

SOLAR ORDINANCE OF
BROWN COUNTY
ILLINOIS

Adopted: May 13, 2019

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ARTICLE I

1.01 TITLE

This ordinance is the solar ordinance of Brown County, References in this document to “the solar code”, “the solar ordinance”, “this code”, or “this ordinance” shall be deemed to be references to the Solar Ordinance of Brown County as amended from time to time.

1.02 PURPOSE

The purpose of this ordinance is to facilitate the construction, installation, and operation of Solar Energy Systems (SES) in Brown County in a manner that promotes economic development and ensures the protection of health, safety, and welfare while also avoiding adverse impacts to important areas such as agricultural lands, conservation lands, and other sensitive lands. This ordinance is not intended to abridge safety, health, or environmental requirements contained in other applicable codes, standards, or ordinances.

2.01 DEFINITIONS

ACCESSORY: As applied to a building, structure, or use, one which is on the same lot with, incidental to, and subordinate to the main or principal structure or use and which is used for purposes customarily incidental to the main or principal structure, or the main or principal use.

BUILDING INTEGRATED PHOTOVOLTAIC SYSTEMS: A solar energy system that consists of integrating photovoltaic modules into the building structure such as the roof or facade and which does not alter the relief of the roof.

COMMERCIAL/LARGE SCALE SOLAR FARM: A utility scale commercial facility that converts sunlight to electricity, whether by photovoltaic, concentrating solar thermal devices, or various experimental technologies for onsite or offsite use with the primary purpose of selling wholesale or retail generated electricity.

GROUND MOUNT SOLAR ENERGY SYSTEM: A solar energy 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.

PHOTOVOLTAIC SYSTEM: A solar energy system that produces electricity by the use of semiconductor devices called photovoltaic cells that generate electricity whenever light strikes the cells.

QUALIFIED SOLAR INSTALLER: A trained and qualified electrical professional who has the skills and knowledge related to the construction and operation of solar electrical equipment and installations and has received safety training on the hazards involved.

ROOF MOUNT: A solar energy system in which solar panels are mounted on top of a building roof as either a flush mounted system or as modules fixed to frames which can be tilted toward the south at an optimal angle.

SOLAR ACCESS: Unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.

SOLAR COLLECTOR: A device, structure, or part of a device or structure for which the primary purpose is to transform solar radiant energy into thermal, mechanical, chemical or electrical energy.

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. The term applies, but is not limited to, solar photovoltaic systems, solar thermal systems, and solar hot water systems.

SOLAR STORAGE BATTERY/UNIT: A component of a solar energy device that is used to store solar generated electricity or heat for later use.

SOLAR THERMAL SYSTEMS: Solar thermal systems directly heat water or other liquid using sunlight. The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating swimming pools.

3.01 GROUND MOUNT AND ROOF MOUNT (SES) PERMITTED AS AN ACCESSORY USE.

Ground Mount and Roof Mount (SES) shall be permitted as an accessory use by a building. An application shall be submitted to the Brown County Clerk subject to the following requirements:

1. Height:
 - a. Building or roof mounted solar energy systems shall not exceed 6 feet above the existing roof line.

- b. Ground or pole-mounted solar energy systems shall not exceed 20 feet in height when oriented at maximum tilt.
- c. Ground mounted solar energy systems may be placed in the front yard, but shall not exceed 30 inches above grade.

2. Setbacks:

- a. Ground mounted solar energy systems shall meet an accessory structure setback for a minimum of ten (10) feet.
- b. Ground mounted solar energy systems shall not extend beyond the side yard or rear yard setback when oriented at minimum design tilt.
- c. In addition to building setbacks the collector surface and mounting devices for roof mounted systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built, unless the collector or mounting system has been engineered to safely extend beyond the edge, and setback requirements are not violated. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side yard exposure.

3. Reflection Angles:

Reflection angles for solar collectors shall be oriented such that they do not project glare into adjacent properties.

4. Visibility:

Solar energy systems shall be located in a manner to reasonably minimize view blockage and shading for surrounding properties while still providing adequate solar access for collectors.

