

# TAMA COUNTY UTILITY-SCALE SOLAR ENERGY ORDINANCE

WHEREAS, Tama County, Iowa desires to regulate all utility-scale solar energy systems within Tama County in areas zoned Agricultural, except as otherwise prohibited; and

WHEREAS, the Tama County Board of Supervisors desires to facilitate the construction, installation, and operation of utility-scale solar energy systems in a manner that promotes economic development, protects property values, and ensures the protection of the health, safety and welfare of all inhabitants of Tama County while also avoiding adverse and detrimental impacts to rural residents, their economies, unsightliness on agricultural lands, conservation lands and other sensitive lands; and

WHEREAS, the Tama County Board of Supervisors is empowered to regulate the orderly development and proper use of solar energy by establishing certain procedures for obtaining access to solar energy under certain of the provisions of Iowa Code Chapter 564A; and

WHEREAS, The Tama County Board of Supervisors has taken into consideration the thoughts, beliefs, suggestions and views of Tama County citizens and residents in the construct of this Ordinance.

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

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### Section 100. PURPOSE AND INTENT

- 100.1 The requirements of this Ordinance shall apply only to all Utility-Scale Solar Energy Systems proposed after the effective date of this Ordinance. This Ordinance shall apply only to Utility-Scale Solar Energy Systems, intended and constructed to generate less than a total capacity of twenty-five (25) megawatts. Systems with a total capacity of more than 25 megawatts are forbidden under this Ordinance as it presently requires approximately ten (10) acres of land to create a 1-megawatt output using current solar panel energy. A combined total limit of five hundred (500) acres will be allowed for Utility-Scale Solar within Tama County.
- 100.2 This Ordinance shall not be construed to apply to or displace the Tama County Solar Zoning Ordinance created in October 2019, and now found in Chapter XIX of the Tama County Zoning Ordinances, as that Ordinance pertains only to allow “Residential and Non-Residential solar energy systems as an accessory use to permitted, conditional and special exception uses in any zoning district”.
- 100.3 This Ordinance shall be construed to be consistent with the Tama County Land Use Plan adopted March 26, 2025 where in paragraph one (1) it is stated: “We would discourage the use of prime agricultural land for anything other than agricultural production; generally this would be land with a Corn Suitability Rating (CSR2) of an average of sixty (60), reference the Iowa State University Publication PM 1168, October 1984. There is adequate land available in Tama County with a CSR2 of less than 60 for non-agricultural purposes.”

### Section 200. Definitions

- 200.1 ABANDONMENT. The state in which a Solar Farm Energy System, or portion

thereof, has ceased to produce energy for at least three-hundred sixty-five (365) consecutive days.

- 200.2 ADMINISTRATOR. Shall refer to the Tama County Zoning Administrator.
- 200.3 BATTERY ENERGY STORAGE SYSTEM (BESS). An electrochemical device that enables the energy from a Solar Farm Energy System (SFES) to be stored on site, and be readily available during times of especially high demand or during emergencies. At this time, any BESS will not be allowed on a commercial solar array within Tama County.
- 200.4 BOARD OF SUPERVISORS. Shall refer to the Board of Supervisors of Tama County, Iowa.
- 200.5 CLUSTER OF SOLAR ARRAYS. Shall refer to any grouping of adjacent solar arrays that is not separated from any other grouping of arrays by a roadway, other public right-of-way, utility easement, or greater than fifty (50) feet of open space.
- 200.6 CONCENTRATING SOLAR POWER (CSP) SYSTEMS. Systems that generate power by using mirrors or lenses to concentrate a large area of sunlight, or solar therapy energy, onto a small area. Electricity is generated when the concentrated light is converted to heat, which drives a heat engine (usually a steam turbine) connected to an electrical power generator or powers a thermochemical reaction. CSP systems are prohibited under this Ordinance.
- 200.7 COUNTY ENGINEER. Shall refer to the County Engineer of Tama County, Iowa.
- 200.8 CSR2. Refers to corn suitability rating. A CSR2 rating shall be obtained by the proposed dominant owner for that parcel described.
- 200.9 DECOMMISSIONING. The complete removal of all components of a Solar Farm Energy System, including solar arrays and accessory structures, following the permanent ceasing of operations – either through abandonment or planned termination at the end of its useful life, returning the land to its original condition.
- 200.10 DEVELOPER. The person(s) and/or entity pursuing the development of a Solar Farm Energy System (SFES), who are responsible for submitting a Siting Permit application and all required attachments necessary for the review and approval thereof by the County.
- 200.11 DOMINANT ESTATE. The parcel of land to which the benefits of a solar access easement attach (Iowa Code Section 564A.2(2)). This is obtained from the owner of

the real property under a solar access easement. The “dominant estate” includes every transferee and successor in interest of the original dominant owner, including but not limited to those who own the solar collectors and equipment constituting the solar farm.

- 200.12 **MAINTENANCE, SOLAR FARM ENERGY SYSTEM.** Any activity undertaken by the operator of a Solar Farm Energy System (SFES) during the course of its operational lifespan, for the purpose of making repairs, cleaning the equipment, evaluating its performance, or assessing the condition of individual components.
- 200.13 **MAXIMUM HORIZONTAL TILT.** The point during the course of a daily rotation (if any) at which the panels of a solar array are the closest to being entirely parallel to the ground surface.
- 200.14 **MAXIMUM VERTICAL TILT.** The point during the course of a daily rotation (if any) at which the panels of a solar array are the closest to being at a ninety (90)-degree angle to the ground surface.
- 200.15 **NON-PARTICIPATING PROPERTY.** Any property that is located near a Solar Farm Energy System (SFES) but does not physically contain a portion of that System.
- 200.16 **OCCUPIED DWELLING.** A building that contains one or more dwelling units intended for residential use – whether occupied by the owner or unrelated individuals paying rent, and which is occupied for year-round or seasonal use by one or more households or actively marketed for sale or rent at the time a Solar Farm Energy System (SFES) is proposed to be built in the nearby vicinity. This term shall not apply to any such building which is vacant year-round and not being actively marketed for sale or rent at the time the System is proposed. It shall not apply to any accessory buildings such as garages that are not used for human habitation.
- 200.17 **OCCUPIED RESIDENTIAL AREA.** A geographic location where residential properties are actively inhabited by their owners or tenants.
- 200.18 **OPERATOR.** The person(s) and/or entity responsible for the day-to-day operation and maintenance of a Solar Farm Energy System, including any third-party subcontractors. This term shall apply to all subsequent operators of the System, if such responsibility is transferred at any point during its operational lifespan.

