



## Style Guide & Glossary

**air-condition, air-conditioned, air conditioner, air conditioning** *Air-condition* is a verb. *Air-conditioned* is an adjective. *Air conditioner* is a noun. *Air conditioning* can be a noun or an adjective; if used as an adjective, add a hyphen.

**annual meeting** Once-a-year gathering of electric cooperative members held according to a cooperative's bylaws for the purpose of electing directors/trustees and conducting other business.

**arrester** Never use arrestor.

**base load** The minimum amount of electric power delivered or required from a generating system over a specified period; usually measured in megawatts.

**bottom ash** Heavier, coarser solids, ranging from the size of grains of sand to small pebbles, that fall to the bottom of a boiler when coal gets burned.

**byproduct** Something produced in the making of something else. Use as one word.

**capacity** The potential for generating power, measured in kilowatts or megawatts, of a power plant. Also the electric load, measured in watts or kilowatts, of a piece of electrical equipment.

**capital credits** Margins credited to cooperative members each year based on their purchases (in the case of electric cooperatives, electricity) from the cooperative. Used by the cooperative as working capital for a period of time, then paid back to individual members. Also called *patronage capital* or *equity capital*. Capital credits should not be confused with profits, which are a return *on* capital. Retirement of capital credits provides a return *of* member-furnished capital.

**chairman** The National Association of Parliamentarians insists on *chairman* for both sexes.

**coal ash** Residues, such as bottom ash, fly ash, scrubber sludge, and slag generated by coal-fired power plants. Often used interchangeably with the term *coal combustion byproducts*. Most coal ash, more than 70 million tons per year, ends up in impoundments and landfills. The U.S. Environmental Protection Agency is considering whether to recommend regulating coal ash as hazardous waste, which would overturn four previous —non-hazardous|| determinations, the last made in 2000.

**combined cycle** A method of generating power from waste heat created by one or more combustion turbines. High-pressure, high-temperature exhaust from the turbines can be captured to make steam and power a turbine-generator that produces additional electricity. The process greatly increases generating efficiency at low cost with zero emissions. A form of cogeneration, it's also known as *waste-heat recovery*.

**compact fluorescent lightbulb (CFL)** A type of fluorescent lamp designed to replace incandescent lightbulbs. Compared with incandescents delivering the same amount of visible light, CFLs use 25

percent to 33 percent less energy and boast a longer life. Note that *lightbulb* is now used as one word, according to *Merriam-Webster's Collegiate Dictionary, Eleventh Edition*.

**co-op** Short for *cooperative*. Always use the hyphen. Otherwise, it's a small shed where barnyard fowl roost.

**demand** The amount of electricity drawn from an electric system at a given time, measured in kilowatts.

**distribution cooperative** An electric cooperative that operates a distribution system, purchases wholesale power, and delivers it to consumers. Clay Electric is a distribution cooperative.

**distribution system** Poles, wire, substations, and transformers used to deliver electric energy to consumers.

**electric cooperative** A not-for-profit utility owned by those (members) who use its services. Electric cooperatives generate and purchase wholesale power, own or arrange for the transmission of that power, distribute power, and aggregate power purchases for consumers.

**Electric Cooperative Youth Tour** An annual educational trip to Washington, D.C., held during June for high school students (mostly seniors-to-be) selected by local electric cooperatives. The program, first launched in 1957 by Texas electric cooperatives, has been coordinated by the National Rural Electric Cooperative Association since 1964 in conjunction with electric cooperative statewide organizations. *Youth Tour* acceptable on second reference.

**energy efficiency rating (EER)** A measure of how efficiently an appliance uses energy. Determined by dividing Btu per hour output by watts used. A higher EER means greater efficiency.

**feeder** a power line that carries power from the substation to individual tap lines.

**fly ash** Tiny, talcum-like solids that escape in flue gas from a coal-fired boiler; removed by pollution-control equipment.

