

ORDINANCE No. 2021-21

AN ORDINANCE AMENDING TITLE 17 OF THE BYRON MUNICIPAL CODE

AN ORDINANCE PROVIDING FOR THE INSTALLATION AND OPERATION OF  
SOLAR ENERGY SYSTEMS

WHEREAS, the Byron City Council has determined the need for regulations governing the construction, installation, and operation of solar energy systems; and

WHEREAS, the Planning and Zoning Department of the City of Byron has drafted a Solar Energy System Ordinance to address this need; and

WHEREAS, the Byron City Council has determined that it is in the best interests of the citizens of the City of Byron to amend Title 17 of the Byron Municipal Code to adopt the Solar Energy System Ordinance;

NOW THEREFORE, be it ordained by the Mayor and City Council of the City of Byron, Illinois as follows:

That Title 17 of the Byron Municipal Code shall be amended by adding Chapter 17.50, Regulation of Installation and Operation of Solar Energy Systems, to read as follows:

CHAPTER 17.50

REGULATION OF INSTALLATION AND OPERATION OF SOLAR ENERGY SYSTEMS

**17.50.010 Purpose and Scope**

The purpose of this ordinance is to facilitate the construction, installation, and operation of Solar Energy Systems in Byron IL 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.

**17.50.020 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 as the roof or façade 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 photovoltaics, 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 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.

*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 pool water.

### **17.50.030 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 permit in all zoning districts. An application shall be submitted to the Zoning Office demonstrating compliance with the Byron Zoning Ordinance in addition to the following requirements:

#### A. Height:

1. Building or roof mounted solar energy systems shall not exceed the maximum allowed height for principal structures in their respective zoning district.
2. Ground or pole-mounted solar energy systems shall not exceed 15 feet in height when oriented at maximum tilt.

#### B. Setbacks:

1. Ground mounted solar energy systems shall meet the accessory structure setbacks for the zoning district in which the unit is located.
2. Ground mounted solar energy systems shall not extend beyond the side yard or rear yard setback when oriented at minimum design tilt.
3. 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.

#### C. Reflection Angles:

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

#### D. Visibility:

1. 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.

#### E. Safety:

1. 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.

2. All solar energy systems installations shall be performed by a qualified solar installer.
3. Any connection to the public utility grid shall be inspected and approved by the appropriate public utility.
4. All solar energy systems shall be maintained and kept in good working order. If it is determined by the Zoning Administrator 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 Zoning Administrator shall issue a Notice of Violation, subject to fines.

F. Approved Solar Components:

1. 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.

G. Restrictions on Solar Energy Systems Limited:

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

**17.50.040 Building Integrated Systems**

Building Integrated Systems shall be permitted outright in all zoning districts.

**17.50.050 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 market require a Special Use permit in the rural residential and industrial districts. The following information shall also be submitted as part of the application:

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

1. Existing property lines with the names of adjacent property owners and the current use of those properties.
2. Existing public and private roads, showing widths of the road and any associated easements.

3. Location and size of any wells and sewage treatment systems, both in use and abandoned.
4. Location of utilities and pipelines.
5. Existing buildings and impervious surfaces.
6. 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.
7. Existing vegetation (list type and percent of coverage: i.e. cropland/plowed fields, grassland, wooded areas, etc.)
8. Any delineated wetland boundaries.
9. A copy of the current FEMA FIRM maps that shows the subject property including the one hundred year flood elevation and any regulated flood protection elevation, if available.
10. Surface water drainage patterns.
11. The location of any subsurface drainage tiles, lines, pipes, tubing, etc.
12. The location of mines both active and abandoned.

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

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

C. Fencing and Weed/Grass Control:

1. 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.