- 200.19 **OWNER, SOLAR FARM ENERGY SYSTEM.** The person(s) and/or entity that own the structures and equipment comprising a Solar Farm Energy System (SFES), regardless of whether they also own the land upon which it is situated. This term shall apply to all subsequent owners of the System, if ownership is transferred at any point during its operational lifespan.
- 200.20 **PARTICIPATING PROPERTY.** Any property on which a portion of a Solar Farm Energy System is physically located. In any instance where a property under common ownership is split into multiple adjacent parcels for taxation purposes (using section, quarter-section, and quarter lines from the Public Land Survey System), the entire property shall be considered a ‘participating property’, regardless of whether or not each individual tax parcel physically contains a portion of the SFES.
- 200.21 **PERSONAL SOLAR ENERGY SYSTEM (PSES).** An SES where the energy produced is primarily intended for consumption on the subject property and/or one or more adjoining properties. Excess energy generated by the System may be sold and distributed to an electrical utility provider serving the general public, but as designed, the majority of the energy generated will be consumed on site. This typically involves a private residential, agricultural, or commercial property where the rooftop or ground-mounted solar panels are owned and maintained by the landowner, and the SES covers less than ten (10) acres.
- 200.22 **SERVIENT ESTATE.** “Land burdened by a solar access easement, other than the dominant estate”, Iowa Code Section 564A.2(3).
- 200.23 **SOLAR ACCESS REGULATORY BOARD.** “The board designated by a . . . county board of supervisors under Section 564A.3 to receive and act on applications for a solar access easement . . .” Iowa Code Section 564A.2(5).
- 200.24 **SITING PERMIT.** A written certificate that, once approved by the County, authorizes the developer to proceed to the construction of a Solar Farm Energy System or any associated structures and equipment. Similar to Building Permit and Zoning Certificate.
- 200.25 **SOLAR ACCESS.** Unobstructed access to direct sunlight on a lot through the entire calendar year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy farm.

- 200.26 SOLAR ACCESS EASEMENT. “An easement recorded under Section 564A.7, the purpose of which is to provide continued access to incident sunlight necessary to operate a solar collector.” Iowa Code Section 564A.2(4). This easement shall express the limits of height and location for development of the solar farm’s panels for the purpose of providing solar access to the dominant estate in keeping with Iowa Code Section 564A.1(b, e, and g) and Section 564A.7(2)(b). This easement shall be approved by order of the Solar Access Regulatory Board, under Section 564A.5 prior to recording, and before installation and construction of any aspect of the solar farm. Iowa Code Section 564A.4(1).
- 200.27 SOLAR ARRAY. A group of panels connected together.
- 200.28 SOLAR COLLECTOR. “A device or structural feature . . . that collects solar energy and that is part of a system for the collection, storage, and distribution of solar energy.” Iowa Code Section 564A.2(6).
- 200.29 SOLAR ENERGY. “Energy emitted from the sun and collected in the form of heat or light by a solar collector.” Iowa Code Section 564A.2(7).
- 200.30 SOLAR ENERGY SYSTEM (SES). A system of infrastructure used for the conversion of solar energy from the sun into electricity, using a series of panels designed to collect energy from the rays of the sun.
- 200.31 SOLAR ENERGY UTILITY-SCALE GENERATION. A group of interconnected solar panels/arrays that convert sunlight into electricity for the primary purpose of wholesale or retail sales of generated electricity in projects for 25 Megawatts and under. Projects of over 25 Megawatts, which are under the jurisdiction of the Iowa Utility Board by Iowa Code Section 476A.1(5) and 199 Iowa Administrative Code Chapter 24, shall not be granted in Tama County. A limit of 500 acres will be allowed for Commercial Solar in Tama County.
- 200.32 SOLAR FARM. A commercial facility that converts sunlight into electricity, whether by photovoltaics, or other conversion technology, for the primary purpose of wholesale or retail sales of generated electricity. A solar farm, defined by any Decision of the Solar Access Regulatory Board, under Iowa Code Section 564A.5, is the principal land use for the parcel on which it is located.
- 200.33 SOLAR FARM ENERGY SYSTEM (SFES). A utility-scale SES where the energy produced is primarily intended to be distributed to the electrical power grid for use

by the public at large, either within Tama or elsewhere. Little, if any of the energy produced will be consumed on the subject property and/or adjoining properties. This typically involves over one hundred (100) acres of private agricultural land, where one or more landowners lease the land to a solar energy company, which owns and maintains the solar equipment.

- 200.34 SOLAR GLARE. The effect produced by sunlight reflecting from a solar panel with intensity sufficient to cause annoyance, discomfort or loss in visual performance in visibility in humans and farm animals.
- 200.35 SOLAR PANEL. A composition of groups of individual solar cells (or solar collectors) used to convert solar energy into electrical current.
- 200.36 STRUCTURE. Anything constructed or erected with a permanent location on the ground, including but not limited to dwellings, civic buildings, retail stores, offices, factories, utility stations, wind turbines, freestanding solar arrays, garages, sheds, barns, livestock pens and grain bins.
- 200.37 SUBSTATION. Any additional structures such as a substation would need to reference the 1998 Tama County Zoning Ordinance in regard to Conditional Use Permits (CUP).

