

12 Glossary

This chapter contains a glossary of words, legislative terms and regulatory requirements used in this DEIS.

Administrative Rule (AR)	Administrative rules officially proclaim the State of South Dakota's regulations and have the force of law. Administrative rules and regulations elaborate or detail the requirements of a law or policy.
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.
Air pollutant	Generally, an airborne substance that could, in high enough concentrations, harm living things or cause damage to materials. From a regulatory perspective, an air pollutant is a substance for which emissions or atmospheric concentrations are regulated or for which maximum guideline levels have been established due to potential harmful effects on human health and welfare.
Air Quality Standards	The level of pollutants prescribed by regulation that may not be exceeded during a specified time in a defined area.
Alluvial deposits	Deposits of earth, sand, gravel and other materials carried by moving surface water deposited at points of weak water flow.
Ambient air	Any unconfined portion of the atmosphere; open air, surrounding air. That portion of the atmosphere, external to buildings, to which the general public has access.
American Wind Energy Association (AWEA)	National trade association representing wind power project developers, equipment suppliers, service providers, parts manufacturers, utilities, researchers, and others involved in the wind industry.
Anabat	A system to identify and survey bats by detecting and analyzing their echolocation calls.
Applicants	Basin Electric Power Cooperative and PrairieWinds SD1, Incorporated
Aquifer	A body of rock or sediment in a formation, group of formations, or part of a formation that is saturated and sufficiently permeable to transmit economic quantities of water to wells and springs.

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 sites (resources)	Any location where humans have altered the terrain or discarded artifacts during either prehistoric or historic times.
Archaeology	A scientific approach to the study of human ecology, cultural history, and cultural process.
Area of potential effects (APE)	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	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.
Bald and Golden Eagle Protection Act (BGEPA)	Law that provides for the protection of the Bald Eagle and the Golden Eagle by prohibiting the taking, possession and commerce of such birds (16 U.S.C. 668-668d, 54 Stat. 250).
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.

Board of County Commissioners	A group of elected officials charged with administering the policies and regulations of county government.
Bounding	A credible upper limit to consequences or impacts.
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.
Candidate species	A species of plant or animal for which there is sufficient information to indicate biological vulnerability and threat, and for which proposing to list as “threatened” or “endangered” is or may be appropriate.
Capability	The maximum load that a generator, turbine, transmission circuit, apparatus, station, or system can supply under specified conditions for a given time interval, without exceeding approved limits of temperature and stress.
Capacity	The load for which a generator, turbine, transformer, transmission circuit, apparatus, station, or system is rated. Capacity is also used synonymously with capability.
Carbon dioxide (CO ₂)	A chemical compound composed of two oxygen atoms covalently bonded to a single carbon atom. It is a gas at standard temperature and pressure and exists in Earth's atmosphere in this state. CO ₂ is also recognized as the most prominent greenhouse gas.
Carbon monoxide (CO)	A colorless, odorless gas that is toxic if breathed in high concentrations over a period of time. It is formed as the product of the incomplete combustion of hydrocarbons (fuel).
Class I, II and III Areas	Area classifications, defined by the Clean Air Act, for which there are established limits to the annual amount of air pollution increase. Class I areas include international parks and certain national parks and wilderness areas; allowable increases in air pollution are very limited. Air pollution increases in Class II areas are less limited, and are least limited in Class III areas. Areas not designated as Class I start out as Class II and may be reclassified up or down by the State, subject to Federal requirements.
Clast	A rock fragment or grain resulting from the breakdown of larger rocks.