5. Safety:

- a. Roof or building mounted solar energy systems, excluding building integrated systems, shall allow for adequate roof access for firefighting purposes to areas upon which the panels are mounted.
- b. All solar energy systems installations shall be performed by a qualified solar installer.
- c. Any connection to the public utility grid shall be inspected and approved by the appropriate public utility.
- d. All solar energy systems shall be maintained and kept in good working order. If it is determined by the County Board Chairman, or his/her duly appointed agent, that a solar energy system is not being maintained, kept in good working order, or is no longer being utilized to perform as intended

for 6 consecutive months, the property owner shall be given 30 day notice for removal of the unit and all equipment. If the solar energy system is not removed within 30 days the Brown County State's Attorney shall issue a Notice of Violation.

6. Approved Solar Components:

Electric solar energy system components shall have a UL listing or approved equivalent. A UL listing means representative samples have been tested and meets safety standards. Solar hot water systems shall have an SRCC rating. The SRCC rating standardizes comparisons of solar thermal products.

7. Restrictions on Solar Energy Systems Limited:

Consistent with 765 ILCS 165. et.seq., no homeowner's agreement, covenant, common interest community, or other contracts between multiple property owners within a subdivision of unincorporated Brown County shall prohibit or restrict homeowners from installing solar energy systems.

4.01 BUILDING INTEGRATED SYSTEMS.

Building Integrated Systems shall be permitted outright.

5.01 COMMERCIAL/LARGE SCALE SOLAR FARM (SES).

Ground Mount solar energy systems that are the primary use of the lot, designed for providing energy to off-site uses, or export to the wholesale markets require a Permit issued by the Brown County Board. The following information shall also be submitted as part of the application.

1. A site plan with existing conditions showing the following:

- a. Existing property lines with the names of adjacent property owners and the current use of those properties.
- b. Existing public and private roads, showing widths of the road and any associated easements.
- c. Location and size of any wells and sewage treatment systems, both in use and abandoned.
- d. Location of utilities and pipelines.
- e. Existing buildings and impervious surfaces.
- f. A contour map showing topography. A contour map of surrounding properties may also be required. Contour maps should be at 2 foot

intervals where available.

- g. Existing vegetation (list type and percent of coverage: i.e. cropland/plowed fields, grassland, wooded areas, etc.).
- h. Any delineated wetland boundaries.
- i. A copy of the current FEMA FIRM maps that shows the subject property including one hundred year floor elevation and any regulated flood protection elevation, if available.
- j. Surface water drainage patterns.
- k. The location of any subsurface drainage tiles, lines, pipes, tubing, etc.
- l. The location of mines both active and abandoned.

2. A site plan of proposed conditions showing the following:

- a. Location and spacing of the solar panels and their setbacks.
- b. Location of access roads.
- c. Location of underground or overhead electric lines connecting the solar farm to a building, substation, or other electric load.
- d. New electrical equipment other than at the existing building or substation that is to be the connection point for the solar farm.

3. Fencing and Weed/Grass Control:

- a. The applicant shall submit an acceptable weed/grass control plan for property inside and outside the fenced area for the entire property. The operating company or successor during the operation of the solar farm shall adhere to the approved weed/grass control plan.
- b. Perimeter fencing having a maximum height of eight (8) feet shall be installed around the boundary of the solar farm. The fence shall contain appropriate warning signage that is posted such that it is clearly visible on the site. The following shall be provided at the locked entrance:
 - i. A visible "High Voltage" warning sign
 - ii. Name(s) and phone number(s) for the electric utility provider
 - iii. Name(s) and phone number(s) for the site operator
 - iv. Name(s) and phone number(s) in case of emergency
 - v. The facility's 911 address and GPS coordinates
 - vi. A knox box with keys

- c. The applicant shall maintain the fence and adhere to the approved weed/grass control plan. If the Operating Company does not adhere to the plan, a fine of \$250 per week will be assessed until the operating company or successor complies with the weed/grass control and fencing requirements.

4. Lighting

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

5. 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.

6. Manufacturers Specifications:

The manufacturer's specifications and recommended installation methods for all major equipment, including solar panels, mounting systems, and foundations for poles and racks shall be followed unless good cause for deviation is shown.