#### Section 300. Solar Access Regulatory Board

- 300.1 Pursuant to Iowa Code Section 564A.3, the Solar Access Regulatory Board is hereby designated to be the five (5) member Tama County Board of Adjustment.
- 300.2 The Solar Access Regulatory Board shall consider Applications under Iowa Code Sections 564A.4, 564A.7(2) and the provisions of this Ordinance, only between owners of real property with a CSR2 of 60 or less who, under Section 564A.7(1), voluntarily wish to lease to a dominant owner the land legally described in the Application for a Solar Farm Energy System (SFES) designed for less than 25 Megawatts. A proposed signed copy of the lease with all of its terms between the dominant and servient owners and the proposed easement agreement between the parties shall be submitted to and filed with the Solar Access Regulatory Board contemporaneously with all other required documents to support the Application under Section 564A.4 and this Ordinance.
- 300.3 The Solar Access Regulatory Board shall not proceed to accept any Application brought to the Board by an erstwhile dominant owner who has failed to voluntarily

negotiate a solar access easement and lease with an owner of property who does not desire to enter into such voluntary agreement.

300.4 To the extent that Iowa Code Sections 564A.4(1)(h), 564A.4(2) and Section 564A.5 imply or state that an owner's property may be adjudicated by the Solar Access Regulatory Board to involuntarily create a dominant easement and taking against the desires and wishes of the property owner even though compensation be ordered to the servient owner, the Solar Access Regulatory Board shall not entertain and is hereby forbidden to exercise such power of dubious constitutionality.

300.5 Upon receipt and filing of the voluntary Application, the Tama County Zoning Administrator shall refer the Application and all supporting papers and documents to the Solar Access Regulatory Board, who shall undertake confirmation that the Application is complete and contains the information required under Sections 564A.4(1), 564A.7(2) and the provisions of this Ordinance.

Section 400. Construction Guidelines and Requirements for Application

401. Pursuant to the powers conferred by Iowa Code Section 564A.4(2), before the Solar Access Regulatory Board issues any decision or order approving the application and solar access easement, the following shall be submitted with the application under Iowa Code Section 564A.4(1) and 564A.7(2).

402. Site Plan Showing:

- a. Name, address, email address, and phone number of the property owner
- b. Parcel lines
- c. All existing structures, with heights clearly marked
- d. Sanitary Infrastructure (e.g. septic fields)
- e. Presence of Wells, capped and otherwise functional
- f. Setback Measurements
- g. Easements present on the designated solar farm, including those for existing utilities
- h. Field title locations with mapping
- i. Flood plain locations
- j. Topography lines (with 2-foot contours)
- k. Location of all solar panels, solar collectors, solar arrays and associated equipment



- l. Evidence that the site plan has been submitted to the local fire protection district
  - m. A detailed electrical grid drawing, certified by an electrical engineer, showing all connection points in the Solar Farm and to a connecting electrical grid
  - n. A grading plan
403. Height: Shall not exceed fifteen (15) feet at maximum tilt of the solar panels.
404. Setbacks:
- a. The following setbacks are required for SFES structures:
    - 1) Eighty (80) feet from a hard surface right of way, sixty (60) feet from a gravel right of way, and one hundred seventy-five (175) feet from the center of an intersection (Intersection radius).
    - 2) Five hundred (500) feet from confinement facilities.
    - 3) Five hundred (500) feet from a non-participating owners' property line, if also not an occupied residential area.
    - 4) One thousand (1,000) feet from occupied residential areas.
    - 5) All buildings, accessory buildings, and other infrastructure of the SFES shall be located one quarter (1/4) mile (1320 feet) from any residential dwelling or unit not within the area leased under easement to the dominant owner.
    - 6) One thousand five hundred (1,500) feet from a cemetery property line.
    - 7) One-half (1/2) mile (2640 feet) from city limits.
    - 8) One-half (1/2) mile (2640 feet) from conservation areas and historic registry areas.
    - 9) Five (5) mile minimum from public and private airports or heliports.
  - b. No setbacks are required where a property line is shared by two participating landowners subject to the identical lease and easement terms for each owner. Mandated setback distances may be waived with the consent of participating landowners and non-participating adjacent property owners.
  - c. No approved Solar Farm Energy System (SFES) project shall be closer than one-half (1/2) mile (2640 feet) to another solar farm.
405. Screening:
- a. A landscape buffer shall be required, and installed and maintained, during the period of easement and lease.

- 1) Determination of screening requirements will be made by the Solar Access Regulatory Board as part of the Application review process based upon the surroundings of the solar farm site, including adjacent or nearby surrounding land uses and topography and input from the local residents.

406. Fencing/Security:

- a. An NEC (National Electrical Code®) compliant security fence shall be installed along all exterior sides of the Solar Farm and be equipped with a minimum of one gate and locking mechanism on the primary access side.
- b. Security fences, gates and warning signs must be maintained in good condition during the period of easement and lease.
- c. Video cameras are recommended to ensure safety.

407. Signage:

- a. Warning signs and signs disclosing the name, address, telephone number and email address of the site operator and electric utility provider shall be displayed at least once on all fenced sides of the Solar Farm.
- b. Such signs shall include a visible “High Voltage” warning and the Solar Farm’s 911 address and GPS coordinates.

408. Utility Connections:

- a. All utility connections from the solar installation shall be underground, as dependent upon soil conditions, shape and topography of the site, distance to connection with other electrical grids.
- b. All components used for the collection, conversion, and storage of energy shall be contained underground within the leased and fenced Solar Farm, excluding existing overhead transmission lines.

409. Floodplain/Floodway:

- a. No portion of the Solar Farm site proposed for development may be located in a mapped 100-year DNR designated flood plain.

410. Habitat and Natural Resource Considerations:

- a. The potential impact on any sensitive areas such as lakes, ponds, streams, rivers, wetlands, steep slopes, aquifers and recharge areas, natural wooded areas, prairie and other natural wildlife habitats shall be identified and considered for reasonable mitigation following a natural resource consultation with the Iowa

Department of Natural Resources.

411. Solar Glare Minimization:

- a. The Solar Farm site shall be designed and located in such a fashion so as to prevent solar glare toward any buildings inhabited by humans or farm animals on property adjacent to the Solar Farm and adjacent roadways where a safety hazard might be created.

412. Weed Control:

- a. Applicant for the Solar Access Easement must present a weed/grass control plan for the Solar Farm Energy System (SFES) site inside and outside the fenced area for the entire property.
- b. The dominant estate owner shall adhere to the weed control plan during the period of the easement and lease.

