

**ORDINANCE # 65**  
**AN ORDINANCE ADOPTING REGULATIONS FOR UTILITY-SCALE SOLAR ENERGY SYSTEMS (US-SES) ON PROPERTY LOCATED IN THE UNINCORPORATED AREAS OF CEDAR COUNTY, IOWA.**

BE IT ENACTED BY THE CEDAR COUNTY BOARD OF SUPERVISORS:

NOW, THEREFORE, BE IT HEREBY ORDAINED by the Cedar County Board of Supervisors:

**SECTION 1. PURPOSE.**

The purpose of this ordinance is to establish guidelines for the siting, design, construction and decommissioning of US-SESs which generate electricity to be sold to wholesale or retail markets. In addition, the purpose of this Ordinance shall be to promote the public health, safety, comfort and general welfare, while facilitating economic opportunities for rural residents and promoting a goal of increased energy production from renewable energy sources. The requirements of this Ordinance shall apply to all US-SESs constructed after the effective date of this Ordinance.

**SECTION 2. DEFINITIONS.**

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| <b>Solar Energy System</b>                         | A system that converts energy from sunlight into electricity or an additional energy source such as heat.  |
| <b>Residential/Small-Scale Solar Energy System</b> | A solar energy system that is installed at a residence or business to meet the electrical demands at that location. These systems are typically intended to offset electricity use for the owner and are not intended to be net generators of electricity.   |
| <b>Concentrating Solar Power (CSP)</b>             | A system that generates solar power by using mirrors or lenses to concentrate a large area of sunlight onto a receiver.  |
| <b>Corn Suitability Rating 2 (CSR2)</b>            | An index that rates soil types for their potential row crop productivity.  |
| <b>Utility-Scale Solar Energy System (US-SES)</b>  | A group of interconnected solar panels/arrays that convert sunlight into electricity for the primary purpose of wholesale or retail sales of generated electricity. This definition does not apply to consumer scale solar installations that are constructed primarily to provide power for use on-site.  |
| <b>Easement</b>                                    | A legal interest in land, as defined in a document recorded in the office of the Cedar County Recorder, granted by the landowner to another person or entity, which allows that person(s) or entity(ies) the use of all or a portion of the landowner's land, generally for a stated purpose, including, but not limited to, access or placement of utilities. |

<b>Lease</b>	A contract between two parties where one party, the lessor, allows the other party, the lessee, use of their property for a period of time in exchange for consideration, usually a monthly sum of money. The original landowner ultimately retains possession of the property.
<b>Transmission Lines</b>	Power lines used to carry electricity from collection systems or substations over medium to long distances rather than directly interconnecting and supplying energy to retail customers.
<b>Feeder Circuits/Lines</b>	A power line or network of lines used as a collection system that carries energy produced by a solar energy system to an interconnection point like a substation. Feeder circuits are most often placed underground.
<b>Interconnection</b>	Link between a generator of electricity and the electrical grid.
<b>Module</b>	An individual unit composed of multiple photovoltaic (PV) cells, with multiple modules used in a solar energy system.
<b>Mounting</b>	The method of anchoring solar energy system modules to the ground or a building.
<b>Non-Participating Landowner</b>	Any landowner that has not signed a lease agreement or granted easement to the project owner or developer, often adjacent to or near the project.
<b>Participating Landowner</b>	A landowner that has signed a lease agreement or granted easement to the applicant, project owner or developer.
<b>Operator</b>	The entity(ies) or individual(s) responsible for the day-to-day operation and maintenance of the solar energy system, including third party subcontractors.
<b>Owner</b>	The entity or individual that has ownership over a solar energy system(s), including their respective successors and assigns. Owner does not mean (i) the property owner from whom the land is leased for locating the solar energy system (unless the property owner has equity interest in the solar energy system); or (ii) any person holding a security interest in the solar energy system(s) solely to secure an extension of credit or a person foreclosing on such security interest provided that after foreclosure, such person seeks to sell the solar energy system(s) at the earliest practicable date.
<b>Applicant</b>	The owner or operator of the US-SES.
<b>Professional Engineer</b>	A qualified individual who is licensed in the State of Iowa as a professional engineer.

