

ORDINANCE NO. \_\_\_\_\_

SOLAR ENERGY ORDINANCE

Section 1. Commercial Solar Energy Systems, is added to read as follows:

The Commercial Solar Energy Systems Standards apply to the following zoning district:

AGRICULTURE

- A. Purpose. It is the purpose of these performance standards to enable Starke County to: regulate the permitting of commercial solar energy systems; be informed of the placement of commercial solar energy systems; preserve and protect public health and safety; allow for the orderly development of land; and protect property values in Starke County.
- B. Commercial Solar Energy Systems (CSES) and Private Residential Solar Energy Systems (PRSES) are defined in section 3 of this ordinance
- C. Permitted Districts. Approvals required for a CSES are as follows:  
Zoning District Agriculture
- D. Parcel Line Setbacks. Any CSES equipment, excluding any security fencing, poles, roads, and wires, necessary to connect to facilities of the electric utility, must be set back in accordance with the accessory structure standards for the zoning district. Ground mounted Solar Panels/arrays shall be set back a minimum of 50 feet from any adjoining property line and a minimum of 100 feet from the center of any public road. These setbacks shall not apply between adjoining participating parcels. Additionally, such CSES Equipment must be set back a minimum of 200 feet from the foundation of a primary dwelling unit located on a parcel not participating in the CSES. These setbacks may be waived in writing by adjacent property owners.
- E. Height Limit. The height of any CSES ground mounted solar equipment is limited to 35 feet, as measured from the highest natural grade below each solar panel. If a switchyard or substation is required to connect the project to the electrical grid, the switchyard's/substation's design, including height will be in accordance with applicable electrical codes.
- F. Noise Limit. A noise study shall be performed and included in the application. Noise caused by an operational CSES shall not exceed 55 dBA above background, as measured at a dwelling unit measured on an hourly average basis (Leq) (1hour). These limits may be waivable by any adjoining property owners.
- G. Landscape Buffer. Evergreens shall be placed along the perimeter of the CSES (outside of the fence), including along road frontage. This requirement shall not apply between adjoining participating parcels. This requirement may be waived by an adjoining property owner, but no waiver applies along road frontage.
- H. Application Procedure. Applications for CSES permits shall be filed on forms provided by the Zoning Administrator.
- I. Application and Permits.  
Any CSES shall be required to submit a preliminary/conceptual commercial site plan to the Technical Advisory Committee for review. Such review shall occur within 30 days of filing.

Once an application has been approved, an Improvement Location Permit shall be issued. The following shall also be required:

1. Solar System specifications, including typical manufacturer and model and maximum spatial extent (height and fence lines).
2. Preliminary array/module design and site plans with the maximum spatial extent of the CSES and its perimeter fence indicated.
3. Certification that layout, design, and installation conform to and comply with all applicable industry standards, such as the National Electrical Code (NEC) (NFPA-70), the American National Standards Institute (ANSI), the Underwriter's Laboratories (UL), the American Society for Testing & Materials (ASTM), the Institute of Electric & Electronic Engineers (IEEE), the Solar Rating & Certification Corporation (SRCC), the Electrical Testing Laboratory (ETL), and other similar certifying organizations, the Federal Aviation Administration (FAA), the Indiana Building Code (IBC), and any other standards applicable to solar energy systems. The manufacturer specifications for the key components of the CSES shall be submitted with the application.
4. All ground-mounted electrical and control equipment for CSES shall be labeled and secured to prevent unauthorized access.
5. All CSES shall be installed so as not to cause significant wire or wireless communication signal disturbance.
6. All CSES shall be designed to avoid concentrated and prolonged glare onto abutting structures and roadways.
7. All ground-mounted electrical and control equipment for CSES shall be fenced to prevent unauthorized access. The solar array and/or modules shall be designed and installed to prevent access by the public, and access to same shall be through a locked gate.
8. To the greatest practical extent, all electrical wires and utility connections for CSES shall be installed underground, except for transformers, inverters, switchyards/substations, and controls. The Planning Director will take into consideration prohibitive cost and site limitations in making his or her determination.
9. Exterior lighting for CSES shall be limited to that required for safety, inspection/repair/maintenance, and operational purposes.
10. All signs, other than the manufacturer's or installer's identification, appropriate warning (including safety and trespassing) signs, or owner identification on a solar panel array and/or modules, building, or other structure associated with a CSES, shall be prohibited.
11. The CSES applicant shall certify that the applicant will comply with the utility notification requirements contained in Indiana law and accompanying regulations through the Indiana Public Utility Commission, unless the applicant intends, and so states on the application, that the system will not be connected to the electricity grid.
12. Prior to the start of construction, a Decommissioning Agreement must be executed by the applicant which stipulates that decommissioning of the entire facility will begin upon the occurrence of twelve consecutive months of no power generation at the facility. In order to facilitate and ensure appropriate removal of the energy generation equipment of a CSES when it reaches the end of its useful life, or if the applicant ceases operation of the facility, applicants must file a decommissioning agreement which details the means by which decommissioning will be accomplished and the timeline for completion. This agreement must include a description of implementing the decommissioning, a description of the work required, a cost estimate for decommissioning, a schedule for contributions to a decommissioning fund, and a

demonstration of financial assurance. Salvage value shall be considered in determining decommissioning cost. In the event of a force majeure or other event which results in the absence of electrical generation for twelve months, by the end of the twelfth month of non-operation the applicant must demonstrate to Starke County that the project will be substantially operational producing electricity with-in twenty-four months of the force majeure or other event. If such a demonstration is not made to Starke County's satisfaction the decommissioning must be initiated eighteen months after the force Majeure or other event. The County considers a force Majeure to mean fire, earthquake, flood, tornado, or other acts of God and natural disasters, and war, civil strife or other similar violence. The operator of any CSES shall secure and provide a performance bond, escrow deposit, or other financial assurance in a form acceptable to the County in an amount determined by a third-party engineering firm to ensure the proper decommissioning and removal of the CSES. The applicant will have the financial assurance mechanism in place prior to the start of the construction and will re-evaluate the decommissioning cost and financial assurance at the end of years five, ten and fifteen. Every five years after the start of construction, updated proof of acceptable financial assurance must be submitted to Starke County for review. Proof of acceptable financial assurance will be required prior to the start of commercial operation.