413. Grading Plan:

- a. Applicant for the Solar Access Easement shall submit a grading plan for all aspects of the Solar Farm which shall include all proposed changes to the landscape of the site showing areas of clearing, grading, topographical changes, drainage, tree removal, etc.

414. Compliance with local state and federal laws:

- a. Before approval of Applicant's Solar Access Easement, Applicant shall submit to the Solar Access Regulatory Board evidence of compliance with all applicable local, state and federal regulations governing Solar Energy Utility-Scale Generation.
  - 1) Such evidence shall include but not be limited to certifications of those engineers as to all matters of electrical, ecological, architectural, topographical and surveying required by the provisions of Iowa Code Section 564A.4(1), 564A.7(2) and the provisions of this Ordinance.

415. Access Required:

- a. The Zoning official or any other designee of the Solar Access Regulatory Board may enter the property for which a Solar Access Easement has been granted under this Ordinance to conduct an inspection to determine that the conditions under which the Easement have been granted continue to be met as specified by statute, regulation and this Ordinance. Failure to provide such access shall be

deemed a violation of this Ordinance.

Section 500. Permitting and Review Procedure

501. The Tama County Zoning Administrator is hereby appointed to implement and administer the provisions of this Ordinance and will herein be referred to as the Administrator.
- a. The Tama County Engineer shall assist in the administration and enforcement of this Ordinance as it pertains to the matter of roadway maintenance and the Road Use Agreement outlined in 600 of this Ordinance.
502. Condemnation Waiver: Issuance of an SFES Building Permit shall be conditioned on the permit holder's enforceable promise supported by the consideration of the issuance of the US-SES Construction Permit, that the permit holder shall never use, or seek to use, eminent domain to acquire any real property interests to construct or operate the Project.
503. Conditional Use Permit and Required Documents: Prior to the construction, erection or installation of a Solar Farm Energy System within unincorporated Tama County, the developer shall obtain an approved Conditional Use Permit (CUP) from the County. In total, the developer shall provide all of the following to the Administrator when applying for a Conditional Use Permit:
- 503.1 A completed application form for an SFES conditional use permit using forms supplied by the County, which shall include the following information:
- a. The location of the proposed SFES and the size of its total physical extent.
  - b. The number of participating properties associated with the SFES.
  - c. The height and size dimensions of the solar arrays and other structures that comprise the SFES, including the height of arrays at maximum vertical tilt, and their width at maximum horizontal tilt.
  - d. The length of the anticipated timeframe for implementation of the project, including the construction and placement of all structures and equipment that comprise the SFES.
  - e. Information regarding the location and extent of properties to be served by the energy generated on site.

- f. Contact information for all representatives of the developer that will be involved in the permitting and review process.
  - g. Fee for the Conditional Use Permit Application is due before a public hearing will be set with the Board of Adjustment; fee amount is set in the Tama County 6.1 Zoning Ordinance. This is separate from the project application fee and building permit/ zoning certificate fee.
- 503.2 A Site Plan for the proposed SFES, comprised of a map and any associated diagrams or illustrations, which contains all of the following information:
- a. The location of all structures that comprise the SFES, including solar arrays as well as any accessory structures and equipment, including utility lines, whether above or below-ground.
  - b. A Development Plan (Plan) for the Project shall contain aerial photographs of the entire proposed Project Area, showing the approximate proposed location of the SES, private access roads, Feeder Lines, Substations, and all other Components of the SES Project, including any new transmission lines, or any expansion of existing transmission lines.
    - 1) The Plan shall show Property Lines and Setback Distances under Section 400 of this Ordinance, as well as all public roads and public drainage district facilities (i.e. ditches, and underground tiles) in the defined Project Area.
    - 2) The Plan shall also identify any other SES, communication antennae or towers, and airports (including private airstrips and heliports) located within five (5) miles of the Project Area; and all lakes, permanent water courses and Public Conservation Areas within three (3) miles of the project area boundaries.
    - 3) The plan shall show topographical conditions and existing vegetation (list type and percent of coverage: e.g. cropland/plowed fields, grassland, wooded areas, etc.).
    - 4) In providing the above information, the Plan shall use a GPS coordinate system that is compatible with the County's geographical and topographical information and data systems.

- c. The location of all utility lines, sanitary systems, drainage tile networks, and any associated easements, regardless of whether they are currently being utilized.
- d. The locations of all driveway entrances for obtaining access to any portion of the SFES, as well as any other private entrances to the public roadway system within one thousand (1,000) feet of each, measured along the road right-of-way line.
- e. The locations of any vegetative screening areas as required in Section 400 of this Ordinance.
- f. The location and extent of any floodplains, if applicable.

503.3 A report from a licensed structural engineer containing the following information:

- a. A description of the proposed solar arrays and/or substation, in terms of functional design characteristics, appearance, dimensions, etc.
- b. Photographs and/or elevation drawings providing a visual depiction of the proposed solar arrays and/or substation.
- c. A line-of-sight analysis showing the potential visual impact on residential properties within one thousand (1000) feet.
- d. Documentation to establish that the proposed solar arrays and any substation have sufficient structural integrity for the proposed use and location, and comply with all applicable industry standards in terms of safety and performance.
- e. Calculations for the approximate total and average energy to be generated by each individual cluster of solar arrays, as well as in aggregate for the SFES, as anticipated.
- f. The applicant shall provide standard manufacturer's specifications and recommended installation methods for all major equipment, including solar panels, mounting systems and foundations for poles and racks. Specifications for the actual equipment to be used in the SES shall be required before a SES Construction permit is issued.
- g. The Plan shall also include a mailing address for the owner of each communication antennae or towers.