<b>Structure</b>	Anything constructed or erected on the ground or attached to the ground, including but not limited to, antenna(s), buildings, sheds, cabins, dwellings (built on-site or factory built homes), signs, storage tanks, towers, windmills or other similar uses.
<b>Substation</b>	A subsidiary station of electricity generation, transmission and distribution system where voltage is transformed from high to low or the reverse using transformers.
<b>System Height</b>	The height of a solar energy system, usually referring to ground mounted systems. Total system height is the measurement from the ground to the top of the mounting or modules associated with a system, whichever is greater.

**SECTION 3. PERMITTED LOCATIONS.**

A US-SES is a Special Permitted Use, as provided in the Cedar County Zoning Ordinance No. 10 in the A-1 Agricultural and AR-1 Agricultural-Recreational Districts and a permitted use in the M-1 Light Industrial, M-2 Heavy Industrial and C-2 Highway Commercial Districts. No US-SESs are permitted in the R-1 Suburban Residential, R-2 Urban Residential, R-3 Multi -Family Residential and C-1 Local Commercial Zoning Districts.

A Special Use Permit will be considered upon determination that all applicable conditions of this Ordinance are met. Special Use Permit Applications are submitted to the Cedar County Board of Adjustment for action after review and recommendation by the Cedar County Planning and Zoning Commission as provided by Chapter 17.18(2) of the Cedar County Zoning Ordinance accompanied by a fee as established by the Cedar County Board of Supervisors and Payable to the Treasurer of Cedar County, Iowa.

**SECTION 4. CAP ON TOTAL ACRES UTILIZED FOR US-SES.**

There shall be a cap of six-hundred forty (640) total acres devoted to the placement of a US-SES. A participating landowner who wishes to appeal the denial of a US-SES construction permit on the basis that the total acreage cap has been met or exceeded must contact the Cedar County Zoning Office to receive the current Request for Variance form. The participating landowner must complete the form in its entirety, and file with the Cedar County Zoning Office for review by the Board of Adjustment.

**SECTION 5. GENERAL REQUIREMENTS FOR US-SES**

- a. **Concentrating Solar Power (CSP) Systems.** Concentrating Solar Power Systems shall be prohibited.

- b. **Corn Suitability Rating 2 (CSR2).** US-SESs shall not be installed on land in the A-1 Agricultural District unless the land has an average CSR2 of 65 or lower. Average CSR2 will be calculated using current data supplied by the United States Department of Agriculture Natural Resources Conservation Service (NRCS). The Area of Interest (AOI) established for calculating an average CSR2 must reflect the precise, contiguous land area being developed with arrays, buildings, and utility and access infrastructure, and shall not include land area set aside for conservation or agriculture or land otherwise undisturbed by development.
- c. **Site Plan.** A site plan shall be submitted to the Cedar County Zoning office and reviewed prior to approval of a US-SES.
- d. **Setbacks.** Setbacks for all structures (including solar arrays) shall be the same as what is required for residences in the A-1 Agricultural District unless the Board of Adjustment finds that less is warranted. All structures shall observe listed setbacks in the M-1 Light Industrial, M-2 Heavy Industrial and C-2 Highway Commercial Districts. No setbacks are required where a property line is shared by two participating landowners. No part of a solar energy system shall be closer than 1,250 feet from a residence or livestock facility. A solar energy system must be at least one-half mile from the next solar energy system. Mandated setback distances may be waived with the written consent of participating landowners and adjacent property landowners.
- e. **Screening.** A landscape buffer may be required to be installed and maintained during the life of the operation if a Special Use Permit is required. 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.
- f. **Utility connections.** Reasonable efforts shall be made to place all connections within the solar installation underground, depending on appropriate soil conditions, shape and topography of the site, distance to the connection, or other conditions or requirements. All components used for the collection, conversion, and storage of energy shall be contained within the leased and fenced project area, excluding overhead and underground transmission lines.
- g. **Grading plan.** A grading plan shall be submitted and shall include all proposed changes to the landscape of the site (e.g., clearing, grading, topographic changes, tree removal, etc.)
- h. **Glare minimization.** All solar panels shall be constructed to minimize glare or reflection onto adjacent properties and adjacent roadways and must not interfere with traffic, including air traffic, or create a safety hazard.
- i. **Compliance with local, state and federal regulations.** Consultation with or notifications from relevant state and federal agencies showing the project will not be a hazard to wildlife, communications, air traffic and other related matters is required. All US-SES shall conform to applicable industry standards, including those from the Underwriters Laboratory and Federal Aviation Administration. US-SES installations shall comply with all applicable local, state and federal regulations.