Clean Air Act (CAA)	(42 U.S.C. 7401 <i>et seq.</i>) Establishes (1) national air quality criteria and control techniques (Section 7408); (2) NAAQS (Section 7409); (3) State implementation plan requirements (Section 4710); (4) Federal performance standards for stationary sources (Section 4711); (5) National Emission Standards for Hazardous Air Pollutants (NESHAP) (Section 7412); (6) applicability of CAA to Federal facilities (Section 7418), <i>i.e.</i> , Federal agency must comply with Federal, State, and local requirements respecting control and abatement of air pollution, including permit and other procedural requirements, to the same extent as any person; (7) Federal new motor vehicle emission standards (Section 7521); (8) regulations for fuel (Section 7545); (9) aircraft emission standards (Section 7571).
Clean Water Act (CWA)	(33 U.S.C. 1251 <i>et seq.</i>) Restores and maintains the chemical, physical, and biological integrity of the nation's waters.
Code of Federal Regulations (CFR)	All Federal regulations in force are published in codified form in the Code of Federal Regulations.
Colluvium	A loose deposit of rock debris accumulated through the action of gravity at the base of a cliff or slope.
Community (biotic)	All plants and animals occupying a specific area under relatively similar conditions.
Conditional Use Permit	A permit issued by a city, county, or other administrative entity to consider special uses which may be essential or desirable to a particular community, but which are not allowed as a matter of right within a particular zoning district or zoning ordinance. A conditional use permit can provide flexibility in planning, allowing, with conditions, a special use of property that is the public interest.
Conservation	A reduction in electric power consumption as a result of increases in the efficiency of energy use, production, or distribution.
Conservation Reserve Program (CRP)	A cost-share and rental payment program under the U.S. Department of Agriculture (USDA) administered by the Farm Service Agency. Technical assistance for CRP is provided by the USDA Forest Service and the USDA Natural Resources Conservation Service (NRCS). The CRP program encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filter strips, or riparian buffers.

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.
Critical habitat	Habitat identified as essential to the conservation of a threatened or endangered species, and which may require special management considerations or protection.
Cultural resources	Districts, sites, structures, and objects and evidence of some importance to a culture, a subculture, or a community for scientific, traditional, religious, and other reasons. These resources and relevant environmental data are important for describing and reconstructing past lifeways, for interpreting human behavior, and for predicting future courses of cultural development.
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.
Customer	Any entity or entities purchasing power from the power generator or distributor provider.
Day-night average sound level (L_{dn})	The average noise level over a 24 hour period.
Decibel (dB)	A unit for expressing the relative intensity of sounds on a logarithmic scale from 0 for the average least perceptible sound to about 130 for the average level at which sound causes pain to humans. For traffic and industrial noise measurements, the A-weighted decibel (dBA), a frequency-weighted noise unit, is widely used. The A-weighted decibel scale corresponds approximately to the frequency response of the human ear and thus correlates well with loudness.

Decommissioning	The process to remove the Proposed Project Components, or portions thereof, from service. Decommissioning may include decontamination, dismantling, shipment and final disposition of project components, and site rehabilitation, in compliance with applicable rules and regulations.
Demand	The rate at which energy is used at a given instant or averaged over a designated period of time.
Dendritic	Stream pattern resembling the branching pattern of blood vessels or tree branches.
Deposition	In geology, the laying down of potential rock-forming materials; sedimentation. In atmospheric transport, the settling out on ground and building surfaces of atmospheric aerosols and particles (“dry deposition”) or their removal from the air to the ground by precipitation (“wet deposition” or “rainout”).
Drinking water standards	The prescribed level of constituents or characteristics in a drinking water supply that cannot be exceeded legally.
Ecology	A branch of science dealing with the interrelationships of living organisms with one another and with their nonliving environment.
Ecosystem	Living organisms and their non-living (abiotic) environment functioning together as a community.
Effects (impacts)	As used in NEPA documentation, the terms effects and impacts are synonymous. Effects can be ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.
Elevation	Height in feet above mean sea level.
Eligibility	The criteria of significance in American history, architecture, archeology, engineering, and culture. The criteria require integrity and association with important people or events, distinctiveness for any of a variety of reasons, or importance because of information the property does or could hold.

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.
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.
Emission Standards	Requirements established by a State, local government, or the EPA Administrator that limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis.
Emissions	Pollution discharged into the atmosphere from smoke stacks, other vents, and surface areas of commercial or industrial facilities, residential chimneys, and vehicle exhausts.
Endangered species	Plants or animals that are in danger of extinction through all or a significant portion of their range.
Endangered Species Act of 1973	(16 U.S.C. 1531 <i>et seq.</i>) Provides for listing and protection of animal and plant species identified as in danger, or likely to be in danger, or extinction throughout all or a significant portion of their range. Section 7 places strict requirements on Federal agencies to protect listed species.
Energy	That which does or is capable of doing work. It is measured in terms of the work it is capable of doing; electric energy is usually measured in kilowatt-hours.
Environmental Impact Statement (EIS)	The detailed written statement that is required by Section 102(2)(C) of NEPA for a proposed major Federal action significantly affecting the quality of the human environment.
Environmental Justice	Identification of potential disproportionately high and adverse impacts on low-income and/or minority populations that may result from proposed Federal actions (required by Executive Order 12898).
Eolian	Sediment materials eroded and deposited by the wind.
Erosion	Wearing away of soil and rock by weathering and the actions of surface water, wind, and underground water.
Ethnographic	Information about cultural beliefs and practices.
Facility	The wind power generating components of the Proposed Project.