- 503.4 A Stormwater Management Plan, prepared by a licensed engineer, which details the measures to be taken during and after construction of the SFES, to eliminate any increase in the volume of stormwater runoff that is a direct result of its construction and ongoing operations. In an effort to eliminate erosion and limit any potential damage the entity will need to mitigate runoff to adjoining properties from excessive flooding.
- 503.5 A Soil Maintenance Plan, which describes the vegetation planting and other soil maintenance practices to be used on the premises of an SFES during and after construction, in order to demonstrate compliance with the requirements of the Stormwater Management Plan.
- a. This plan shall include references to any and all outreach conducted with qualified natural resource professionals such as the Iowa DNR and NRCS, either for this particular SFES or a previous, similar project in Tama County or another community with similar climate and soil conditions.
  - b. This plan shall include references to the methods used to control weeds, especially noxious weeds, pests, and other potential hazards to adjoining agricultural properties.
  - c. This plan shall include a description of all chemicals or solvents that will be used for the routine cleaning of solar panels, and details on the method and location of storage if any of these will be regularly stored on site which shall meet DNR approval.
  - d. Photographs and illustrations of the proposed practices, including examples from previous projects in similar communities, are strongly encouraged.
  - e. An unredacted Health & Safety Instructions Manual for make, model, and type of solar panel array from the manufacturer of said solar panels permitting. This manual must be presented to the County to have on file and must be made available to the public at time of application. No other generalized statement, document, or manual is acceptable. The Health & Safety Instructions manual must be specific to the make, model, and type of solar panels permitted and contain the safety information of the solar

panels permitting. The Applicant/Developer/Owner must comply with all requirements of Solar Safety therein.

- f. Documentation of Applicant/Developer/Owner's legal control over the private property necessary for the Project, signed by the property owner. Such legal control must be vested in the Permit Holder of the SES Construction Permit at the time of its issuance. The Developer needs to document that all property owners have legally signed off voluntarily.
- 503.6 Formal documentation of agreements with any electric company for the interconnection of the SFES with their power grid.
- a. This map shall be accompanied by plans for any necessary traffic control activities and detours for local motorists accessing properties within the project area.
- 503.7 Documentation of any and all applicable permits issued by other permitting agencies at the Federal, State or Local level, which confirms compliance with any applicable requirements from those agencies.
- a. This shall include documentation of an approved National Pollutant Discharge Elimination System (NPDES) permit from the Iowa Department of Natural Resources, along with the associated Erosion and Sediment Control Plan, which outlines the specific control practices to be utilized during construction of the SFES.
  - b. This shall also include any applicable permits from the Federal Aviation Administration (FAA) concerning the reflective glint and glare generated by solar panels in the vicinity of airport runways, and Federal Communication Commission (FCC), if necessary to the project.
- 503.8 An Operations and Maintenance Plan, which contains the following:
- a. A description of how the SFES will be regularly operated and maintained, including references to any subcontractors or associated firms that will be directly involved.
  - b. The expected frequency and duration of on-site visits and inspections by operations and maintenance personnel.
  - c. The procedures for keeping the individual components of an SFES locked and secured outside of regular operations and maintenance visits.



- 503.9 A Road Use Agreement, as outlined in Section 600 of this Ordinance, along with financial security which guarantees payment for all costs associated with the repair of roads and other infrastructure following the construction of the SFES.
- 503.10 A Decommissioning Plan, as outlined in the decommissioning plan of this Ordinance, along with a financial security which guarantees payment for all costs associated with the decommissioning of the SFES.
- 503.11 An Emergency Response Plan, which contains response procedures to be followed in the event of a fire, collapse, personal injury, or other emergency related to an SFES.
- a. Prior to its submittal to the Board, the Emergency Response Plan shall be reviewed and approved by Tama County Emergency Management and the applicable Fire Department(s) serving the SFES project area.
- 503.12 A description of the process by which the developer, or a contractor acting on their behalf, will recruit employees for the construction of the proposed SFES. This should specify whether or not this will include local recruitment efforts in Tama County and the surrounding region.
- 503.13 All utility-scale solar project applications shall be accompanied by the payment of an administrative fee of \$2500 to compensate County staff and officials for the application review process.
- 503.14 Six bound hard copies of all application materials are required to be submitted along with one electronic copy to the Zoning Administrator.
504. Assistance for County Review:
- 504.1 The Solar Access Regulatory Board may choose to utilize the services of a third-party consultant to review any of the technical documents submitted along with an application for a Siting Permit, such as the Operations and Maintenance Plan and Decommissioning Plan.
- 504.2 Such a consultant may also assist with on-site inspections and other work as necessary to assist the County in its review of the Siting Permit application.
- 504.3 The developer shall be responsible for all fees associated with such consultant activities.

505. Public Hearing and Vote: Within sixty (60) days of the submission of a complete Siting Permit Application with Site Plan, the Solar Access Regulatory Board shall schedule a date for a public hearing regarding the proposed SFES. The hearing itself does not need to be held within the 60-day timeframe.
- 505.1 Notification shall be provided to the owners and occupants of all properties within one (1) mile of any solar array or substation comprising the proposed SFES, and shall be published in a newspaper of general circulation within the community no fewer than four (4) or greater than twenty (20) days prior to the hearing.
- 505.2 Following the conclusion of the first public hearing, the Board may require an additional hearing if it is felt that further information is necessary to make a determination on the proposed SFES, or to adequately inform the general public and individual property owners of the impact of the project.
- 505.3 Following the conclusion of the final public hearing, the Board shall vote on whether to approve or deny the Siting Permit request.
- a. The Board may attach additional conditions to the approval of a Siting Permit, which shall be limited to anything deemed necessary to protect the public health, safety and community welfare.
  - b. Approval of a Siting Permit shall be contingent on the submission of a completed Road Use Agreement, Decommissioning Plan, and all associated requirements as listed in this Ordinance.
  - c. If the permit request is denied, the Solar Access Regulatory Board shall clearly state the reason(s) for doing so, and provide the developer with a copy of a written statement attesting to the same.
- 505.4 Notification of the Board's final decision shall be mailed to the owners and occupants of all properties within one (1) mile of each solar array, or substation comprising the proposed SFES, as well as any other members of the general public that attended as a result of the newspaper publication for the hearing, excluding any such individuals that were present at the meeting in which the decision was made.

506. Validity of Permits: An approved Siting Permit shall be valid for two (2) years following approval by the Solar Access Regulatory Board and Board of Supervisors within which time building permits must be applied for, for this permit to not lapse.