- j. **Appurtenant structures.** All appurtenant structures shall be subject to bulk and height regulations of structures in the applicable zoning district except where otherwise approved and shall not be taller than 20 feet above grade.
- k. **Floodplain considerations.** US-SES installations are considered to be maximum damage potential structures and facilities for purposes of the floodplain district regulations. US-SES installations are strongly discouraged within the 1% Special Flood Hazard Area (100 year floodplain), but may be allowed subject to provisions of the Cedar County Floodplain Management Ordinance and Iowa Department of Natural Resources Flood Plain Management.
- l. **Fencing/security.** An NEC compliant security fence must be installed along all exterior sides of the US-SES and be equipped with a minimum of one gate and locking mechanism on the primary access side. Security fences, gates and warning signs must be maintained in good condition until the US-SES installation is dismantled and removed from the site.
- m. **Signage.** Signage with the following information shall be maintained at all locked entrance locations:
  - 1. A visible “High Voltage” warning sign;
  - 2. Name(s) and phone number(s) for the electric utility provider;
  - 3. Name(s) and phone number(s) for the site operator;
  - 4. The facility’s 911 address, GPS coordinates; and,
  - 5. A lockbox with keys as needed.
- n. **Operation and maintenance plan.** The applicant shall submit a plan for the operation and maintenance of the solar installation, which shall include measures for maintaining safe access to the installation, stormwater and erosion controls, as well as general procedures for operation and maintenance of the installation.
- o. **Soil erosion and sediment control considerations.** The applicant agrees to conduct all roadwork and other site development work in compliance with a national pollutant discharge elimination system (NPDES) permit as required by the Iowa Department of Natural Resources and comply with requirements as detailed by local jurisdictional authorities during the plan submittal. If subject to NPDES requirements, the applicant must submit the permit for review and comment and an erosion and sediment control plan before beginning construction. The plan must include both general “best management practices” for temporary erosion and sediment control both during and after construction and permanent drainage and erosion control measures to prevent damage to local roads or adjacent areas and to prevent sediment laden run-off into waterways.
- p. **Stormwater management considerations.** Storm and water runoff shall be controlled through enclosed storm sewers or overland drainage. Detention facilities sufficient to capture runoff of a twenty-five (25) year storm shall be placed in the US-SES. The release rate of storm water out of the detention facility shall be restricted so as not to exceed the volume produced by a five (5) year storm. The velocity of water leaving the US-SES shall be reduced so as not to cause erosion. Drainage easements may be required, but the land shall remain privately owned. A drainage easement is required where storm water from a

US-SES crosses an adjacent property to reach a natural stream or public drainage facility. Enclosed storm sewers require Cedar County Engineer approval before construction of the US-SES begins.

- q. **Ground cover and buffer areas.** Ground around and under solar arrays and in project site buffer areas shall be planted and maintained in perennial vegetated ground cover, and meet the following standards:
1. Top soil shall not be removed during development, unless part of the remediation effort.
  2. Soils shall be planted and maintained in perennial vegetation to prevent erosion, manage run off and build soil. Seeds should include a mix of grasses and pollinator-friendly wildflowers, ideally native to the region of the project site that will result in a short stature prairie with a diversity of forbs or flowering plants that bloom throughout the growing season. Blooming shrubs may be used in buffer areas as appropriate for visual screening.
  3. Seed mixes and maintenance practices should be consistent with recommendations made by qualified natural resource professionals such as those from the Department of Natural Resources, County Soil and Water Conservation Service or Natural Resource Conservation Service.
  4. Notification of the landowner, farm tenant and adjoining landowner shall be required and approval of the landowner secured prior to the company enrolling the land in a Candidate Conservation agreement or Habitat Conservation Plan under the Endangered Species Act. The notification should include information about the size of the buffer areas to adjacent properties, a summary of the agreement or plan, and where the landowner, tenant or adjoining landowner may obtain more information.
- r. **Maintenance, operation, repair or replacement of facility.** Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to emergency response officials. Any retrofit, replacement or refurbishment of equipment shall adhere to all applicable local, state and federal requirements. Note: Expansion of a US-SES will require a new application following the same requirements as the original application.
- s. **Access Required.** The Zoning/Building Official and any other necessary personnel may enter the property for which a Special Use or Building Permit has been issued under this ordinance to conduct an inspection to determine whether the conditions stated in the permit have been met as specified by statute, ordinance or code. An annual on-site tour shall be provided to local emergency responders to ensure awareness of critical infrastructure within the facility in the event of an emergency. Failure to provide access shall be deemed a violation of this ordinance.