Farmland Protection Policy Act	A statute enacted in 1981 by the USDA to ensure that significant agricultural lands are protected from conversion to nonagricultural uses.
Federal Aviation Administration	An agency that regulates civil aviation to promote safety, encourages and develops civil aeronautics including new aviation technology, develops and operates a system of air traffic control and navigation for both civil and military aircraft, researches and develops the National Airspace System and civil aeronautics, develops and carries out programs to control aircraft noise and other environmental effects of civil aviation, and regulates U.S. commercial space transportation.
Federal Energy Regulatory Commission (FERC)	An independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects.
Floodplain	The lowlands adjoining inland and coastal waters and relatively flat areas, including at a minimum that area inundated by a 1-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.
Fluvial	Sediment materials eroded and deposited by the action of a stream.
Formation	In geology, the primary unit of formal stratigraphic mapping or description. Most formations possess certain distinctive features.
Game Production Areas (GPA)	Areas owned and managed by the South Dakota Department of Game, Fish and Parks for game production and public hunting.
Gauss (G)	The unit most commonly used in the United States to measure magnetic fields.
Generation	The act or process of producing electricity from other forms of energy.
Generator	A machine that converts mechanical energy into electrical energy.
Glaciofluvial	Sediments deposited by streams fed by melting glaciers.

Grassland Easements	A legal agreement signed with the United States of America, through the U.S. Fish and Wildlife Service that pays to permanently keep land in grass. This restriction is to help grassland nesting species, such as ducks and pheasants, complete their nesting before the grass is disturbed.
Groundwater	Water within the earth that supplies wells and springs.
Hazardous Air Pollutants	Air pollutants that are not covered by ambient air quality standards, but that may present a threat of adverse human health effects or adverse environmental effects.
Hazardous waste	A category of waste regulated under the Resource Conservation and Recovery Act (RCRA). To be considered hazardous, a waste must be a solid waste under RCRA and must exhibit at least one of four characteristics described in 40 CFR 261.20 through 40 CFR 261.24 (<i>i.e.</i> , ignitability, corrosivity, reactivity, or toxicity) or be specifically listed by the EPA in 40 CFR 261.31 through 40 CFR 261.33.
Historic properties	Resources of national, State, or local significance in American history, architecture, archaeology, engineering, or culture, and worthy of preservation.
Hydric soils	Soils containing considerable moisture.
Hydrophytic	Growing wholly or partially in water or having or characterized by excessive moisture.
Hydrophytic vegetation	Vegetation adapted to an aquatic or very wet environment.
Impacts (effects)	An assessment of the meaning of changes in all attributes being studied for a given resource; an aggregation of all the positive and negative effects, usually measured using a qualitative and nominally subjective technique. In this EIS, as well as in the CEQ regulations, the word impact is used synonymously with the word effect.
Impaired waters	Under Section 303(d) of the Clean Water Act, States, territories, and authorized tribes are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the water quality standards set by States, territories or authorized tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop total maximum daily loads for these waters. Total maximum daily loads are calculations of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.

Indirect impacts	Impacts resulting from an action that are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
Infrastructure	The basic installations and facilities (e.g., roads, schools, power plants, transportation, communication systems) on which the continuance and growth of a community or State are based.
Interested parties	Those groups or individuals that are interested, for whatever reason, in the project and its progress. Interested parties include but are not limited to private individuals, public agencies, organizations, customers, and potential customers.
Invertebrate	Animals characterized by not having a backbone or spinal column, including a wide variety of organisms such as insects, spiders, worms, clams, crayfish, <i>etc.</i>
K Factor (K)	Represents the potential for soil erosion accounting for several factors, including rainfall/runoff, slope length and steepness, cover management, and the physical properties of the soil itself.
Kame	A short ridge or mound of sand and gravel deposited during the melting of glacial ice.
Key Observation Point (KOP)	An element of the contrast rating system used by the Bureau of Land Management (BLM) 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.
Landowner agreements	A lease agreement established between the Applicants and a private landowner for the construction of the Proposed Project. These leases would allow construction and operation of wind facilities for a negotiated term.
Large Generator Interconnection	The protocols established by Western for customers requesting an interconnection with a capacity greater than 20 MW.

