# COMMERCIAL SOLAR ENERGY AMENDMENT TO THE VERMILLION COUNTY ZONING ORDINANCE

Ordinance #2020- 15

## Purpose

The purpose of this ordinance is to promote and encourage economic development, ensure protection of the health, safety and welfare of the residents of Vermillion County and avoid adverse impact to important areas such as agricultural land, endangered species habitats, conservation land, and other sensitive lands during the construction, installation and operation of Solar Energy Systems (SES) in Vermillion County, Indiana. This ordinance shall not be deemed to nullify any provisions of local, state or federal law.

### Scope

This ordinance applies to commercial solar energy installations in Vermillion County, Indiana.

#### **Definitions**

Concentrated Solar Power System: A solar energy system which uses mirrors to concentrate solar energy to create thermal energy which drives a steam or traditional engine.

Ground Mount: A solar energy system mounted on a rack or pole that rests on or is attached to the ground.

Non-Participating: Refers to properties or the property owners, whether residence or open land which have not executed a Solar Access Easement or similar agreement with the owner or operator of the Solar Farm, or Solar Energy System.

Photovoltaic System: An active solar energy system that converts solar energy directly into electricity.

Solar Collector: An assembly, structure, or design used for gathering, concentrating, or absorbing direct and indirect solar energy 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): All components required to become a complete assembly or structure that will convert solar energy into electricity for use.

Solar Farm: A commercial facility that converts sunlight into electricity for the primary purpose of wholesale sales of generated electricity. A solar farm is the principal land use for the parcel on which it is located.

#### Solar Farms

Solar Farms may be approved as a Special Exception in the following zoning districts: agricultural, industrial I, industrial II, and Vermillion Rise, subject to compliance with the

regulations of this section and any conditions or commitments imposed at the time of the Special Exception approval. Provided, however that any conditions or commitments imposed by the BZA may not conflict with the specifications or regulations set forth herein. A one-time flat fee of five hundred dollars (\$500) for special exception shall be paid at the time of application.

- 1. <u>Height:</u> Buildings are limited to the height limitations of the subject zoning district. Ground-mounted solar energy systems may not exceed twenty-five (25) feet in height when oriented at maximum tilt. Transmission lines, substations and switchyards are not subject to the twenty-five feet height limit, but are subject to any height limits otherwise imposed upon the zoned area.
- 2. <u>Setbacks and Lot Coverage</u>: Permanent buildings are subject to the setback regulations of the subject zoning district. The design of the buildings and related structures associated with the Solar Farm shall use materials, colors, textures, screening, and landscaping that, to the greatest extent possible, will blend the facilities to the natural setting and surrounding structures. Ground-mounted solar energy systems must be set back at least one hundred (100) feet from all non-participating property lines; and, at least two hundred (200) feet from all non-participating residences. Exception of variance may be permissible, depending on individual circumstances.
- 3. <u>Minimum Lot Size:</u> The minimum lot size for any Solar Farm is five (5) acres, notwithstanding other required setbacks.
- 4. <u>Ground Cover and Buffer Areas</u>: The following provisions shall apply to the clearing of existing vegetation and establishment of vegetated ground cover:
  - a. Ground around and under solar panels and in project site buffer areas shall be planted, established, and maintained for the life of the solar project in perennial vegetated ground cover, with pollinator friendly seed mixes and native plants.
  - b. The site shall be planted and maintained to be free of all invasive species, as listed by the Indiana Invasive Species Council.
  - c. No insecticide use is permitted on the site. This provision does not apply to insecticide use in on-site buildings, in or around electrical boxes, spot control of noxious weeds, or as otherwise may be deemed necessary to protect public health and safety.
  - d. Plant material must not have been treated with systemic insecticides, particularly neonicotinoids.
  - e. An exemption can be granted if current vegetation supports wildlife or serves other useful purposes including co-location with agricultural operations or gravel can be used in lieu of vegetation if soil cannot support suitable vegetation.
- Security Barrier: Solar energy systems that are part of a solar farm shall be enclosed by a
  perimeter security fence or other approved barrier with a minimum height of at least

- seven (7) feet. The fence may either be around the entire solar farm, or the solar panels. The use of razor wire is prohibited unless otherwise expressly approved by the Board at the time of Special Exception approval or as required.
- 6. <u>Lighting:</u> Solar Farms may not be artificially illuminated unless required by the Federal Aviation Administration (FAA) or other applicable government agency or authority. Permanent lighting around substation is permitted as required by the National Electric Code. All permanent lighting provided for the operational phase of the Solar Farm shall be shielded away from nonparticipating adjacent properties and positioned downward to the extent possible to minimize light emission onto adjacent properties.
- 7. Glare: Solar Farms shall be designed, constructed, and sited to minimize glare or reflections on adjacent properties and roadways and not to interfere with traffic, including air traffic, or otherwise create a safety hazard.
- 8. <u>Approved Solar Components:</u> All electrical components shall conform to applicable state and national codes, and relevant national and international standards.
- 9. Noise: Upon completion of the solar farm, noise levels measured at the property line shall not exceed fifty (50) decibels when located adjacent to an existing residence on a nonparticipating property.
- 10. Outside Storage: Permanent outside storage of materials and equipment is prohibited unless expressly approved by the Board at the time of Special Exception Approval. It is understood that temporary outside storage is necessary during the construction phase of the project.
- 11. <u>Underground Utilities:</u> All medium voltage cables between the inverter locations and project substations shall be located and maintained underground. Other solar infrastructures, such as module to module collection cables, CAB cables, transmission lines, substations, junction boxes, and other typical above ground infrastructure may be located and maintained above ground. Any and all cabling and other items mentioned shall meet the National Electric Code.
- 12. <u>Coordination of Local Emergency Services:</u> The owner-operator of the Solar Farm must coordinate with local emergency services staff to provide materials, education, and training to departments serving the property with emergency services in how to safely respond to on-site emergencies, if necessary.

