Appendix C Solar Energy

3.01 Title. This ordinance shall be known as the Solar Energy Ordinance.

3.02 Authority. This ordinance is adopted pursuant to authority granted by ILCS Chapter 55 Counties Division 5-12 Zoning and Section 5/5-1063 Building Construction, Alteration, Maintenance.

3.03 Purpose. The purpose of this ordinance is to preserve and protect public health and safety without significantly increasing the cost or decreasing the efficiency of a solar energy system and to allow for the orderly development of land, protect property values and aesthetic conditions within the county. This ordinance does not repeal, abrogate, annul, impair or interfere with any existing ordinance.

3.04 Applicability. This ordinance applies to all unincorporated lands within the boundaries of Henry County.

3.05 Definitions.

**Ground Mount Solar Energy System.** A solar energy system that is directly installed into the ground and is not attached or affixed to an existing structure.

**Net Metering.** A billing arrangement that allows solar customers to get credit for excess electricity that they generate and deliver back to the grid so that they only pay for their net electricity usage at the end of the month.

**Solar Energy.** Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.
Solar Energy System (SES). The components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing.

Personal Solar Energy System (PSES). Any device or combination of devices or elements which rely upon direct sunlight as an energy source including but not limited to any substance or device which collects sunlight for generating electricity for use on-site. However, the energy output may be delivered to a power grid to offset the cost of energy on-site.

Solar Garden. A commercial solar-electric array, of no more than 5 acres in size that provides retail electric power to multiple households or businesses residing in or located off-site from the location of the solar energy system. A solar garden may be either an accessory use or a special use if it is a stand-alone garden.

Solar Farm Energy System (SFES). A commercial facility, on a parcel(s) of five (5) acres or more that converts sunlight to electricity, whether by photovoltaics, concentrating solar thermal devices, or various experimental technologies for on-site or off-site use with the primary purpose of selling wholesale or retail generated electricity.

Solar Farm Energy System Project Area. A SFES project area may be compromised of a single parcel of land or two (2) or more contiguous parcels of land providing that the total area of SFES project area consists of five (5) acres of land or more.

Solar Panel. A device for the direct conversion of solar energy into electricity.

Structure Mount Solar Energy System. A solar energy system in which solar panels are mounted on top of a roof structure as either a flush mounted system or as modules fixed to frames which can be tilted toward the south at an optical angle.

3.06 Personal Solar Energy System (PSES).

A. Purpose and Intent.

The purpose of these regulations is to provide a uniform and comprehensive set of standards for the installation and use of PSESs designed for on-site home, farm and small commercial use that are used primarily to reduce on-site consumption of utility power. The intent of these regulations is to protect the public health, safety, and community welfare without unduly restricting the development of PSESs.

B. Permitted Use.

Personal Solar Energy Systems shall be considered an accessory use to a principal permitted use in any zoning district.
C. Special Requirements
Personal Solar Energy Systems shall be subject to the requirements included in Zoning Ordinance Section 7.6 Bulk Regulations unless otherwise stated herein:

1) Ground Mounted PSES height. Shall not be greater than twenty (20) feet at maximum tilt of the solar panel(s) in any zoning district.

2) Structure Mounted PSES height. Shall not be greater than the allowable height of any structure within the zoning district in which the PSES is to be installed.

3) Setbacks. The PSES shall maintain perimeter setbacks including; side and rear yard setbacks of ten (10) feet. No PSES shall be permitted to be located in the required front yard setback unless at least one hundred (100) feet back from the edge of the right of way with a vegetative buffer toward neighboring residential property.

4) Building Codes. All county, state, and national construction codes shall be followed.

5) Use. The PSES shall provide electricity for on-site use by the owner. This does not prohibit an owner from making excess power available for net metering.

6) Approved Solar Components. Electric solar energy system components must have an Underwriters Laboratory (UL) listing or approved equivalent.

D. Certificate of Compliance
Before a building permit is issued, the following shall be submitted to the Henry County Zoning and Building Department for review.

1) Site plan showing:
   a) Name, address, and phone number of the property owner;
   b) Property lines;
   c) All structures;
   d) Septic field;
   e) Setback lines;
   f) Location of all solar panels and associated equipment; and,
   g) Location of the electrical disconnect for the PSES.

2) Evidence that the local electric utility has been informed of the customer’s intent to install a customer-owned solar energy system.

3) Evidence that the site plan has been submitted to the local fire protection district.

4) After an approved final inspection of all building permits, a certificate of compliance shall be issued.

3.07 Solar Farm Energy System (SFES)
A. Purpose and Intent.
The purpose of these regulations is to provide a uniform and comprehensive set of standards for the installation and use of SFESs designed for commercial energy production. The intent of these regulations is to protect the public health, safety, and community welfare while allowing development of solar energy resources for commercial purposes.

B. Special Use Permit (SUP)
Solar Farm Energy Systems shall require a SUP within the Ag-1 and M-1 zoning districts, and shall be subject to the procedures and standards included in Section 19.7 Special Permitted Uses, in the Henry County Zoning Ordinance unless otherwise stated in this Solar Ordinance.
C. Special Requirements.

