

100.36 SOLAR ENERGY SYSTEMS. The intent of the regulations of this Section is to balance the need for clean, renewable energy resources with the need to protect the public health, safety, and welfare. The regulations of this Section are found to be necessary to ensure that solar energy systems are appropriately designed, sited, and installed. Solar energy systems include accessory systems for private use, and solar farms for utility-scale energy production and distribution.

1. *Use.*

A. *Accessory Use.* Accessory Solar Energy Systems shall be allowed only as an accessory use to a permitted principal use in residential, commercial, and industrial zoning districts and land uses. Accessory use shall also be allowed in agricultural zoning districts and land uses.

B. *Principal Use.* Solar Farms designed for utility-scale energy production and distribution shall be allowed as a principal use only in agricultural zoning districts and land uses.

2. *Special Use Permit Required.* No zoning permit shall be issued for any utility-scale solar energy system that is proposed to be constructed until after a Special Use Permit has been approved by the Zoning Board of Adjustment in accordance with Section 100.32 of this Chapter. This shall not apply to Accessory Solar Energy Systems.

A. The special use permit shall be valid so long as the structure conforms to the site plan on file with the Monona County Zoning Administrator and the Monona County Zoning Ordinance.

3. *Zoning Permit Required.* It shall be unlawful to construct, erect, install, alter, or locate any solar energy system within Monona County, unless a zoning permit has been obtained from the Zoning Administrator or their designee. In granting such permit, the Zoning Administrator or their designee may impose conditions on the use in addition to the regulations of this Section. The zoning permit may be revoked by the Zoning Administrator or their designee any time the approved system does not comply with the regulations of this Section and the conditions imposed at the time the permit was granted. The owner and/or operator of the solar energy system must also obtain any other permits required by other federal, state, and local agencies or departments prior to obtaining an approved zoning permit or installing the system, and shall comply with all overlay district regulations.

4. *Permit Application Information.* An application for a zoning permit for a solar energy system shall be made on forms provided by the County. Along with the application, the applicant shall submit the following information:

A. *Site Plan.* One (1) complete copy of a site plan and fee shall be submitted in accordance with Section 100.25. The site plan shall be based on a certified instrument survey by a surveyor licensed in the State of Iowa. A Plat of Survey is required to establish property lines and/or setbacks. The site plan shall include the following:

- (1) Location of the solar panel(s) on the site and total height of the each panel or array at maximum tilt, dimensions, and ground clearance for each panel or array;
 - (2) The height and depths of each mounting structure including footings, and maximum area of ground cover;
 - (3) Utility lines, telephone lines and any other lines, both above and below ground, within 200 feet of any and all above-ground portions of the solar energy system or solar farm;
 - (4) Details as to how the power will be delivered to the grid, including the route and size of poles and towers to be used, if applicable;
 - (5) Property lot lines, land uses and the location and dimensions of all existing structures and uses on and off site within a radius of 500 feet of any and all above-ground portions of the solar energy system or solar farm;
 - (6) Standard drawings and dimensional representations of the solar energy system including panels and arrays, mounting structures, and footings;
 - (7) Planned location and dimensions of a security fence; and
 - (8) Interconnection agreement with the electrical utility, if applicable.
- B. *Decommissioning Plan.* All applications for solar farms shall include a decommissioning plan that describes the anticipated life of the utility scale solar installation, the anticipated manner in which the project will be decommissioned, the anticipated site restoration actions, the estimated decommissioning costs in current dollars, and the method for ensuring that funds will be available for decommissioning and restoration.
- C. *Landscaping.* A landscape buffer may be required to be installed and maintained during the life of the solar farm. Determination of screening requirements will be made by the Board of Adjustment as part of the review and approval process and will be based on adjacent or nearby surrounding land uses and topography.
- D. *Grading Plan.* A grading plan shall be submitted for all solar energy system plans and shall show all proposed changes to the landscape of the site, included but not limited to: clearing, grading, topographic changes, drainage, and tree removal.
6. ***Accessory Solar Energy Systems.*** Accessory solar energy systems shall be for the sole benefit of the parcel or lot on which it is located.
- B. Building- or roof-mounted systems shall not exceed the bulk regulations of the district or land use on which the building sits.
- (1) Such systems shall not extend beyond the perimeter of the building, except

that exterior piping for hot water systems may exceed the exterior perimeter in a side yard.

- (2) Roof-mounted systems may be visible from the public right-of-way.
 - (3) Roof-mounted systems shall require adequate roof access to the panels.
 - (4) Prior to installation, the applicant must provide documentation of the building's structural capacity to the Zoning Administrator or their designee.
- C. Solar hot water systems must have an SRCC (Solar Rating & Certification Corporation) rating.
 - D. Accessory systems must comply with the State of Iowa Building Code, Electric Code, and Plumbing Code.
 - E. All accessory systems must comply the regulations of all overlay zones in which it is located.
 - F. All accessory systems must comply with the requirements of the electric utility. Self-contained (off-grid) systems that are not connected to the electric utility are exempt from the interconnection requirements.
 - G. Surplus energy sold back to a utility must comply with *Section 199, Chapter 15.11(5)* of the *Iowa Administrative Code*, and all requirements of the Iowa Utilities Board.

7. **General Regulations.**

- A. Ground- or pole-mounted panels and arrays shall not exceed 20 feet in height at maximum tilt.
 - B. All solar energy systems must have a UL (Underwriters Laboratories) listing.
 - C. *Airports.* All solar energy systems located within 500 feet of an airport or within approach zones of an airport requires the applicant to complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the *Interim Policy, FAA Review of Solar Energy Projects on Federally-Obligated Airports*, or most recent version adopted by the FAA. The applicant shall also obtain written approval from all appropriate airport authorities, including but not limited to James G. Whiting Memorial Field in Mapleton.
 - D. *Solar Access.* Solar Access rights may be purchased from neighboring property owners through the recording of a solar easement. This easement may apply to buildings, trees, or other plants and structures that would diminish solar access.
8. **Abandonment.** Abandonment proceedings begin one (1) year after the last day any solar energy system produces power.

- A. The owner shall have one (1) year after abandonment proceedings have commenced to begin generating electricity with the unit or to decommission and safely dispose of the solar unit.
- B. Upon final declaration of abandonment, Monona County shall cause the removal of the abandoned system and invoice the property owner for all costs associated with the removal of the solar energy system and reclamation of the site. If unpaid, the cost shall be assessed as a lien against the property.