Large Generator Interconnection Agreement (LGIA)	The agreement established between Western and an interconnection customer outlining the terms and provisions of the interconnection.
Lewis and Clark Interpretive Center (LCIC)	An educational center, managed by the USDA Forest Service, providing information to the public a personal sense of President Thomas Jefferson's vision of expanding America to the west. Information based toward the challenges faced by the Lewis and Clark expedition as they portaged the great falls of the Missouri River and explored the 'unknown', brings to life the daily experiences of the expedition and the environment and native peoples of the 'uncharted West.'
Lewis and Clark National Historic Trail (NHT)	Meriwether Lewis and William Clark traveled over a three-year period through lands that later became 11 States. Most of the trail follows the Missouri and Columbia Rivers. At 3,700 miles (5,950 km), it begins at Hartford, Illinois, and passes through portions of Missouri, Kansas, Iowa, Nebraska, South Dakota, North Dakota, Montana, Idaho, Oregon, and Washington. It is part of the National Trails System of the United States.
Lewis and Clark Trail Driving Route (LCTDR)	The LCTDR is a network of roads that generally tracks the Lewis and Clark NHT along the Missouri River and provides vistas as well as historic markers. The Lewis and Clark NHT extends more than 3,700 miles and includes the entire Missouri River from its headwaters in Montana to its confluence with the Mississippi River near St. Louis, Missouri.
Liter (L)	Unit of volume of the metric system.
Lithic	A stone artifact that has been modified or altered by human hands.
Load	The amount of electric power required at a given point on a system.
Loam	A rich, permeable soil composed of a mixture of clay, silt, sand, and organic matter.
Low-income population	A population that is classified by the U.S. Bureau of the Census as having an aggregated mean income level for a family of four that correlates to \$13,359, adjusted through the poverty index using a standard of living percentage change where applicable, and whose composition is at least 25 percent of the total population of a defined area or jurisdiction.

Mammal	Animals in the class Mammalia that are distinguished by having self regulating body temperature, hair, and in females, milk-producing mammary glands to feed their young.
Megawatt (MW)	The electrical unit of power that equals 1 million watts or 1 thousand kilowatts.
Megawatt-hours (MWh)	A unit of energy. Energy in watt hours is the multiplication of power in watts and time in hours.
Mesic	Ecological term indicating characterized by, or adapted to a moderately moist habitat.
Meteorology	The science dealing with the dynamics of the atmosphere and its phenomena, especially relating to weather.
Microtesla (μ T)	The Tesla is the internationally accepted scientific unit for measuring magnetic fields. Since a Tesla is very large, and the majority of magnetic field exposure is substantially lower, values typically reported and measured are in microtesla (μ T) (or 1/1,000,000 of a Tesla).
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)
Miles per hour (mph)	The ratio of the distance traveled (measured in miles) to the time expended traveling that distance (measured in hours).
Milligauss (mG)	A unit of measurement for measuring magnetic fields. Since a Gauss is very large and the majority of magnetic field exposure is substantially lower, values typically reported and measured are in milligauss (mG) (1/1,000 of a Gauss).
Minority population	A population that is classified by the U.S. Bureau of the Census as African American, Hispanic American, Asian and Pacific American, American Indian, Eskimo, Aleut, and other non-White persons, whose composition is at least 25 percent of the total population of a defined area or jurisdiction.