506.1 If requested by the developer, an extension may be granted in six-month intervals if applied for to the Solar Access Regulatory Board by the Developer/Owner, provided that sufficient evidence is supplied that demonstrates the ongoing viability of the project as first proposed.

a. Six-month extension may be requested by the developer for a non-refundable \$2,500 fee.

506.2 A previously approved permit may be revoked by the Board if it determines that a violation has occurred, and all permitted activities shall cease until a new or revised permit has been approved using the procedures outlined in this Section.

507. Fee Structure: An approved permit requires a payment compliant with the Tama County Zoning Ordinance to be paid before Zoning Certificates are issued:

<b>Value of structure, building or addition</b>	<b>Fee</b>
• \$0.00 - \$1,000.00	\$30.00 minimum
• For each \$1,000.00 or fraction thereof, up to and including \$20,000.00	\$0.50 per \$1,000.00
• For each additional \$1,000.00 or fraction thereof, up to and including \$50,000.00	\$0.25 per \$1,000.00
• For each additional \$1,000.00 or fraction thereof, exceeding \$50,000.00	\$0.10 per \$1,000.00

#### Section 600. Road Use Agreements

601. Purpose:

601.1 The transport of heavy, oversized equipment during the construction of a Solar Farm Energy System is likely to cause substantial traffic disruptions along public roadways in the project area. It is also likely to cause serious damage to or deterioration of County roadways and other associated infrastructure. The SFES must observe all current weight limits and restrictions on bridges and roads.

- 601.2 Adequate space must be maintained onsite for receiving materials during the construction phase to minimize impact on local traffic.
- 601.3 Therefore, it is necessary to ensure that local residents and officials are fully prepared for the anticipated traffic disruptions, and that adequate mitigation efforts are undertaken for the damages incurred, without the placement of any financial burden on the County and its taxpayers.
602. Road Use Agreement: The developer of a Solar Farm Energy System shall prepare a Road Use Agreement with the Tama County Secondary Roads Department, and submit documentation of such agreement to the Administrator, once approved by both parties.
- 602.1 The Road Use Agreement shall clearly outline the roles and responsibilities regarding the use of County roadways during the construction of the SFES, as well as repair any such roadways that are damaged as a result of the construction activity.
- 602.2 The agreement shall be accompanied by an estimate of the total cost for the repair of roadways and other infrastructure that are likely to be damaged during the construction of the SFES.
603. Cost Estimate: The following requirements shall apply to the cost estimate supplied by the developer as stipulated in Section 602.2 of this Ordinance.
- 603.1 At the developer's expense, the cost estimate shall be prepared by a professional engineer licensed in the State of Iowa.
- 603.2 A baseline survey shall be conducted, in order to assess and evaluate existing roadway conditions prior to construction of the SFES.
- 603.3 The baseline survey shall factor in the presence and condition of any other infrastructure that may be damaged as a result of the construction of the SFES, including but not limited to above or below-ground utility lines, drainage tile networks, private driveway entrances, or the components of a levee and drainage system.
- 603.4 The cost estimate shall encompass the total cost of any and all repairs necessary to return the roadway and all other impacted infrastructure to the condition observed in the baseline survey.

- 603.5 The cost estimate shall also include the cost of providing liability insurance coverage to the County, at an amount deemed acceptable by the Solar Access Regulatory Board, in the event that the developer's liability insurance coverage lapses for any reason.
- 603.6 At their own expense, the developer shall obtain an independent third-party review of the supplied cost estimate, to be conducted by an individual or firm of the County's choosing.
- a. If the third-party review does not support the estimate supplied by the developer, the developer shall supply the County with an explanation of the discrepancy, obtained either through further consultation with their engineer, the third-party reviewer, and/or other licensed professional(s).
  - b. Approval of the Siting Permit shall be contingent on the submittal of a revised cost estimate that is supported by the third-party reviewer.
604. Financial Security: Any and all costs associated with the repair of roadways and other infrastructure damaged as a result of the construction of the SFES shall be paid for entirely by the developer sixty (60) days from completion of repairs, without any assistance from the County.
- 604.1 Prior to the approval of a Conditional Use Permit for an SFES, the developer shall provide the Board of Supervisors with a surety bond, or another form of financial security deemed acceptable to the Board. Evidence of the bond will be documented in the application package to the Solar Access Regulatory Board.
- 604.2 The financial security shall cover no less than three (3) times the total cost identified in Section 603 of this Ordinance.
- 604.3 The financial security shall only be released when the County Engineer determines, following inspection, that the roadways and associated infrastructure have been repaired to their pre-construction condition.
605. Construction - Notification of Local Officials:
- 605.1 Prior to the commencement of construction for an SFES, a set of detailed plans for roadway usage, traffic control, and the timing and duration of operations shall be provided to the Administrator, as well as Tama County

Secondary Roads, Tama County Emergency Management, Tama County Sheriff's Department, and Fire Department(s) serving the project area.

- 605.2 The Administrator and the other aforementioned entities shall be notified in the event that any substantial delays in the completion of construction will be necessary, and the details shall be provided regarding the revised timeframe and duration of the project.

606. Construction Notification of Property Owners:

- a. Prior to the commencement of construction for an SFES, the developer shall, at their own expense, provide mailed notification to the owners and occupants of all property within one and one-quarter (1.25) miles of any public roadway segment to be utilized for the transport of solar equipment.
- b. This notification shall identify the roadway segments to be utilized, any necessary detours or other traffic control plans, and the anticipated timing and duration of the activities, with specific dates identified whenever possible.
- c. In order for the County to confirm compliance with this requirement, a copy of the notification letter shall be provided to the Administrator, along with a list and/or map of the property owners that were contacted.

607. Construction Monitoring and Emergency Repairs: The Administrator and County Engineer shall monitor the construction process and notify the developer if any major damage to County roadways or utility infrastructure have occurred as a result of these activities, rendering those roads or utilities unusable without immediate repair.