- t. **Emergency Services.** The Applicant, Owner or Operator shall submit a copy of the site plan and Emergency Action Plan to the Cedar County Emergency Management Administrator. The Emergency Action plan must include 24-hour contact information for US-SES Emergency Operations Personnel and shall be updated with Cedar County Emergency Management annually, or within 48 hours of changes to the emergency contact.

**SECTION 6. SITING APPROVAL APPLICATION REQUIREMENTS.**

In addition to all submittal requirements of a site plan and Special Use Permit application (where required), the application for a US-SES installation shall include the following information on the site plan or in narrative form, supplied by US-SES owner, operator or contractor installing the structures.

1. Project summary, including, to the extent possible: (1) a general description of the project, including its approximate nameplate generating capacity; the potential equipment manufacturer(s), type(s) number, location and spacing of solar panels/arrays (2) a description of the Applicant, Owner & Operator, including their respective business structures. Number, location and spacing of solar panels/arrays.
2. The legal description and address of the project.
3. Site plan to be an aerial photo or scale drawing of the project location and surrounding area including the location of property lines, solar panels/arrays, electrical wires, interconnection points with the electrical grid (location of underground or overhead electric lines), and all related accessory structures. This shall include distances, latitude and longitude of solar panels/arrays and be drawn to scale. In providing the above information the plan shall use a GPS coordinate system that is compatible with the County's geographical information system (GIS).
4. Project development timeline which indicates how the applicant will inform adjacent property landowners, persons in possession (tenants) and interested stakeholders in the community.
5. Documentation of land ownership or legal control of the property.
6. Interconnection plan.
7. Operation and maintenance plan.
8. Decommissioning plan.
9. Site and structure requirements.

No construction activities on a US-SES may be begin until a Zoning/Building Permit has been issued. If construction on the US-SES has not begun within twelve (12) months from the date of issuance of the Zoning/Building Permit, the permit shall be automatically revoked and no work can take place until a new Zoning/Building Permit has been issued. Any portion of the project then completed shall be deemed a discontinued use subject to Section 8, Paragraph 1.

**For projects 25 MW or larger, the Application of Certificate, required by the Iowa Utilities Board, will be considered acceptable to meet the above additional requirements. In cases where a Special Use Permit is required, the current application to the Board of Adjustment shall still be required.**

## **SECTION 7. INFRASTRUCTURE PROTECTION AND ROAD USE AGREEMENTS.**

1. **Roads.** Applicants shall identify all roads to be used for the purpose of transporting the solar energy system, substation parts, cement, and/or equipment for construction, operation or maintenance of the solar energy system and obtain applicable weight and size permits from the impacted road authority(ies) prior to construction.
2. **Existing Road Conditions.** Applicant shall conduct a pre-construction baseline survey, in coordination with the impacted local road authority(ies) to determine existing road conditions for assessing potential future damage. The survey shall include photographs and a written agreement to document the condition of the public facility. The applicant is responsible for on-going road maintenance and dust control measures identified by the Cedar County Engineer during all phases of construction. The applicant is responsible for any costs required to repair roads to pre-construction baseline condition. Cedar County reserves the right to halt operations if road conditions deteriorate to a point that creates a hazard to the public as determined by the Cedar County Engineer
3. **Drainage System.** The Applicant shall be responsible for immediate repair of damage to public drainage systems stemming from construction, operation or maintenance of the US-SES. Any development plan must provide documentation that the project will not negatively affect the operation of existing agricultural drainage tiles on adjacent properties.
4. **Performance Bond or Equivalent Financial Instrument.** The applicant shall be responsible for restoring or paying damages as agreed to by the applicable road authority(ies) sufficient to restore the road(s) and bridges to preconstruction conditions. A performance bond or equivalent financial instrument, approved by the Cedar County Attorney's Office, shall be submitted covering 130% the costs of all required improvements. This requirement may be waived by the Board of Adjustment by written recommendation from the Cedar County Engineer.