7. Connection and Interconnection:

- a. A description of the method of connecting the solar array to a building or substation.
- b. Utility interconnection details and a copy of written notification to the utility company requesting the proposed interconnection.

8. Setbacks.

A minimum of fifty (50) feet must be maintained on all property lines. Solar panels shall be kept at least three hundred (300) feet from a residential dwelling that is not part of the Permit.

9. Fire Protection:

A fire protection plan for the construction and the operations of the facility, and emergency access to the site.

10. Endangered Species and Wetland:

Solar Farm developers shall be required to initiate a natural resource review consultation with the Illinois Department of Natural Resources (IDNR) through the Department's online EcoCat Program. Areas reviewed through this process will be endangered species and wetlands.

The cost of the EcoCat consultation shall be borne by the developer.

11. Road Use Agreements.

All routes on either county or township road district roads that will be used for the construction and maintenance purposes shall be identified on the site plan. All routes for either ingress or egress need to be shown. The routing shall be approved subject to the approval of the Brown County Highway Engineer. The solar farm developer must complete and provided a preconstruction baseline survey to determine existing road conditions for assessing potential future damage due to development related traffic. The developer shall provide a road repair plan to ameliorate any and all damage, installation, or replacement of roads that might be required by the developer. The developer shall provide a letter of credit or surety bond in an amount and form approved by the appropriate highway authority(s) officials when warranted.

12. Decommissioning of the Solar Farm:

- a. The developer shall provide a decommissioning plan for the anticipated service life of the facility or in the event the facility is abandoned or had reached its life expectancy. If the solar farm is out of service or not producing electrical energy for a period of twelve (12) months, it will be deemed nonoperational and decommissioning and removal of that facility will need to commence according to the decommissioning plan as provided and approved. A cost estimate for the decommissioning of the facility and restoration of land shall be prepared by a professional engineer or contractor who has expertise in the removal of solar farms. The decommissioning cost shall be made by a cash, surety bond, escrow account, or irrevocable letter of credit before construction commences. Further, a restoration plan shall be provided for the site with the application. The decommissioning plan shall have the following provided:
 - i. Removal of the following within six (6) months:
 - a. All solar collectors and components, above ground improvements, and outside storage.
 - b. Foundations, pads, and underground electrical wires; reclaim site to a depth of no less than five (5) feet below the surface of the ground.
 - c. Hazardous material from the property and dispose of in accordance with Federal and State law.
 - ii. The decommissioning and restoration plan shall also recite an agreement between the applicant and the county that:
 - a. The financial resources for decommissioning shall be in the

form of a surety bond, escrow account, or other acceptable form of funds approved by the County Board.

- b. A written agreement will be prepared which establishes upon what conditions the funds will be disbursed.
 - c. The County shall have access to the account funds for the expressed purpose of completing decommissioning if decommissioning is not completed by the applicant within six (6) months of the end of project life or facility abandonment.
 - d. The County is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.
 - e. The County is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the County's right to seek reimbursement from applicant or applicant's successor for decommissioning costs in excess of the amount deposited in the account and to file a lien against any real estate owned by the applicant or applicant's successor, or in which they have an interest, for the amount of the excess, and to take all steps allowed by law to enforce said lien.
 - f. The terms of the decommissioning plan shall be binding upon the owner/operator and any of their successors, assigns, or heirs.
 - g. Financial provisions shall not be so onerous as to make solar power projects unfeasible.
- b. The developer shall provide the County with a new estimate of the cost of decommissioning the SES project every five years. Salvage value of structures, electrical wire, and other appurtenances shall be considered within the cost estimate calculations. Upon receipt of the new estimate, the County will have the right to require a new financial plan for decommissioning acceptable to the County. Failure to provide an acceptable financial plan shall be considered a cessation of operations.
 - c. The developer must agree to an Agricultural Impact Mitigation Agreement (AIMA) with the Illinois Department of Agriculture.

6.01 LIABILITY.

- 1. The applicant, owner, and/or operator of the SES shall defend, indemnify, and hold harmless the County of Brown 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 operation of the SES.