**fuel cost** The total cost of fuel delivered to a power plant, including freight and other transportation charges, coupled with maintenance and mine reclamation costs.

**generation** The production of electricity using fuels such as coal, natural gas, oil, and uranium or from renewable sources such as a biomass, geothermal, hydro, hydrokinetic (ocean wave and tidal), solar, or wind.

**generator** A machine that converts mechanical energy into electrical energy.

**grid** A network of interconnected high-voltage transmission lines and power generating facilities that allows utilities and other suppliers to share resources on a regional basis. The North American Electric Reliability Corporation oversees reliability of the electric grid covering the United States, most of Canada, and the Mexican state of Baja California Norte. The nation's electric grid consists of three main sections: the Eastern Interconnection, which extends from the foot of the Rocky Mountains to the Atlantic seaboard, excluding most of Texas; the Western Interconnection, which runs from the Rocky Mountains to the Pacific coast; and the Texas Interconnection, which covers most of Texas. Also, any network of interconnected electric facilities, including a distribution system.

**heat pump** An appliance that provides both heating and cooling by moving heat into or out of a structure. *Geothermal heat pumps*, also called *ground-source heat pumps*, come in two types: a *groundwater*

(*open-loop*) heat pump uses well water; an *earth-coupled (closed-loop)* model moves a water and antifreeze solution through underground pipes to disperse heat. An *air-source heat pump* uses air to transfer heat.

**kilovolt (kV)** Equal to 1,000 V. Used to measure the amount of electric force carried through a high-voltage transmission line. Abbreviation acceptable on first reference when used with a numeral.

**kilovolt-ampere (kVA)** Equal to 1,000 VA. Abbreviation acceptable on first reference when used with a numeral.

**kilowatt (kW)** The basic unit of electric demand, equal to 1,000 W. A measure of both a utility's capacity and a consumer's demand or load. Abbreviation acceptable on first reference when used with a numeral.

**kilowatt-hour (kWh)** A unit of energy or work equal to 1,000 Wh. The basic measure of electric energy use. A 100-W lightbulb burning for 10 hours uses 1 kWh. Abbreviation acceptable on first reference when used with a numeral.

**lightbulb** One word, according to *Merriam-Webster's Collegiate Dictionary, Eleventh Edition*.

**line** A cable that carries electricity from one point to another on an electric power system.

**lineman** An electric utility employee who builds and maintains power lines. For a gender-neutral reference, use *lineworker* or *line technician*.

**lineworker** Preferred word for *lineman*.

**load** The amount of electric power drawn at a specific time from an electric system, or the total power drawn from the system.

**megawatt (MW)** Equal to 1,000 kW or 1 million W, it measures either a utility's capacity, a generating unit's capacity, or a consumer's demand or load. Abbreviation acceptable on first reference when used with a numeral.

**megawatt-hour (MWh)** Equal to 1,000 kWh or 1 million Wh, it measures the actual amount of electricity a generating unit produces over a certain period of time. Abbreviation acceptable on first reference when used with a numeral.

**member** The actual person(s) listed on an account who receive service from an electric cooperative. In most cases, the number of members served by a cooperative differs from the total number of consumers served (not all consumers are members, as some are children, etc.) or the number of meters served (since some accounts have more than one meter).

**meter** A device used to measure and record the amount of electricity used by a consumer. Newer models also communicate readings and other data with a utility.

**National Rural Electric Cooperative Association (NRECA)** The Arlington, Va.-based national service organization representing more than 900 consumer-owned, not-for-profit electric cooperatives, public power districts, and public utility districts in the United States. NRECA oversees cooperative employee benefits plans; carries out federal government relations activities like lobbying; conducts management and director/trustee training; and spearheads communications, advocacy, and public relations initiatives. In addition, it coordinates national and regional conferences and seminars; offers member cooperatives advice on tax, legal, environmental, and engineering matters; and performs economic and technical research. Incorporated as a cooperative in the District of Columbia on March 19, 1942.