Mitigation	The alleviation of adverse impacts on environmental resources by avoidance through project redesign or project relocation, by protection, or by adequate scientific study.
National Ambient Air Quality Standards (NAAQS)	Standards defining the highest allowable levels of certain pollutants in the ambient air. Because the EPA must establish the criteria for setting these standards, the regulated pollutants are called criteria pollutants.
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 (NHPA)	The National Historic Preservation Act of 1966, as amended, recognized the nation's cultural and historical heritage, and established requirements for ensuring the protection of cultural resources considered significant at the local, State, and national levels (16 U.S.C. 470). The NHPA also provides for an expanded National Register of Historic Places (NRHP) to include districts, sites, buildings, structures, and objects significant to American history, architecture, archaeology, and culture. Section 106 requires that the President's Advisory Council on Historic Preservation be afforded an opportunity to comment on any undertaking that adversely affects properties listed in, or eligible for listing in, the NRHP.
National Pollutant Discharge Elimination System Permit (NPDES)	Federal regulation (40 CFR Parts 122 and 125) 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.
National Register of Historic Places (NRHP)	A list maintained by the Keeper (an individual who has been delegated by the National Park Service) of districts, sites, buildings, structures, and objects of prehistoric or historic local, State, or national significance. The list is expanded as authorized by Section 2(b) of the Historic Sites Act of 1935 (16 U.S.C. 462) and Section 101(a)(1)(A) of the National Historic Preservation Act of 1966, as amended.

National Renewable Energy Laboratory (NREL)	A national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy, LLC.
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	A tribe, people, or culture that is indigenous to the United States.
Native American Graves Protection and Repatriation Act (NAGPRA)	A Federal law requiring Federal agencies and institutions that receive Federal funding to return Native American cultural items and human remains to their respective peoples. Cultural items include funerary objects, sacred objects, and objects of cultural patrimony.
Native vegetation	Plant life that occurs naturally in an area without agricultural or cultivation efforts. It does not include species that have been introduced from other geographical areas and have become naturalized.
Natural Resources Conservation Service	A USDA service that provides a partnership effort to help America's private land owners and managers conserve their soil, water, and other natural resources.
Nitrogen dioxide (NO ₂)	A highly reactive toxic gas and one of the six criteria pollutants regulated by EPA through the NAAQS.
Noise	Unwanted or undesirable sound, usually characterized as being so loud as to interfere with, or be inappropriate to, normal activities such as communication, sleep, study or recreation.
Non-attainment 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.

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 aggressive growing, multiply quickly, and adversely affect desirable plants, or are somehow injurious to livestock or humans either by contact or when ingested. They are a large problem in many parts of the world, greatly affecting areas of agriculture, forest management and other open lands.
Obligate species	Plant species that almost always occur in wetlands (<i>i.e.</i> , greater than 99 percent of the time).
Off-peak	Power that is generated during low-demand periods of the day, typically evenings and to a lesser extent, weekends. There is less demand for power during these times, thus more power is available in the marketplace at a lower cost.
On-peak	Power that is generated during high-demand periods of the day, typically mornings and evenings. Power generated during this time is generally more expensive because baseload power plants are fully operational and excess power in the marketplace is relatively scarce.
Open Access Transmission Service Tariff (Tariff)	A document (typically filed with a regulatory body) that sets forth the rates, terms, and conditions under which an interested entity can receive transmission service from an electric utility. Western's Tariff filed with FERC requires Western to offer its transmission lines for delivery of electricity when capacity is available.
Outwash	A broad, outspread flat or gently sloping deposit of sediment deposited by streams flowing away from a melting glacier.
Oyate	Native American word meaning <i>people</i> or <i>nation</i> .
Ozone	A molecule of three oxygen atoms bound together. In the stratosphere, ozone protects the earth from the sun's ultraviolet rays but in the lower levels of the atmosphere, ozone is considered an air pollutant.
Paleontology	The study of fossils.
Palustrine	All nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 parts per trillion.

Particulate matter (PM, PM10, and PM2.5)	Any finely divided solid or liquid material, other than uncombined water. A subscript denotes the upper limit of the diameter of particles included. Thus, PM10 includes only those particles equal to or less than 10 micrometers (0.0004 inch) in diameter; PM2.5 includes only those particles equal to or less than 2.5 micrometers (0.0001 inch) in diameter.
Peak capacity	The maximum capacity of a system to meet loads.
Peak demand	The highest demand for power during a stated period of time.
Permeability	The ability of rock or soil to transmit a fluid.
pH	A measure of the relative acidity or alkalinity of a solution, expressed on scale from 0 to 14, with the neutral point at 7.0. Acid solutions have pH values lower than 7.0, and basic (<i>i.e.</i> alkaline) solutions have pH values higher than 7.0. Because pH is the negative logarithm of the hydrogen ion (H ⁺) concentration, each unit increase in pH value expresses a change of state of 10 times the preceding state. Thus, pH 5 is 10 times more acidic than pH 6, and pH 9 is 10 times more alkaline than pH 8.
Potential Impact Index (PII)	A scoring protocol used to evaluate the potential for wind development sites to affect plant and wildlife species.
Prairie Pothole Region (PPR)	An area of the northern Great Plains and midgrass and tallgrass prairies that contains thousands of shallow wetlands known as potholes. These potholes are the result of glacier activity in the Wisconsin glaciation, which ended approximately 10,000 years ago. The decaying ice sheet left behind depressions formed by the uneven deposition of till in ground moraines, and melting ice blocks which created kettle lakes. These depressions filled with water, creating the potholes.
Prehistoric	Of, relating to, or existing in times before written history. Prehistoric cultural resources are those that precede written records of the human cultures that produced them.
Presidential Executive Order 11988 (Floodplain Management)	Executive Order 11988 requires Federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