- 2. The owner and/or operator of the solar farm shall maintain a current general liability policy covering bodily injury and property damage and name Brown County as an additional insured with limits of at least two million dollars (\$2,000,000) per occurrence and five million (\$5,000,000) in aggregate with a deductible of no more than five thousand dollars (\$5,000). Any loss of coverage must be reported within three (3) working days of loss. Failure to maintain coverage shall be considered a cessation of operations.

7.01 ADMINISTRATION AND ENFORCEMENT.

The Brown County Board shall enforce the provisions of this section through an inspection of the solar farm every year. The Board may appoint an agent who shall be granted the power and authority to enter upon premises of the solar farm at any time by coordinating a reasonable time with the operator and/or owner of the facility. Any person, firm, or corporation who violates, disobeys, omits, neglects, refuses to comply with, or resists enforcement of any of the provisions of this section may face fines of not less than one hundred (\$100) dollars nor more than five hundred (\$500) dollars for each offense. A separate and distinct offense shall be regarded as committed each day the violation remains uncorrected.

8.01 FEES CHARGED FOR BUILDING PERMITS.

The fees for processing the applications for building permits and mechanical permits shall be collected by the Brown County Clerk who shall be accountable to the County for such fees as follows:

| | |
|----------------------------|--|
| 1-10 kilowatts (kW-dc) | \$75 |
| 11-20 kilowatts (kW-dc) | \$150 |
| 21-50 kilowatts (kW-dc) | \$300 |
| 51-100 kilowatts (kW-dc) | \$500 |
| 101-500 kilowatts (kW-dc) | \$1,000 |
| 501-1000 kilowatts (kW-dc) | \$3,000 |
| 1 + Megawatt (MW-dc) | \$3,000 (first MW) + \$500 per additional MW |

* Solar Thermal Systems converted BTU to kilowatts (kW-dc)

9.01 PENALTIES.

A failure to obtain applicable building permit(s) for the construction of a solar energy system or failure to comply with the requirements of a building permit or the provisions of this code shall be deemed a violation of the code. The State's Attorney may bring action to enforce compliance of the requirements of this chapter by filing an action in Brown County Court for an injunction requiring conformance with this chapter or seek such other Order as the Court deems necessary to secure compliance with this chapter.

Any person found guilty of violating, disobeying, omitting, neglecting, or resisting any provisions of this code, upon conviction thereof shall be guilty of a petty offense and shall be punished by a fine of not less than one hundred (\$100) dollars nor more than five hundred (\$500) dollars. A separate and distinct offense shall be regarded as committed each day the violation remains uncorrected.

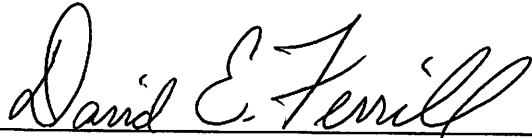
Nothing herein shall prevent the County from seeing such other legal remedies available to prevent or remedy any violations of this code.

10.01 VALIDITY

1. This ordinance shall be a supplemental to, and shall not nullify or usurp any state or federal law. This ordinance shall supersede any and all resolutions or ordinances that have been passed prior.
2. If any section, paragraph, sentences, clause or other portion of this ordinance is held or deemed to be unenforceable or invalid, then such holdings or finding of unenforceability or invalidity shall not affect the validity of the remaining provisions of this ordinance.
3. This ordinance shall become effective immediately. Be it further ordained that this ordinance be recorded in the permanent records of the Brown County Board and published according to law.

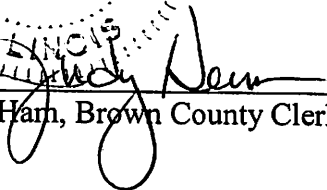
APPROVED AND ADOPTED at a regular meeting of the Brown County Board, this 13th day of May, 2019.

| | |
|----------|-----------|
| <u>8</u> | Yes Votes |
| <u>0</u> | No Votes |
| <u>1</u> | Absent |



DAVID FERRILL, Chairman





Judy Ham, Brown County Clerk

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