**not-for-profit** An incorporated, self-help organization established with the sole purpose of providing a service at the lowest possible cost and where ownership lies with stakeholders (users) and not outside investors. Not-for-profit entities, such as cooperatives and credit unions, maintain a surplus of income over expenditures but use that excess revenue to improve service and return it to stakeholders. *Electric cooperatives are not-for-profit businesses.*

**on-line, online** A generating plant that's operating is *on-line*. *Online* refers to communication over the Internet.

**Our Energy, Our Future®** The largest and most aggressive grassroots awareness campaign in electric cooperative history. At its core, the effort seeks to engage more than 42 million electric cooperative consumers in 47 states in discussing with elected officials the complexities associated with providing safe, reliable, and affordable power in an environmentally responsible fashion over coming decades. Launched in late February 2008. Use with registered trademark symbol on first reference.

**outage** Interruption of service to an electric consumer because of malfunctioning power plants, transmission lines, substations, or distribution equipment.

**peak demand** The electric utility industry's equivalent of rush-hour traffic, when power costs run the highest. It's the greatest demand placed on an electric system, measured in kilowatts or megawatts; also, the time of day or season of the year when that demand occurs.

**peak load** The amount of electric power required by a consumer or a utility system during times when electric consumption reaches its highest point; measured in kilowatts or megawatts.

**photovoltaics (PV)** Materials that generate electric power directly from sunlight.

**power line** A conductor (wire) that carries electricity from a generation source to a supplier or the ultimate consumer. Two words in this usage.

**power pole** The poles alongside the roads are power poles, not telephone poles.

**power strip** An electrical device consisting of a cord with a plug on one end and several electric sockets on the other. Two words, no hyphen.

**power supplier** A company that provides electricity, either by generating it or by arranging for its delivery to a consumer.

**renewables** Sources of energy that are naturally replenishable, including wind, solar, biomass, geothermal, hydro, and hydrokinetic (ocean wave and tidal) power. Non-hydro renewables account for less than 1 percent of the power produced by generation and transmission cooperatives and nearly 3 percent of electric cooperative power requirements nationwide; overall, renewables make up 3 percent of U.S. electric generation.

**right-of-way** A strip of land owned by another party on which a utility places poles, wires, substations, and other facilities. Sometimes acquired through eminent domain. Use hyphens for both the noun and adjective form. Plural is *rights-of-way*.

**rural electrification** Wording that describes the introduction of electricity into rugged and remote areas previously not served by investor-owned or government-run power companies.

**Rural Electrification Administration (REA)** A federal agency established by Executive Order 7037 on May 11, 1935, to provide financing as well as engineering, management, and legal assistance to electric and later telephone cooperatives. REA became part of the U.S. Department of Agriculture (USDA) on May 1, 1939. On October 20, 1994, under the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act, REA was abolished and replaced by the Rural Utilities Service.

**scrubbers** Expensive devices that remove up to 95 percent of the sulfur dioxide and some other pollutants from coal-fired power plant smokestack emissions. Most scrubbers work by spraying a slurry of pulverized limestone or dolomite and water into flue gas. Calcium carbonate in the limestone or dolomite then reacts with sulfur dioxide to form calcium-sulfur compounds. The newest scrubber technology (forced oxidation) introduces air into the process to convert the resulting scrubber sludge into calcium sulfate (synthetic gypsum).

**seasonal energy efficiency rating (SEER)** A way to measure the efficiency of air-conditioning systems. The higher the SEER, the more energy efficient the system.

**service area/territory** The geographic region that a utility is required to serve, or has the exclusive right to serve, in supplying electricity to the ultimate consumer.

**slag** A hard, glassy material formed from coal bottom ash melted by combustion. This heat-fused substance accumulates on the sides and bottom of a coal-fired boiler and must be removed periodically and disposed of according to environmental regulations.

