping meeting	An early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.
scrubber	A device that removes noxious gases from flue gases (such as sulfur dioxide) by using absorbents suspended in liquid solution.
scrub-shrub	Woody vegetation less than 20 ft tall. Species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.
secondary drinking water standards	Non-enforceable Federal guidelines regarding cosmetic effects (e.g., tooth or skin discoloration) or aesthetic effects (e.g., taste, odor, or color) of drinking water.
sediment	Material that has been eroded, transported, and deposited by erosional processes, typically wind, water, and/or glaciers.
sediment control	The planning and construction of facilities for prevention of excessive damage by water in flood stages.
sedimentary rocks	Rocks formed by the accumulation of sediment in water or from air. Sandstone, chert, limestone, dolomite, shale, siltstone, and mudstone are types of sedimentary rocks identified in the EIS. They are differentiated by chemistry and texture.
sedimentation	The process or action of depositing sediment.
seedling	A young plant developing from a seed. In a commercial forestry context, a live tree less than 1.0 inch in diameter.
seismic	Pertaining to, characteristic of, or produced by earthquakes or earth vibrations.
seismicity	A seismic event or activity such as an earthquake or earth tremor; seismic action.
selective catalytic reduction (SCR)	A system to reduce NO _x emissions by injecting a reagent, such as ammonia, into exhaust gas to convert NO _x emissions to nitrogen gas and water via a chemical reduction reaction.
sensitive receptor	As used in this EIS, any specific resource (i.e., population or facility) that would be more susceptible to the effects of the impact of implementing the proposed action than would otherwise be.
sequestration	As used in this EIS, the process of injecting CO ₂ , which has been compressed into a liquid state, into the deep subsurface, potentially isolating CO ₂ from the atmosphere for centuries. While the technologies currently exist to directly inject CO ₂ into the deep ocean, the knowledge base is inadequate to determine what biological, physical, or chemical impacts might occur from interactions with the marine ecosystem.
short-term	Occurring over or involving a short period of time.
significant	As used in an EIS, a measure of the severity of an impact, based on the setting, timing, and intensity of the impact.

sludge	A semi-solid residue containing a mixture of solid waste material and water from air or water treatment processes.
slurry	A watery mixture or suspension of fine solids, not thick enough to consolidate as a sludge.
soil	A dynamic natural medium composed of mineral and organic materials in which plants grow.
soil amendments	Fertilizers and other materials added to soil to make it suitable for prescribed uses.
solubility	Ability or tendency of one substance to dissolve into another at a given temperature and pressure.
sound pressure	The physical force from a sound wave that affects the human ear, typically discussed in terms of decibels (dB).
sour water	Water with dissolved sulfur compounds and other contaminants condensed from synthesis gas (syngas).
spill prevention control and countermeasure (SPCC) plan	A plan that is implemented to protect navigable waters of the US from harmful quantities of petroleum discharges.
spoil	Overburden material from the mined—out pit, which would be utilized to backfill an open pit, or otherwise be used to achieve original topography.
spring	A location on the land surface or the bed of a surface water body where groundwater emerges from rock or soil without artificial assistance.
stratification	The seasonal layering of water within a reservoir due to differences in temperature or chemical characteristics of the layers.
streams	A continually, frequently, or infrequently flowing body of water that follows a defined course. The three classes of streams are: <u>ephemeral</u> : a channel that carries water only during and immediately following rains-torms, <u>intermittent</u> : a watercourse that flows in a well-defined channel during the wet seasons of the year, but not the entire year. <u>perennial</u> : a watercourse that flows throughout the year or nearly 90 percent of the time in a well-defined channel.
sub-bituminous	A type of coal, which is used primarily as fuel for electrical power generation, whose properties range between those of lignite and those of bituminous coal. At the lower end of the range it may be dull, dark brown to black, soft, and crumbly. At the higher end of the range it may be bright, jet black, hard, and relatively strong. Sub-bituminous coal contains 20 to 30% moisture by weight. Heating value varies from 7,000 Btu/lb to slightly over 9,000 Btu/lb.
subsidence	A sinking of a part of the surface topography.
substation	An assemblage of equipment for the purposes of switching and/or changing or regulating the voltage of electricity.

substrates	The base or material to which a plant is attached and from which it receives nutrients.
sulfur dioxide (SO ₂)	A heavy, pungent, colorless, gaseous air pollutant formed primarily by the combustion of fossil-fuel plants.
supercritical CO ₂	CO ₂ usually behaves as a gas in air or as a solid as dry ice. If the temperature and pressure are both increased (above its supercritical temperature of 88°F [31.1°C] and 73 Atmosphere [1073 psi]), it can adopt properties midway between a gas and a liquid, such that it expands to fill its container like a gas, but has a density like that of a liquid.
surface water	Streams, rivers, ponds, lakes, and man-made reservoirs.
syngas	Synthesis gas. Gas mixture containing varying amounts of carbon monoxide (CO) and hydrogen (H ₂) generated by the gasification of a carbon-containing fuel.
threatened species	A species that is likely to become an endangered species within the foreseeable future throughout all or a significant part of its range.
topography	The configuration of a surface including its relief and position of the natural and manmade features.
topsoil	The upper native soil layer, usually consisting of the A and E horizons.
transmission corridor	Area used to provide separation between the transmission lines and the general public and to provide access to the transmission lines for construction and maintenance.
transmissivity	The quality of transmitting groundwater through a geologic stratum or formation.
turbidity	Defined as capacity of material suspended in water to scatter light. Highly turbid water is often called muddy; although all manner of suspended particles contribute to turbidity.
turbine	A machine for directly converting the kinetic energy and/or thermal energy of a flowing fluid (air, hot gas, steam, or water) into useful rotational energy.
understory	Saplings, shrubs, forbs, and other low-growing vegetation present in a forest.
upconing	Vertical upward intrusion from lower water into a shallower groundwater zone caused by pressure reductions in the shallower groundwater zone; usually applies when water in the deeper zone is denser.
upland	The higher parts of a region, not closely associated with streams or lakes.
upset or upset condition	An unplanned or unpredictable failure of process components or subsystems that leads to an overall malfunction or temporary shutdown of the power plant or subsystem while an issue with a component is corrected.
vibration	Force that oscillates about a specified reference point. Vibration is commonly expressed in terms of frequency such as cycles per second (cps), Hertz (Hz), cycles per minute (cpm), and strokes per minute (spm).
viewshed	A non-managed area with aesthetic value.

volatile organic compounds (VOCs)	Any organic compound that participates in atmospheric photochemical reactions except for those designated by the EPA as having negligible reactivity.
wastewater	A combination of liquid and water-carried wastes from residences, commercial buildings, and/or industrial facilities.
water table	(1) The upper limit of the saturated zone (the portion of the ground wholly saturated with water). (2) The upper surface of a zone of saturation above which the majority of pore spaces and fractures are less than 100 percent saturated with water most of the time (unsaturated zone) and below which the opposite is true (saturated zone).
watershed	A region or area bounded peripherally by a water parting and draining ultimately to a particular watercourse or body of water.
wetlands	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Indicators of wetland include types of plants, soil characteristics, and hydrology of the area. Wetlands generally include swamps, marshes, bogs and similar areas.
wind rose	Circular diagram that illustrates the relative frequency of wind speeds for each compass direction based on a time interval.
worst-case	A situation in which the combination of factors that would produce the worst potential impact on the environment.
zero liquid discharge system	Process separates solids and dissolved constituents from the plant wastewater and allows the treated water to be recycled or reused in the industrial process, resulting in no discharge of industrial process wastewater to the environment.

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