**SECTION 8. DISCONTINUANCE/DECOMMISSIONING AND SITE RECLAMATION.**

1. The application must include a decommissioning plan submitted in a form satisfactory to the Zoning Administrator and shall be reviewed by the Cedar County Engineer. The site shall be considered a “discontinued use” if after the US-SES installation is in service, following a continuous one-year period in which no electricity is generated, or if substantial action on the project is discontinued for a period of one year. Once declared to be a discontinued use, the permit holder will have one year to complete decommissioning of the US-SES installation. Decommissioning shall be completed in accordance with the decommissioning plan. The owner or operator of the system must notify the County within 30 days of the project’s discontinuation.
2. The Decommissioning plan shall contain:
  - A. A description of the project components, and a sequence and description of the activities required to removed the same in compliance with this section.
  - B. A report prepared by a qualified third-party (to be approved by the Zoning Administrator in advance) setting forth the procedures and estimated net cost associated with the removal of components (excluding feeder lines) to a depth of not less than four (4) feet and the accompanying restoration of the surface to the original elevation with re-vegetation of restored soil areas with crops, native seed mixes, or plant species suitable to the area, consistent with the county’s weed control plan.
  - C. A a road use agreement (approved by the Cedar County Engineer in advance) that outlines the responsibility of the US-SES owner to maintain and restore designated haul routes to their previous condition prior to decommissioning.
  - D. Cash, an irrevocable letter of credit, or a performance bond (approved by the Cedar County Attorney in advance) running in favor of the County in an amount no less than the total estimated net removal/restoration costs as determined by said report. Said security must be in place prior to issuance of the US-SES Zoning/Building Permit and must remain in effect until decommissioning is completed. No such security shall be cancelable without notice to the Zoning Administrator. Each year, the permit holder shall provide proof that such security is in effect.
  - E. The report prepared under paragraph B above shall be updated and provided to the County at least every five (5) years, and upon any proposed transfer of the US-SES permit or ownership.
  - F. No transfer/assignment of the US-SES permit shall be effective without a corresponding transfer/assignment of the obligations of financial security required under the decommissioning plan as approved by the Zoning Administrator and Cedar County Engineer.

For any part of the energy project on leased property, the plan may incorporate agreements with the landowner regarding leaving access roads, fences, gates or repurposed buildings in place or regarding restoration of agricultural crops or forest resource land. Any use of remaining structures must be in conformance with the regulations in effect at the time.

**SECTION 9. TRANSFER**

Zoning/Building permits and associated decommissioning plans and road use agreements granted under this Ordinance are binding upon any future owners, successors or assigns of the US-SES.

**SECTION 10. REPEALER**

All ordinance(s) in conflict with the provisions of this Ordinance are hereby repealed, only to the extent necessary to resolve the conflict.

**SECTION 11. SEVERABILITY**

Should any section or provisions of this Ordinance be declared by the courts to be invalid or unconstitutional, such decision shall not affect the validity of the Ordinance as a whole, or any part thereof other than the part so declared to be invalid or unconstitutional.

**SECTION 12. PENALTY**

Any person, persons, firms, partnerships or corporations, whether acting alone or in concert with any other, who violates this Ordinance shall be guilty of a County Infraction and shall be penalized as set forth in Ordinance No. 20, of the County Code of Cedar County, Iowa.

**SECTION 13. EFFECTIVE DATE**

This Ordinance shall be in effect after its final passage, approval and publication as provided by law.

PASSED and APPROVED this 16<sup>th</sup> day of May,2023.