Sec. 46-273. Solar energy facility or solar farm.

In districts where permitted by issuance of a special permit (see Table 46-101), a "solar energy facility" or "solar farm," as defined in section 46-1 requiring a minimum of 5 acres to be considered, shall be subject to the following regulations:

(a) *Mounting.*

(1) Solar panels or solar arrays shall be mounted onto a pole, rack or suitable foundation, in accordance with manufacturer specifications, to ensure the safe operation and stability of the system. The mounting structure (fixed or tracking capable) shall be comprised of materials approved by the manufacturer, which are able to fully support the system components, in accordance with applicable building permit requirements. Electrical components of the solar energy facility shall meet applicable electrical code requirements, and all electrical wires and lines less than 100kV that are used in conjunction with the solar energy facility shall be installed underground.

(2) Multiple mounting structures shall be spaced apart at the distance recommended by the manufacturer to ensure safety and maximum efficiency.

(b) *Setbacks.* A solar energy facility and its appurtenant components and structures shall be set back a minimum of 100 feet from all property lines and 600 feet from any residence, measured from the perimeter of the solar energy facility. The setbacks identified herein are the minimum setbacks. Additional setbacks may be required for the issuance of a special permit based on the circumstances of any proposed application.

(c) *Placement.*

(1) When located in agricultural zoning districts, the solar energy facility shall be located as much as possible to minimize impacts on prime agricultural soils.

(2) If located in a floodplain or an area of known localized flooding, all panels, electrical wiring, automatic transfer switches, inverters, etc. shall be located above the base flood elevation. A site plan and elevation certificate showing the location of all solar panels, electrical wiring, automatic transfer switches, inverters, etc., in relation to the scaled 100-year flood zone shall accompany all applications for approval of site plans and building permits.

(3) Components of the solar energy facility shall not be located over a septic system, leach field area, or identified reserve area unless approved by the health department. The components of the solar energy facility shall not be in recharge areas, utility or road rights-of-way, or dedicated easements.

(d) *Screening.* The solar energy facility shall be fully screened from adjoining properties and adjacent roads by installation of an evergreen buffer capable of reaching a height of ten feet within three years of planting, with at least 75 percent opacity at the time of planting. Within all required vegetative buffers, equipment shall also be screened from view from adjacent property and fenced with opaque screening to restrict unauthorized access. Screening shall consist of a minimum of ten-foot opaque fence (color chosen by staff) around the perimeter of the solar energy facility with the addition of shrubbery, trees, or an earthen berm as may be required to comply with glare requirements. In the event the area designated as a buffer does not support vegetation, an earthen berm may be required to further screen all structures on a case-by-case basis. Landscaping and buffers must be routinely maintained.

(e) *Height.*

(1) Mounted solar panels or solar arrays shall not exceed eight feet above the apex of the structure on which it is mounted or the maximum height for buildings in the zoning district in which it is located. All solar equipment shall be anchored to withstand wind shear.

(f) *Security.*

(1) Unless 24-hour security guards or video surveillance is provided at the installation, the solar energy facility shall be enclosed by a security fence no less than ten feet in height.

(2) Access gates and equipment cabinets must be locked when not in use.

(g) *Noise.* Inverter noise shall not exceed 40 dBA, measured at the property line.

(h) *Glare and lighting.*

(1) The solar energy system components shall be designed with an antireflective coating or at least shall not produce glare that would constitute a nuisance to occupants of neighboring properties, aircraft, or persons traveling adjacent or nearby roads.

(2) If lighting is required, it shall be activated by motion sensors, fully shielded and downcast type where the light does not spill onto any adjacent property or into the night sky.

(i) *Maintenance and upkeep.* Systems shall be maintained in accordance with the manufacturer's specifications. The operator of the solar energy facility shall maintain the solar energy facility, including all buffer screening, in compliance with the approved plans and shall keep the solar energy facility free from weeds, dust, trash and debris. All chemical applications shall be performed by a certified, licensed applicator.

(j) *Site plan review and development permit.* A site plan reviewed and approved by the Heard County zoning department shall be required prior to issuance of a development permit. In addition to requirements for site plans generally, the site plan submission shall include the following information: The proposed location and dimensions of all solar panels, inverters, existing and proposed structures, screening, fencing, property lines, parking, access driveways and turnout locations, ancillary equipment, transmission lines, vegetation, the location of any residences on site and within 600 feet of the perimeter of the solar energy facility, the location of any proposed solar access easements, and standard drawings of solar energy system components.

(k) *Additional submission requirements.* In addition to requirements for information to be provided during the site plan review and development permitting process, the solar energy facility shall not be approved for operation until the following are submitted:

(1) Copy of all lease agreements and solar access easements.

(2) Where interconnection to an electric utility grid is proposed, the applicant shall submit evidence that the electrical utility provider has been informed of the customer's intent to install an interconnected with the local electric utility grid. A copy of the approval from the local utility must also be provided before operation of an interconnected facility will be authorized. In the event of a power failure the owner must have an approved emergency response plan to protect utility workers working on downed power transmission lines and to disconnect the transmission of electricity to the power grid of all electric power operations and plants.

(3) A decommissioning plan must follow State Law, for the anticipated service life of the solar energy facility or in the event that the solar energy facility is abandoned or has reached its life expectancy.

(4) The county may require other studies, reports, certifications, and/or approvals be submitted by the applicant to ensure compliance with this section, including any change in lease, operating agreement or ownership within 45 days of such change.

(l) *Removal of obsolete or unused systems, or general replacement of panels.* All obsolete or unused systems shall be removed. Any structure or equipment associated with the solar farm that is not operated for a continuous period of six months shall be considered an obsolete or unused system and decommissioned per the approved decommission plan. The design of the solar electric system shall conform to the applicable industry standards, including those of the American National Standards Institute. The owner must pay for or provide training to Heard County Fire & EMA for response to grid or panel fires, or destruction from natural disaster.

(Ord. of 12-19-2017(1), § 2)