SFESs are subject to the following requirements:

1) Height. Shall not exceed twenty (20) feet at maximum tilt of the solar panel(s).

2) Setbacks. The front yard setbacks shall be a minimum of fifty (50) feet from the edge of the right of way which form the outside perimeter of a SFES project area and one hundred fifty (150) feet from a residential zoned lot. The side yard setback of twenty (20) feet and a rear yard setback of forty (40) feet shall be maintained. Solar panels shall be at least one hundred fifty (150) feet from a residence that is not part of the special use permit.

   a) In the case of a solar farm energy system to be built on more than one parcel and parcels are abutting, a zero (0) side or rear setback shall be permitted to the property line in common with abutting parcel(s)

3) Fencing. A security fence of at least six (6) feet in height but no greater than eight (8) feet shall enclose the SFES.

4) Lighting. If lighting is provided at the project, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel.

5) Noise. Noise levels measured at the property line shall not exceed fifty (50) decibels when located adjacent to an existing residence or residential district. Noise levels shall be enforced by Illinois Pollution Control Board.

6) Installation and Design. The SFES shall be designed and located in order to prevent glare toward any inhabited buildings of adjacent properties as well as adjacent highways.

7) All wiring between solar panels and the solar farm facility substation including transmission lines shall be underground unless a variance is approved by Zoning Board of Appeals.

8) Outdoor storage. Only the outdoor storage of materials, vehicles, and equipment that directly support the operation and maintenance of the solar farm shall be allowed.

9) Proof an Agriculture Impact Mitigations Agreement (AIMA) has been executed with the Illinois Department of Agriculture as needed.

10) Endangered Species and Wetlands. Applicant shall seek natural resource consultation with the Illinois Department of Natural Resources (IDNR). The applicant shall submit with the special use application the results of the IDNR EcoCAT consultation. The cost of the EcoCAT consultation shall be paid by the applicant.

11) Weed control. Applicant must present an acceptable weed control plan for property inside and outside fenced area for entire property. The operating company during the operation of the Solar Farm must maintain the fence and adhere to the weed control plan.

12) Road Authority. Any roads that will be used for construction purposes and egress or ingress shall be identified and approved by the road jurisdiction. All applicable road and bridge weight limits shall be met during construction and maintenance. All applicable permits shall be acquired from the road jurisdiction prior to start of construction. The applicant shall submit with the special use application a letter of review for drive way access from the road jurisdiction(s).

13) Storm Water Management. Best management practices shall be employed to minimize erosion and sedimentation during construction of the solar farm energy...
systems. An erosion control and storm water management plan shall be provided and National Pollutant Discharge Elimination System Permit as needed.

14) Administration and Enforcement
   a) The Zoning/Building Administrator may enter any 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 statue, ordinance and code. Failure to provide access shall be deemed a violation of this ordinance.

D. Certification.
SFESs shall conform to applicable industry standards, including those from the UL and Federal Aviation Administration (FAA).

All applicable county, state, and national construction and electric codes shall be followed.

E. Safety.
All SFESs shall provide the following at all locked entrances:
   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 knox box with keys as needed.

F. Application.
The application for a Special Use permit for a Solar Farm Energy System shall include:
   1) A written summary of the project including a general description of the project and its approximate generating capacity.
   2) The name(s), address(s), and phone number(s) of the owner and SFES operator.
   3) A site plan of the SFES site showing:
      a) Boundaries of the site:
      b) All proposed SFES structures;
      c) Property lines;
      d) Setback lines; and,
      e) Location of all existing structures with their uses identified.
   f) All solar farms will be subject to a site assessment/soil identification standard, (LESA) this is intended to protect agricultural soils. The LESA information will be utilized for a special use permit application and not for map amendment rezoning purposes.
   g) In all undeveloped areas, the solar energy developer will be required to complete a consultation with the Illinois Department of Natural Resources (IDNR) through the Department’s EcoCat Program. The cost of this consultation shall be at the developer’s expense. The final Certificate from EcoCat shall be provided to the Henry County Zoning Department before a permit or Special Use permit will be issued.

   4) All other information contained in Section 19.7 of this Zoning Ordinance as may be required to file a petition.
G. Decommissioning Plan.
Prior to applying for a building permit, the SFES project owner/operator shall submit a decommissioning plan to the Henry County Zoning Department. The Zoning Department shall review the plan for completeness and refer it to the Henry County Planning Committee, and Zoning Board of Appeals, or any successor committee(s) designated to oversee zoning issues. The plan shall include:

1) A description of the plan to remove the SFES equipment and restore the land to its previous use upon the end of the project’s life, as stated in the Solar Ordinance granting the Special Use Permit or as stated in the Henry County Zoning Ordinance.

2) Provisions for the removal of structures, debris, and associated equipment on the surface and to a level of not less than five (5) feet below the surface, and the sequence in which removal is expected to occur;

3) Provisions for the restoration of the soil, vegetation and disturbed earth, which shall be graded and reseeded;

4) An estimate of the decommissioning costs certified by a licensed professional engineer in current dollars. The engineer providing this estimate shall submit it to Henry County Building and Zoning Office for review and all costs associated with this engagement shall be borne by the applicant;

5) A written financial plan approved to ensure that funds will be available for decommissioning and land restoration;

6) A provision that the terms of the decommissioning plan shall be binding upon the owner or operator and any of their successors, assigns, or heirs.