- 13. <u>Abandonment and Decommissioning:</u> Solar Farms which do not produce energy for a continuous period of one year or more are presumed to have been abandoned.
  - a. The owner-operator shall notify the Vermillion County Planning and Zoning Commission by certified mail, return receipt requested, of the proposed date of discontinued operations and plans for removal. Decommissioning/removal shall be performed in compliance with the approved decommissioning plan. The Board may approve any appropriate amendments or modifications of the decommissioning plan. Any solar farm that has been abandoned must be decommissioned and removed within eighteen (18) months.
  - b. Decommissioning shall consist of:
    - i. Physical removal of all solar photovoltaic installations, structures, equipment, security barriers, and transmission lines from the site.
    - ii. Recycling or disposal of all solid and hazardous waste in accordance with local, state, and federal regulations.
    - iii. Energy cables which are buried greater than three (3) feet below the surface are not required to be removed as part of the decommissioning process.
    - iv. Stabilization of re-vegetation of the site is necessary to minimize erosion.
  - c. Decommissioning Plan:
    - i. Decommissioning Plan outlining the anticipated means and costs of removing the solar farm must be submitted with the Special Exception application.
    - ii. As part of the Plan the owner/operator must provide a present-day decommissioning cost estimate and identify the parties responsible for decommissioning the Solar Farm.
    - iii. Said decommissioning cost estimate must be prepared by a Board approved. Indiana licensed engineer, who is independent from the operations of the owner/operator.
    - iv. Said decommissioning cost estimate shall be updated every five years, and the same filed with the Board, and the decommissioning surety must be increased as appropriate to cover additional anticipated decommissioning costs.
    - v. The owner/operator must provide a financial guarantee to cover the approved decommissioning cost estimate. The financial guarantee must be in the form of a bond, letter of credit, cash, or other surety approved by the Vermillion County Commissioners.
    - vi. Such surety shall be submitted and approved prior to any permits being issued for the Solar Farm.
    - vii. Surety bond shall be in place based upon the following schedule:
      - 1. Twenty-five percent (25%) is due at the time the permit is issued;
      - 2. Twenty-five percent (25%) is due upon the completion of construction of the project;

- 3. The remaining fifty percent (50%) is due after the first year of operations.
- 14. Monitoring and Maintenance: The owner/operator shall be responsible for keeping the facility in a safe and well-maintained condition, including painting, grounds-keeping, structural repairs, maintaining internal access drives, and the integrity of security measures.
- 15. <u>Proof of Capability and Expertise</u>: The owner-operator must provide reasonable evidence of capability and expertise to construct the solar farm and all required improvements, as determined by review and decision-making bodies at the time of special exception approval.
- 16 <u>Submittal Requirements:</u> All applications for Special Exception approval shall include the following information in addition to the customary submittal requirements for Special Exception applications:
  - a. Site plan showing property lines and physical features, including roads, setbacks, floodplain or any special flood hazard areas (if applicable), buildings, solar panels, right-of-way, landscaping, and any zoning district designation for the subject property and all adjacent abutting properties.
  - b. Approximate number, location, and spacing of solar panels or arrays.
  - e. Proposed locations of underground or overhead electric lines.
  - d. Interconnection service agreement or evidence of filing required interconnection service applications with the electric utility.
  - e. Operation and maintenance plan of the solar farm, including measures for maintaining safe access to the installation, storm water controls, as well as general procedures for operation and maintenance of the installation.
  - f. Proof of liability insurance.
  - g. Emergency response plan.
  - h. Decommissioning plan as aforementioned.

# 17. Avoidance and Mitigation of Damages to Public Infrastructure:

- a. Roads: Prior to construction, the owner/operator shall identify all roads to be used for the purposes of transporting components and equipment for construction, operation, or maintenance of the solar farm and obtain applicable permits from the Vermillion County Board of Commissioners.
- b. Existing Road Conditions: The owner/operator must, prior to construction, conduct a pre-construction survey, in coordination with the Vermillion County Highway Department to determine existing road conditions. The owner/operator is responsible for ongoing road maintenance and dust control measures identified by the Vermillion County Highway Department during all phases of construction and installation.
- c. Drainage System: The owner/operator will work with the landowners and the Vermillion County Surveyor using reasonable practicable methods to identify existing subsurface drainage systems. The owner/operator will repair damage to

drain tiles and other drainage systems that result from the construction, operation, or maintenance of the solar farm within a reasonable period of said damage occurring. The repair may include the option to repair as originally found, rerouting, or installing new tile as to not negatively impede the flow of water outside the fenced project boundary.

- 18. Prohibited System: Concentrated solar power systems are prohibited.
- 19. <u>Signage</u>: No permanent signage, other than appropriate warning signs at the entrance of the facility is permitted without additional special exception. Said warning sign shall not be larger than 3' x 2' and shall include a twenty-four hour contact phone number for emergencies and any other necessary emergency contact information. It is understood that additional signage may be required during the construction phase of the project.

This ordinance shall be in full force and in effect on November 24, 2020.

Passed by the Board of Commissioners of Vermillion County, Indiana on the 24<sup>th</sup> day of November, 2020.

Board of Commissioners Vermillion County, Indiana

Tim Wilson - President

\ L

Tim Yocum

Harry Crossley

May Londey

May Loudey

Attest