**smart grid** The use of technologies and tools (such as advanced metering infrastructure and down-line automation) that help electric utilities better meet consumers' needs reliably and affordably by more effectively monitoring demand and system conditions on a near real-time basis. The smart grid combines digital devices, software applications, and two-way communications to track the flow of electricity with great precision, pinpoint outages, identify voltages out of allowed ranges, and transmit messages to transformers, capacitors, circuit breakers, and other distribution equipment to initiate diagnostic or corrective (self-healing) actions. It can also let utilities record consumer electric use in various time intervals, communicate that consumption data among authorized staff, and provide consumers with hourly or more frequent pricing signals so they can respond to changing electricity requirements. While the smart grid can help utilities control costs, it can also be abused by for-profit, investor-owned utilities to shift market risks onto consumers. The U.S. Department of Energy lists seven functions of a smart grid: enabling informed participation by consumers; accommodating all generation and energy storage options; enabling new products, services, and markets; delivering power quality for the range of needs in the twenty-first century; optimizing asset utilization and operating efficiency; addressing disturbances—automated outage prevention, containment, and restoration; and operating resiliently against physical and cyber attacks and natural disasters.

**smart meter** A type of advanced digital electric meter that identifies consumption patterns in detail over various time intervals, then uses two-way communications to transmit the information back to a local utility for power quality monitoring and billing purposes. Smart meters also let electric consumers react to electricity price signals and more actively participate in utility demand-response programs.

**solar power** Energy absorbed from photons (elementary particles) in sunlight and converted into heat or electricity.

**spike** An increase in voltage lasting less than 1/60th of a second. Usually caused by heavy loads coming on-line.

**substation** An electrical facility containing equipment for controlling the flow of electricity from supplier to user.

**subtransmission system** The network of poles, lines, and wires used to interconnect a high-voltage transmission network with a distribution system.

**surge** Overvoltages lasting longer than one-sixtieth of a second, often caused by the automatic switching on or off of motor-driven devices or lightning strikes near a power line.

**surge suppressor** A device that protects consumer electronic equipment and appliances from short-term, high-voltage flows of electricity such as lightning strikes; also called a *spike suppressor*.

**system demand** The total amount of energy required to supply all consumers served by a utility or within a region.

**tap** An electric circuit with limited capacity extending from a distribution line; usually supplies a small number of consumers.

**Touchstone Energy® Cooperatives** Branding program of the nation's electric cooperatives launched on April 4, 1998. Use registered trademark symbol on first reference and full name throughout articles; avoid the shortened *Touchstone Energy*. The brand offers more than 45 services, including the Co-op Connections® Card, which provides co-op consumers (who are members of co-ops that provide the card) with discounts at participating local and national retailers and pharmacies; *Get Charged! Electricity and You* curriculum kits designed to teach middle school students about electric cooperatives and electricity in general; branded hot-air and cold-air balloons; SitesAcrossAmerica.com, a web-based clearinghouse for available commercial and industrial properties in electric cooperative service territories; and ongoing national advertising and energy efficiency promotional campaigns.

**transformer** A device used to raise or lower voltage along electric distribution or transmission lines.

**transmission** The process of moving large amounts of electricity from where it's generated to where it's used, as well as the facilities needed to move that power.

**transmission system** The interconnected network of lines, poles, wires, and other equipment that move large amounts of electricity from generating plants to distribution systems, whether on a local or regional level.

**usage, use** *Usage* refers only to language practice. In all other contexts, including electricity, it's *use*: *Load management helps reduce electric use; Joe's monthly electric bill shows a decrease in kilowatt-hour use.*

**utility** An entity (whether investor-owned, cooperative, or municipal) that provides electric, water, or natural gas service for residential, commercial, and industrial consumption.

**water heater** An appliance for heating potable water, such an *electric water heater*. Do not use *hot water heater*. Large capacity (typically 80 gallons or more) electric resistance water heaters are a key part of many electric cooperative load management programs.

**weather stripping** Insulation placed around doors and windows to save energy. Two words, no hyphen.