7) Upon review of the decommissioning plan, the Planning Committee, and Zoning Board of Appeals or its successor Committee(s), of the Henry County Board shall set an amount to be held in a bond, escrow, or other acceptable form of funds approved by the Committee. The plan shall state that Henry County shall have access to the project and to the funds to effect or complete decommissioning one (1) year after cessation of operations; and,

8) The applicant shall provide the county with a new estimate of the cost to decommission the SFES project every five (5) years under the same conditions as set forth in this Sections above. Salvage value of structures, electrical wire and other appurtenances shall be considered with in the cost estimate calculations. Upon receipt of this new estimate, the county may require, and the applicant, owner, and/or operator of the SFES project shall provide, a new financial plan for decommissioning acceptable to the county. Failure to provide an acceptable financial plan shall be considered a cessation of operations.

9) Release of Financial Security. Financial security shall only be released when the Building and Zoning Administrator determines, after inspection, that the conditions of the decommissioning plan have been met.

H. Certificate of Compliance.
Before a building permit is issued, the following shall be submitted to the appropriate Henry County permitting office for review:

1) Site plan with all items previously required in the petition. Additional items to be included are:
a) All SFES structures including, but not limited to, the project solar panels, substations, interconnect substations, and location and voltage of any overhead transmission lines;
b) Ancillary equipment;
c) Transmission lines;
d) Wells;
e) Septic fields;
f) Field tile location;
g) Existing easements;
h) Floodplain location and elevation; and,
i) Wetland location, if any.
2) Emergency Plan. The site and emergency plan shall be submitted to the local fire protection district(s) and/or department(s) whose jurisdiction is included in whole or in part within the SFES project area. Any specialized training necessary will be provided at the operator’s expense.
3) All required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this ordinance.
4) After an approved final inspection of all building permits, a certificate of compliance shall be issued.

3.08 Indemnification and Liability. The applicant, owner, and/or operator of the SFES project shall defend, indemnify, and hold harmless the County of Henry and its officials from and against any and all claims, demands, losses, suites, causes of action, damages, injuries, costs, expenses, and liabilities whatsoever, including attorney’s fees, without limitation, arising out of acts or omissions of the applicant, owner, and/or operator associated with the construction and/or operations of the SFES project.

3.09 Cessation of Operations. If any SFES provided for in this ordinance has not been in operation and producing electricity for at least three hundred and sixty five (365) days, it shall be removed. The Henry County Zoning Administrator shall notify the owner to remove the system. Within sixty (60) days, the owner shall either submit evidence showing that the system has been operating and producing electricity or remove it. If the owner fails to or refuses to remove the solar energy system, the violation shall be referred to the Henry County State’s Attorney for enforcement.

3.10 Violations & Penalties.
A. Violations. In case any building or structure is erected, constructed, reconstructed, altered, repaired, converted or maintained or any building, structure of land is used in violation of this Division or of any ordinance, resolution or other regulation made under authority conferred thereby, the Henry County State’s Attorney, or any person the value or use of whose property is or may be affected by such violation, in addition to other remedies, may institute any appropriate action or proceedings in the circuit court to prevent such unlawful erection, construction, reconstruction, alteration, repair, conversion, maintenance or use, to restrain, correct, or abate such violation, to prevent the occupancy of said building, structure or land or to prevent any illegal act, conduct, business, or use in or about such premises.
B. **Penalties.** Any person who violates the terms of any ordinance adopted under the authority of this Division shall be guilty of a petty offense punishable by a fine not to exceed $500, with each week the violation remains uncorrected constituting a separate offense.

**3.11 Solar Farm Energy System owner/County/Property Owner Restoration Agreement.**

A. Reasonable evidence of financial ability to construct the solar energy system as determined by the County Board is a condition precedent to the issuance of any special use or building permit under this ordinance.

B. Henry County and/or the property owner leasing land for a solar energy system shall require a performance bond, surety bond, escrow account, letter of credit or other financial assurance to Henry County and/or property owner for each solar energy system that guarantees the performance of the restoration agreement, as referenced in Decommissioning Plan.

**3.12 Related Rules and Regulations.**
Each Solar Energy system shall comply with all applicable local, state and federal requirements.

**3.13 Severability.**
The provisions of this ordinance are severable, and the invalidity of any section, subdivision, paragraph or other part of this ordinance shall not affect the validity or effectiveness of the remainder of the ordinance.

Reviewed/approved by the Henry County State’s Attorney

[Signature]

State’s Attorney

[Date]

Approved and adopted by the Henry County Board on this 19\textsuperscript{th} day of April, 2018.

[Signature]

Chairman

[Signature]

County Clerk

Rejected by the Henry County Board on this ___ day of ____, 2018.

[Signature]

Chairman

[Signature]

County Clerk