13. The site plan should be submitted in accordance with the plan requirements of the Starke County Storm Drainage, Erosion and Sediment Control Ordinance (Rule 5)
  14. Drainage Board approval shall be required for an CSES and must be located a minimum of 75 feet from any county ditch and shall not be built over any county tile lines.
  15. Must follow same rules as building in a flood plain, including raising elevation of structures if deemed necessary.
  16. Applicant agrees to pay all attorney fees and costs in the enforcement of the terms of this ordinance.
- J. Public Improvements and Repairs
1. Road Capacity. During construction, roads shall remain open at all times except for periods of time less than twenty (20) minutes unless notice is provided as required here. Expected loss of capacity (i.e., temporary closures) greater than twenty (20) minutes shall require notice to neighboring and affected property owners at least twenty-four (24) hours prior to the temporary closure, and either a detour to be established or personnel to redirect traffic to alternate routes during the temporary closure unless closed for the day by the Starke County Highway Department. Any necessary temporary closures and proposed detours shall be made known to the Highway Department at least twenty-four (24) hours prior to the temporary closure or as otherwise agreed.
  2. Commitment to Avoid Disruptions. In addition to a surety, the CSES operator shall sign an affidavit indicating they will strive to avoid:
    - a. Damage to roads;
    - b. Unreasonable disruption of vehicular circulation around the development site; and
    - c. Unreasonable disruption of power or other utility services to surrounding areas.
- K. Public Notice. The CSES operator shall identify all State highways and local roads to be used in the transport of equipment and parts for construction of the CSES. It shall also prepare a time line and phasing plan for construction and identify any known road closures. This information shall be released to the local newspapers as notice to persons who may be

- affected. This information shall also be conveyed to local law enforcement, emergency services, public school corporations, the United States Postal Service , and the regional office of the Department of Transportation.
- L. **As-Built Plans Requirement.** Upon completion of all development, the exact measurements of the location of utilities and structures erected during the development are necessary for public record and shall therefore be recorded. The applicant, owner, or operator shall submit a copy of the Final Construction Plans (as-Built plans), as amended, to the Planning Administrator with the exact measurements thereon shown. The Planning Administrator, after being satisfied that the measurements are substantially the same as indicated on the originally approved final plans, shall approve, date and sign said Construction Plans for the project, which the applicant, owner, or operator shall then record.
  - M. **Change in Ownership.** It is the responsibility of the owner or operator listed in the application to inform the Advisory Plan Staff of all changes in ownership and operation during the life of the project, including the sale or transfer of ownership or operation.

Section 2. Location Improvement Permit Fees, is amended by the addition of Solar Energy System Fees as follows:

- 1. **CSES Permits**
  - a. Fees applicable to Site Plan submittal will also be required, as well as any and all other permits as required by Starke County.
  - b. An ILP application for a CSES permit shall be accompanied by a fee of:
 

i.	0-10 kilowatts	\$150.00
ii.	11-50 kilowatts	\$300.00
iii.	51-100 kilowatts	\$600.00
iv.	101-500 kilowatts	\$1,200.00
v.	501-1,000 kilowatts	\$2,750.00
vi.	1,001-2,000 kilowatts	\$6,000.00
vii.	Over 2,000 kilowatts	\$6,000.00 + 200.00 for each additional 1000 kw
  - c. Maximum Fee of \$30,000.00
- 2. **PRSES Permits.** Application shall be accompanied by an accessory use fee of \$150.00.

Section 3. Definitions:

“Commercial Solar Energy Systems (CSES)” means an area of land or other area used by a property owner, multiple property owners, and/or corporate entity for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power, and supply electrical or thermal power, primarily or solely for off-site utility grid use, and consisting of one or more free-standing ground-mounted, solar arrays or modules, battery storage facilities, solar related equipment, and ancillary improvements, including substations. CSES are a minimum of 10 acres in total area.

“Private Residential Solar Energy Systems (PRSES)” means an area of land or other area used for a solar collection system principally used to capture solar energy convert it to electrical energy or thermal power, and supply electrical or thermal power, primarily or solely for on-site residential use, and consisting of one or more free-standing, ground or roof mounted, solar arrays or modules, or solar related equipment, intended to primarily reduce on-site consumption of utility power and/or fuels. PRSES shall be permitted in all zoning districts and shall be treated as accessory structures in each zoning district in which they are erected. The maximum size of PRSES is limited to the maximum size

allowed for an accessory structure in each zoning district (other accessory structures shall not be included in maximum size calculations).

Section 4. This Ordinance is effective upon passage this \_\_\_\_\_ of \_\_\_\_\_ 2019

Starke County Plan Commission Public Hearing Held On May 15, 2019

Recommended and Approved By The Starke County Plan Commission On May 15, 2019

Presented To The Starke County Commissioners On \_\_\_\_\_

This Ordinance shall be effective upon its passage and posting of law.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

Starke County Board of Commissioners.

\_\_\_\_\_  
Charles Chesak, president

\_\_\_\_\_  
Kathryn Norem, vice president

\_\_\_\_\_  
Bryan Cavender, member

Attest: \_\_\_\_\_  
Rachel Oesterreich, Auditor

