
Sec. 19.4. Solar energy systems and wind farm facilities.

The establishment and operation of solar energy systems and wind farm facilities shall comply with the following design and development standards:

1. Site plans shall be prepared by a licensed land surveyor, landscape architect, or engineer in the State of South Carolina. Plans must be sealed.
2. All internal roads servicing the farm must be named. E-911 Addressing per Chapter 54, Article III shall approve new road names.
3. *Setbacks.* Solar Energy Systems must be set back 50 feet from adjoining property lines or 200 feet from the nearest residence.
4. Water and sewer systems approved by South Carolina Department of Health and Environmental Control (SCDHEC) and/or Darlington County Water and Sewer Authority (DCWSA).
5. *Height.* Solar structures shall not exceed 15 feet in height. Wind turbine structures including rotor blades shall not exceed 170 feet in height.
6. Wind turbine system shall be engineered to survive a 100 mph wind load or greater.
7. No appurtenances (i.e. lighting, flags, signs, or decorations) shall be attached to the system. Lighting would be required by the Federal Aviation Administration (FAA).
8. Noise levels shall not exceed 55 decibels (dba).
9. Wind turbines climbing apparatus shall be no lower than 12 feet from the ground.
10. Wind equipment shall be white or earth toned and remained painted and finished. The intent is to minimize glare/flicker and attraction to birds.
11. A fail-safe breaking system, auto-furling system, or similar system shall be incorporated to prevent uncontrolled rotation, over-speeding, and excessive pressure on system.
12. Developer shall make practical efforts to preserve natural features and landscape.
13. *Screening.* A continuous vegetative buffer shall be installed around the perimeter of the solar energy system/wind farm. This buffer shall be 36" to 48" in height at planting and must reach 100 percent of the panel height within three (3) years of planting. The vegetation must be planted in two staggered rows at a spacing interval between 8' to 10' on center. The fence must be located on the inside of the vegetative buffer. Screening is not required along properties adjacent to non-residential uses or along roadways.
14. Development shall maintain a 50-foot vegetated buffer from any body of water (i.e. lakes, streams, ponds, and rivers) to preserve the county's water quality and prevent any adverse stormwater effects.
15. All lighting shall be shielded or directed in a downward position to prevent noxious glare. A light fixture is required at the ends of all turnarounds.
16. Fencing shall be at least six feet in height to secure the perimeter. The fence must be secure at all times.
17. *Signage.* A warning sign concerning voltage must be placed at the main gate to include the address and name of the solar energy system or wind farm operator and a 24-hour phone number for the solar energy system or wind farm operator in case of an emergency.
18. Power lines must be located underground to the extent practical.

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19. Solar collectors shall be designed with anti-reflective coating to minimize glare. Textured glass coupled with the anti-reflective coating further minimizes solar glare. Textured glass is optional. Mirrors are prohibited.
 20. Electric solar system components must have an Underwriters Laboratories (UL) listing.
 21. All active solar energy systems and wind systems shall meet all requirements of the county building codes department.
 22. Submit and maintain an updated facility decommission plan. The latest facility decommission plan shall be recorded in the county's clerk of courts office.

An applicant must include a decommissioning plan that describes the anticipated life of the solar energy system. Following a continuous six (6) month period in which no electricity is generated, the permit holder will have six (6) months to complete decommissioning of the solar energy system. Decommissioning includes removal of solar panels, buildings, cabling, electrical components and any other associated facilities below grade as described in the decommissioning plan. No later than thirty (30) days following the sixth (6th) anniversary of the operation date of the solar energy system, the owner of the solar energy system must provide Darlington County with a \$50,000 surety or performance bond to be maintained by the solar energy system owner or subsequent owner(s) until the solar energy system is decommissioned. Prior to the issuance of any electrical permit, the owner of the solar energy system must submit a notarized affidavit acknowledging the above decommissioning obligations. Decommissioning Plan must be passed by conveyance to successive owner(s).

(Ord. No. 15-15, § 4, 6-1-15; Ord. No. 16-19, §§ 12—19, 3-6-17)

Editor's note(s)—Ord. No. 16-19, § 12, adopted March 6, 2017 Editor's note(s)—, amended the title of § 19.4Editor's note(s)— to read as set out herein. Previously § 19.4Editor's note(s)— was titled "Solar and wind farm facilities."