- 607.1 If deemed necessary to ensure the safe and efficient movement of traffic on the County roadway system, the Administrator may require the developer to cease with the continued transport of solar energy equipment until the area of major damage has been rectified.
- 607.2 The use of detours as a result of such unforeseen damage shall not be implemented until the developer has notified the Administrator and County Engineer of any additional roadways to be used in transporting the equipment and has received their approval.
- 607.3 The costs for completing such emergency repairs, deemed necessary by the County Engineer, shall be borne entirely by the developer, the same as any other repair activities after construction is complete, as outlined in Section

604 of this Ordinance.

Section 700. Decommission Plan

701. Purpose: Given that the infrastructure associated with a Solar Farm Energy System has a useful life of limited duration, it is necessary to ensure that the SFES and all of its components are safely removed from the site, and that such removal activities do not place any financial obligation on the County and its taxpayers.
702. Decommissioning Standards: The decommissioning of an SFES shall comply with the following minimum standards:
- a. All structures, utility lines, and equipment associated with the SFES shall be removed, including the entirety of any such structures located below ground level.
  - b. Following the removal of structures, utility lines and equipment, all remaining materials and debris shall be removed, and the site shall be inspected by a County-approved inspector to identify the presence of any potentially hazardous substances or contaminants. Such substances shall be removed and remediated in accordance with any and all applicable state and federal laws at the time of decommissioning, and to the satisfaction of the Solar Access Regulatory Board after consulting with County Engineer, Conservation Board or other entities.
  - c. All areas of ground that had been disturbed by constructing and operating the SFES shall be graded, reseeded, and otherwise restored to their condition prior to the establishment of the SFES, to the satisfaction of the Solar Access Regulatory Board after consulting with County Engineer, Conservation Board or other entities.
  - d. The structures and equipment comprising an SFES shall be recycled to the greatest extent practicable, and under no circumstances shall any of the solar panels be disposed of in a landfill within Tama County.
703. Decommissioning Plan – Submission Requirements: Prior to the approval of any Siting Permit for an SFES, the developer shall submit a Decommissioning Plan to the Administrator, which complies with all requirements listed in Section 702 of this Ordinance, and includes each of the following:
- 703.1 A description of the planned procedure to remove all structures, utility lines, and other equipment associated with the SFES, along with any remaining materials or debris.

- a. This shall include a description of the process through which the site will be inspected to identify any hazardous substances or contaminants that may have been deposited on or below the ground surface, as well as the process to remove and remediate those materials.
- 703.2 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 the remaining structures must be in conformance with the regulations in effect at the time.
- 703.3 A description of the planned procedure to restore all previously disturbed land to its condition prior to the construction of the SFES.
- 703.4 A description of the disposal process for the major components of all solar arrays comprising the SFES.
- 703.5 Documentation of existing conditions prior to the establishment of the SFES, for the County to use as a baseline reference in determining whether the land has been restored to its pre-development condition during decommissioning.
- a. This shall include aerial and ground level photographs, written descriptions, or any other such documentation that the Board determines necessary for documenting the existing condition of the properties involved.
  - b. Specific measurements shall be provided by a County-approved inspector for the Corn Suitability Rating (CSR2) and the extent of soil compaction.
- 703.6 An estimate of the total cost for the decommissioning of the SFES, as outlined further in Section 704 of this Ordinance, along with a written financial plan that adequately ensures that the operator will be able to supply the necessary funds at the time of decommissioning.
- a. The financial plan shall stipulate that all costs associated with the decommissioning of the SFES shall be borne entirely by the owner or operator, without any assistance from the County.
  - b. The financial plan shall stipulate that the terms will apply to all future successors, assigns, or heirs to which responsibility for operating the System may be transferred at a later date.



- 703.7 A statement that the owner or operator will notify the County in advance of the planned decommissioning of an SFES, and a description of the means by which the County will be notified.
- 703.8 A statement that Tama County shall have access to the SFES, and to the funds to effect or complete decommissioning no less than three hundred sixty-five (365) consecutive days after the structure(s) have ceased operations.
704. Cost Estimate: The following requirements shall apply to the cost estimate supplied by the developer, as stipulated in Section 703.6 of this Ordinance.
- 704.1 At the developer's expense, the cost estimate shall be prepared by a professional engineer licensed in the State of Iowa.
- 704.2 The cost estimate shall encompass all costs associated with the decommissioning of the SFES, including the deconstruction, transportation, and disposal of equipment, as well as site clean-up activities.
- 704.3 The cost estimate shall also include the anticipated cost of repairing roadways or other infrastructure following the removal and transport of all equipment, calculated under the same procedure outlined in Section 603 of this Ordinance.
- 704.4 The cost estimate shall also include the cost of providing liability insurance coverage to the County, in the event that the developer's liability insurance coverage lapses for any reason.
- 704.5 When preparing the cost estimate, under no circumstances shall the salvage value of the equipment be deducted from the total cost of decommissioning
- 704.6 At their own expense, the developer shall obtain an independent third-party review of the supplied cost estimate, to be conducted by an individual or firm of the County's choosing.
- a. If the third-party review does not support the estimate supplied by the developer, the developer shall supply the County with an explanation of the discrepancy, obtained either through further consultation with their engineer, the third-party reviewer, and/or other licensed professional(s).
- b. Approval of the Siting Permit shall be contingent on the submittal of a revised cost estimate that is supported by the third-party reviewer.
- 704.7 In order to account for inflation and any unanticipated future trends and

influences, the cost estimate shall be reevaluated and updated three (3) years after the approval of the Siting Permit, and at every subsequent three (3) year interval, following the same process undertaken in the initial calculation.

705. Financial Security: Any and all costs associated with the decommissioning of an SFES shall be paid for entirely by the owner and/or operator, without any assistance from the County or non-participating landowners in the project area.

705.1 Prior to the approval of a Siting Permit for an SFES, the developer shall provide the Board of Supervisors with an escrow account, or another form of financial security deemed acceptable by the Board and Landowner. This shall be used to complete the decommissioning of the SFES, should the owner or operator fail to do so.

a. The landowner shall review the financial security provided by the developer and sign an agreement to be responsible for any expenses which the financial security fails to cover. The agreement shall be secured by the land on which the SFES resides. This lien shall be recorded and in effect until the decommissioning is complete. If the land is transferred this responsibility shall be incumbent on the new owners.