Presidential Executive Order 11990 (Wetlands Management)	Executive Order 11990 directs Federal agencies to minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. The order requires Federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided.
Presidential Executive Order 12088 (Federal Compliance with Pollution Control)	Executive Order 12088 requires all Federal agencies to be in compliance with environmental laws and fully cooperate with EPA, State, interstate, and local agencies to prevent, control, and abate environmental pollution.
Presidential Executive Order 12898 (Environmental Justice)	Executive Order 12898 directs Federal agencies to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.
Presidential Executive Order 13007 (Indian Sacred Sites)	Executive Order 13007 directs Federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites.
Presidential Executive Order 13112 (Invasive Weed Species)	Executive Order 13112 requires the prevention of the introduction of invasive species and provides for their control and to minimize the economic, ecological, and human health impacts that invasive species cause.
Presidential Executive Order 13186 (Protection of Migratory Birds)	Executive Order 13186 directs executive departments and agencies to take certain actions to further implement the MBTA. Each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement a Memorandum of Understanding (MOU) with the USFWS that shall promote the conservation of migratory bird populations.
Prime farmland	Soil types with a combination of characteristics that make the soils particularly productive for agriculture.
Raptor	Birds of prey including various types of hawks, falcons, eagles, vultures, and owls.

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 ROD is prepared in accordance with the requirements of the CEQ NEPA regulations (40 CFR 1505.2).
Region of Influence (ROI)	The geographical region that would be expected to be affected in some way by a proposed action and alternatives.
Reliability	The ability of the power system to provide customers uninterrupted electric service, including generation, transmission, and distribution reliability.
Renewable Portfolio Standard	A provision stating that any load serving entity shall derive a percentage of its total retail energy sold from new solar resources or environmentally friendly renewable electricity technologies, whether that energy is purchased or generated by the seller.
Right-of-way	An easement for a certain purpose over the land of another use, such as a strip of land used for a transmission line, roadway, or pipeline.
Riparian	Of or pertaining to the bank of a river, stream, lake, or other water bodies.
Runoff	The portion of rainfall, melted snow, or irrigation water that flows across the ground surface and may eventually enter streams.
Safe Drinking Water Act	The principal Federal law in the United States that ensures safe drinking water for the public. Pursuant to the act, the EPA is required to set standards for drinking water quality and oversee all States, localities, and water suppliers who implement these standards.
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 106 Process	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 <i>et seq.</i>).

Sediment	Material deposited by wind or water.
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.
Socioeconomics	The social and economic condition in the study area.
Solid waste	In general, solid wastes are non-liquid, non-soluble discarded materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid wastes include sewage sludge, agricultural refuse, demolition wastes, and mining residues.
South Dakota Ambient Air Quality Standards (SDAAQS)	The thresholds established and regulated for criteria air pollutants. The Department of Environment and Natural Resources (DENR) has adopted the NAAQS for the State air quality program.
South Dakota Codified Laws (SDCL)	Statutes, laws, and regulations established through the State's legislative process.
South Dakota Department of Game, Fish and Parks	The Department of Game, Fish and Parks conserves, manages, protects and enhances South Dakota's wildlife resources, parks, and outdoor recreational opportunities.
South Dakota State Historic Preservation Office	The State Historic Preservation Office manages the National Register of Historic Places program of the National Park Service in South Dakota. 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.
Special Use Permit (SUP)	A permit issued under specific circumstances to regulate activities that may otherwise be prohibited.
Special-status species	Those species that have been identified as endangered, threatened, proposed, State species of special concern, or State protected.