2. 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:
  - a. A visible “High Voltage” warning sign
  - b. Name(s) and phone number(s) for the electric utility provider
  - c. Name(s) and phone number(s) for the site operator
  - d. Name(s) and phone number(s) in case of emergency
  - e. The facility’s 911 address and GPS coordinates
  - f. A Knox box with keys
3. The applicant shall maintain the fence and adhere to the approved weed/grass control plan and comply with Section 8.40 of the Byron Municipal Code.

D. Lighting:

1. 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.

E. Outdoor Storage:

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

F. Manufacturers Specifications:

1. The manufacturer’s specifications and recommended installation methods for all major equipment, including solar panels, mounting systems, and foundations for poles and racks.

G. Connection and Interconnection:

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

H. Setbacks:

1. A minimum of fifty (50) feet must be maintained on all property lines. Solar panels shall be kept at least five hundred (500) feet from a residence that is not part of the Special Use permit.

I. Fire Protection

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

J. Endangered Species and Wetland:

1. 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.

K. Road Use Agreements:

1. All routes on either county or 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 Byron City Engineer. The solar farm developer must complete and provide 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.

L. Decommissioning of the Solar Farm:

1. 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 the solar farm. 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:

- a. Removal of the following within six (6) months:

- 1) All solar collectors and components, above ground improvements, and outside storage.

- 2) Foundations, pads and underground electrical wires; reclaim site to a depth of no less than five (5) feet below the surface of the ground.
- 3) Hazardous material from the property and dispose in accordance with Federal and State law.

b. The decommissioning and restoration plan shall also recite an agreement between the applicant and the city that:

- 1) 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 Zoning Administrator.
- 2) A written agreement will be prepared which establishes upon what conditions the funds will be disbursed.
- 3) The City 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.
- 4) The City is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.
- 5) The City is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the City's right to seek reimbursement from applicant or applicant 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 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.
- 6) The terms of the decommissioning plan shall be binding upon the owner/operator and any of their successors, assigns, or heirs.
- 7) Financial provisions shall not be so onerous as to make solar power projects unfeasible.

2. The developer shall provide the City 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 City 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.

3. The developer must agree to an Agricultural Impact Mitigation Agreement (AIMA) with the Illinois Department of Agriculture.

#### **17.50.060 Liability**

- A. The applicant, owner, and/or operator of the SES shall defend, indemnify, and hold harmless the City and its officials from and against any and all claims, demands, losses, suits, 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.
- B. The owner and/or operator of the solar farm shall maintain a current general liability policy covering bodily injury and property damage and name the City of Byron 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.

#### **17.50.070 Administration and Enforcement**

The Zoning Administrator shall enforce the provisions of this section through an inspection of the solar farm every year. The Zoning Administrator is hereby granted the power and authority to enter upon the 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.

#### **17.50.080 Fees Charged for Building Permits**

The fees for processing the applications for building permits and mechanical permits shall be collected by the Zoning Administrator who shall be accountable to the City for such fees as follows:

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

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

**17.50.090 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 the Ogle 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 City from seeking such other legal remedies available to prevent or remedy any violations of this code.

**17.50.100 Validity**

- A. This ordinance shall be a supplement 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.
- B. 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 or unenforceability or invalidity shall not affect the validity of the remaining provisions of this ordinance.
- C. All other ordinances of the City shall remain in effect as previously enacted except that those ordinances, or parts thereof, in conflict are hereby repealed to the extent of such conflict.
- D. This ordinance shall be in full force and effect from after its passage, approval, and publication in pamphlet form as provided by law.

PASSED UPON MOTION BY Community Services Committee

SECONDED BY N/A

BY ROLL CALL THIS 16th DAY OF February 2021 2022

	AYE	NAY	ABSENT	ABSTAIN
Emily Gerdes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zeke Hobbie	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jessica Nehring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Todd Isaacs	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mike Gyorkos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Christy Hanlin	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mittzi Fulrath	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheryl Metz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPROVED February 16, 2021/2022

ATTEST:

Caryn Huber  
Caryn Huber, City Clerk, City of Byron

John Rickard  
John Rickard, Mayor, City of Byron