705.2 The financial security shall cover one-hundred thirty percent (130%) of the total cost estimate outlined in Section 704 of this Ordinance.

705.3 Following the initial approval of a Siting Permit for an SFES, the owner or operator shall continually renew the financial security every three (3) years throughout the lifespan of the SFES. At the time of each renewal, the cost estimate shall be reevaluated under the same procedure as outlined in Section 704 of this Ordinance, and the bond shall cover no less than three (3) times the updated estimate for total cost.

705.4 The owner or operator shall provide the Board with a notice of their intent to continue operations no less than one hundred and eighty (180) days prior to the three (3) year anniversary of the previous financial security filing or renewal, and shall supply the renewed financial security to the Board no less than ninety (90) days prior to that anniversary.

a. If the financial security has not been renewed at ninety (90) days prior to the anniversary of the previous financial security filing or renewal, then

the owner or operator shall take the steps to begin the decommissioning of the SFES at that time.

- 705.5 Each time that the financial security is filed or renewed, it shall be accompanied by a written agreement that stipulates that it will apply to all future successors, assigns, or heirs to which responsibility for operating the System may be transferred between the time of the filing and the next renewal.
- a. The financial security shall only be released once the Solar Access Regulatory Board, after consulting with County Engineer, Conservation Board or other entities, can confirm that the land has been restored to its condition prior to the construction of the SFES, including the remediation of any contamination.

706. Confirmation of Decommissioning:

- 706.1 The owner and/or operator shall supply the County with documentation of on-site conditions following the completion of decommissioning. This shall include aerial and ground level photographs, written descriptions, or any other such documentation that the Board determines necessary for documenting the condition of the properties involved.
- 706.2 If the supplied documentation does not meet the satisfaction of the Board, the County may conduct its own inspection of the site, either directly or through the use of a third-party consultant, and the owner and/or operator shall be responsible for compensating the County for these activities.

707. Determination of Abandonment:

- 707.1 Any SFES, or portion thereof, that has not been in operation for a period of three hundred sixty-five (365) consecutive days shall be deemed to be abandoned by the Administrator, and notification of this determination shall be submitted to the owner and/or operator at this time.
- 707.2 Following the determination of abandonment, the owner or operator shall within ninety (90) consecutive days, either reactivate the use of the structure(s) or begin the process of dismantling and removing them.
- a. This required timeframe for reactivation shall only be extended if the owner or operator is able to provide sufficient evidence or documentation to the Solar Access Regulatory Board that the failure to reactivate is due

to either a natural catastrophic event or a mechanical or technological failure that the owner or operator is actively working to remedy at the time.

- 707.3 If the owner and/or operator desires to reinstate and maintain operations for the SFES, they shall provide the Solar Access Regulatory Board with substantial evidence of their intention and ability to do so within ninety (90) consecutive days of the abandonment determination, and resubmit such evidence every one-hundred eighty (180) days after the initial ninety (90) day period.
- 707.4 In the absence of any intent to reinstate operations, failure to begin the dismantling and removal of an abandoned SFES within ninety (90) consecutive days shall constitute a violation of this Ordinance, subject to penalties as specified in Section 806 of this Ordinance.
- 707.5 If the solar panels and other structures are not removed as required, the Board of Supervisors may initiate the removal of the SFES using the funds set aside through the surety bond or other financial security, as outlined in Section 705 of this Ordinance. As needed, the Board may take any other legally authorized steps to recover the cost of the removal, including the sale of removed materials, or initiation of judicial proceedings against the owner or operator.

#### Section 800. Related Rules and Regulations and Effective Date

801. Every Utility-Scale Solar Energy system shall comply with all the applicable local, state and federal requirements.
802. Severability: The provisions of this Ordinance are severable, and the invalidity of any Section, paragraph or provision of this Ordinance shall not affect the validity or effectiveness of the remainder of the Ordinance.
803. Fee Structure for issuance of Order: Upon issuance of an Order approving the Application by the Solar Access Regulatory Board under Iowa Code Section 564A.5, the Applicant shall pay to the Tama County Auditor the following amounts proportioned to the electrical capacity of the approved Solar Farm Energy System.
804. Effective Date: This Ordinance shall take effect upon its publication as required by law.
805. Financial Risk and Responsibility: All costs associated with the permitting,

construction, installation, operation, maintenance, repair, modification or decommissioning of an SFES, shall be entirely the responsibility of the developer, owner, and/or operator of the SFES, and no such costs shall be passed on to Tama County, its taxpayers, or individual landowners in the SFES project area. In addition, the developer, owner and/or operator shall be entirely responsible for the cost of any legal actions (including defense and settlement costs) associated with aforementioned activities regarding an SFES.

806. Enforcement and Penalties: Any violation of the provisions of this Ordinance or failure to comply with any of its requirements shall constitute a County infraction as defined by Chapter 331.307 of the Iowa Code. Each day that the violation persists shall constitute a separate repeat offense.

806.1 In accordance with Chapter 331.307 of the Iowa Code, any person or firm that violates this Ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than seven-hundred fifty (750) dollars for the first offense, and not more than one thousand (1000) dollars for each repeat offense.

806.2 Nothing herein contained shall prevent Tama County from taking such other lawful action as is necessary to prevent or remedy any violation.

Passed and adopted by the Tama County Board of Supervisors on this \_\_\_\_\_ day of

\_\_\_\_\_, 2025.

TAMA COUNTY BOARD OF SUPERVISORS

\_\_\_\_\_  
Mark Doland, 4<sup>th</sup> District, Chairman

\_\_\_\_\_  
Curt Hilmer, 1<sup>st</sup> District

\_\_\_\_\_  
David Turner, 2<sup>nd</sup> District

\_\_\_\_\_  
Heather Knebel, 3<sup>rd</sup> District

\_\_\_\_\_  
Curt Kupka, 5<sup>th</sup> District

ATTEST \_\_\_\_\_

Karen Rohrs, Auditor

\_\_\_\_\_, Approved 1<sup>st</sup> Consideration

\_\_\_\_\_, Approved 2<sup>nd</sup> Consideration

\_\_\_\_\_, Adopted