Spill Prevention Control and Countermeasures Plan (SPCC)	A plan implemented to help prevent any discharge of oil into navigable waters or adjoining shorelines. As stipulated by EPA, SPCC plans are required for non-transportation facilities that have a total above-ground oil storage capacity of 1,320-gallons.
State Historic Preservation Officer	The official within each State, authorized by the State at the request of the Secretary of the Interior, to act as liaison for purposes of implementing the National Historic Preservation Act.
Step-up transformer	Transformer in which the energy transfer is from a low- to a high-voltage winding or windings. (Winding means one or more turns of wire forming a continuous coil for a transformer, relay, rotating machine, or other electric device.)
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 NPDES permit coverage for storm water discharges.
Stratigraphy	The study of rock strata, especially the distribution, deposition and age of sedimentary rocks.
Substation	A facility where electric energy is passed for transmission, transformation, distribution, or switching.
Sulfur dioxide (SO ₂)	One of the six criteria pollutants regulated by EPA through the NAAQS.
Sulfur hexafluoride (SF ₆)	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. SF ₆ is used in electrical equipment, such as circuit breakers.
Super long extreme (sle)	A technical specification of one of the proprietary wind turbines manufactured by General Electric.
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.
Switchyard	Facility with circuit breakers and automatic switches to turn power on and off on different transmission lines. Switchyards are typically associated with substations.
Tesla (T)	The internationally accepted scientific unit for measuring magnetic fields.

Threatened species	Plant and wildlife species likely to become endangered in the foreseeable future.
Total suspended solids (TSS)	A measure of the amount of small, particulate solid pollutants that are suspended in water.
Traditional Cultural Property/Use Area	Areas of significance to the beliefs, customs, and practices of a community of people that have been passed down through generations.
Transformer	Its most frequent use in power systems is for changing voltage levels.
Transmission line	The structures, insulators, conductors and other equipment used to transfer electrical power from one point to another.
Trophic state index	A measure of eutrophication (increase in chemical nutrients resulting in increased productivity) of a body of water using a combination of measures of water transparency or turbidity, chlorophyll-a concentrations and total phosphorus levels.
U.S. Army Corps of Engineers (USACE)	A Federal Army construction management agency. Generally associated with dams, canals and flood protection in the United States, U.S. Army Corps of Engineers is involved in a wide range of public works support to the nation and the Department of Defense throughout the world. U.S. Army Corps of Engineers specializes in planning, designing, building, operating locks and dams, and environmental regulation and ecosystem restoration.
U.S. Code (USC)	The United States Code is the codification by subject matter of the general and permanent laws of the United States. It is divided by broad subjects into 50 titles and published by the Office of the Law Revision Counsel of the U.S. House of Representatives.
U.S. Environmental Protection Agency (EPA)	The independent Federal agency, established in 1970, that regulates Federal environmental matters and oversees the implementation of Federal environmental laws.
U.S. Fish and Wildlife Service (USFWS)	The U.S. Fish and Wildlife Service is the unit of the U.S. Department of the Interior dedicated to the management and preservation of wildlife. Units within the USFWS include: National Wildlife Refuge System, Migratory Birds program, Federal Duck Stamp, National Fish Hatchery System, Endangered Species Program and the Office of Law Enforcement.

Vertebrate	Animals that are members of the subphylum Vertebrata, including fishes, amphibians, reptiles, birds, and mammals, all of which are characterized by having a segmented bony or cartilaginous spinal column.
Volt	The unit of voltage or potential difference. It is the electromotive force which, if steadily applied to a circuit having a resistance of one ohm, will produce a current of one ampere.
Voltage	Potential for an electric charge to do work; source of an electric field.
Waterfowl Production Areas (WPAs)	Public lands purchased by the Federal government for the purpose of increasing the production of migratory birds, especially waterfowl.
Waters of the United States (WUS)	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.
Wetland	Land or areas exhibiting hydric soil concentrations saturated or inundated soil during some portion of the year, and plant species tolerant of such conditions.
Wetland Management District (WMD)	Public lands managed by the USFWS as part of the National Wildlife Refuge System to provide habitat for endangered species, migratory birds, and other wildlife and to provide places for people to learn about and enjoy wildlife.
Wind Resource Assessment Network (WRAN)	A network of 11 towers throughout South Dakota used for measuring wind speed and direction to allow for statistical verification of wind resources within the State.