

LAKE COUNTY PLAN COMMISSION

A PROPOSAL TO CHANGE THE TEXT OF THE UNINCORPORATED LAKE COUNTY ZONING ORDINANCE TO MAKE PROVISIONS FOR SOLAR FARMS

Whereas, the Lake County Council has rescinded Resolution 20-21, on June 16, 2020;

Whereas, the Lake County Board of Commissioners, Lake County Council, and Lake County Plan Commission have adopted a new Comprehensive Plan on September 11, 2018;

Whereas, the Lake County Board of Commissioners, Lake County Council, and Lake County Plan Commission have entered into a contract with Duncan & Associates to conduct a rewrite of the Unincorporated Lake County Zoning and Subdivision Ordinances;

Whereas, Duncan & Associates (Consultant) has completed a portion of the proposed zoning ordinance regarding Solar Farms;

Whereas, the Lake County Council requests that the Lake County Plan Commission initiate a proposal to change the text of the current Unincorporated Lake County Zoning Ordinance to accommodate Solar Farms as directed by their Consultant; and,

Now, therefore the Lake County Plan Commission of Lake County, Indiana proposes the following amendments to the Unincorporated Lake County Zoning Ordinance:

ORDINANCE # 2527
OF THE COUNTY OF LAKE

AN ORDINANCE TO AMEND the Unincorporated Lake County Zoning Ordinance No. II, County of Lake, State of Indiana, more specifically Section 2.2 – Definitions, Section 5.1.C.2 – Uses Permitted by Special Exception, and Section 9.10.2 – Supplemental Regulations.

BE IT ORDAINED by the County Council of the County of Lake, State of Indiana that the Unincorporated Lake County Zoning Ordinance be amended as follows:

DELETE: Title 2.0, General Provisions, Article, 2.2 Definitions

Solar Energy System - Includes: (1) A design using natural and architectural features to cool or heat a structure, or (2) A mechanical assembly which may include a solar collector, storage facility, and any other components needed to cool or heat a structure.

INSERT: Title 2.0, General Provisions, Article, 2.2 Definitions

Solar Energy System – A system intended to convert solar energy into thermal, mechanical, or electrical energy.

Solar Energy System, Building-Integrated – A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural part of the building. Building-

integrated systems include, but are not limited to, photovoltaic or hot water systems that are contained within roofing materials, windows, skylights, shading devices and similar architectural components.

Solar Energy System, Structure-Mounted – A solar energy system that is mounted on the façade or roof of either a principal or accessory structure.

Solar Energy System, Flush-Mounted – A solar energy system that is mounted flush with a finished building surface, at no more than six (6) inches in height above that surface.

Solar Energy System, Ground-Mounted – A solar energy system mounted on the ground and not attached to any other structure other than structural supports.

Solar Panel – A group of photovoltaic cells assembled on a panel. Panels are assembled on-site into solar arrays.

Solar Farm – A solar energy system consisting of a group of interconnected solar panels/arrays that convert sunlight into electricity for the primary purpose of wholesale or retail sales of generated electricity (also known as grid-intertie photovoltaic system). These systems include solar monitoring systems and all equipment and facilities necessary for the proper operation of the facility, such as electrical collection and transmission lines, transformers, substations and operations and maintenance facilities.

Solar Array – is a collection of multiple solar panels that generate electricity as a system.

Concentrated solar power systems – concentrated solar power systems generate solar power by using mirrors or lenses to concentrate a large area of sunlight onto a receiver.

INSERT:

Add “Solar Farm” to the listing of uses permitted by special exception in Sec. 5.1.C.2

| 2. <u>Uses Permitted by Special Exception:</u> | <u>A-1</u> | <u>R-1</u> | <u>R-2</u> | <u>R-3</u> | <u>RR</u> |
|---|-------------------|-------------------|-------------------|-------------------|------------------|
| m. Solar Farms (see also Sec. 9.10.2) | Yes | No | No | No | No |

INSERT: Add a new Sec. 9.10.2 establishing supplemental use regulations for “Solar Farms” approved as special exceptions in A-1 district

9.10.2 Solar Farms

Solar Farms may be approved as a Special Exception in the A-1, Agricultural zoning district, subject to compliance with the regulations of this Section and any conditions or commitments imposed at the time of Special Exception approval.

- A. Height – Buildings are subject 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 25 feet height limit.
- B. Setbacks and Lot Coverage - Buildings are subject to the setback regulations of the subject zoning district. The design of 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 fifty (50) feet from all non-participating property lines. Since a solar farm may include several properties, the setback requirement shall be inclusive of the entire project rather than any individual property. Ground-mounted solar energy systems must be set back at least 200 feet from all non-participating residences. For purposes of this provision, “non-participating” shall refer to property owners that have not executed a Solar Access Easement or similar agreement with the owner-operator. The setback regulations of the A-1 zoning district shall not apply. Solar panels or arrays shall not be counted for lot coverage purposes.
- C. Landscaped Buffer – The Solar Farm owner or operator shall install a landscaped buffer in areas of the solar farm adjacent to non-participating properties to the extent that the required landscape buffer area reasonably extend to obstruct the view of any residence and associated accessory structures, such as swimming pools, detached garages, backyard cottages, and parking areas. This landscape buffer requirement is to be determined by the Board in conjunction with approval of the special exception. The required landscaped buffer may be located within required setbacks and must comply with the following or a similar alternative approved at the time of special exception approval:
 - 1. A landscaped area with at least one shrub per 5 linear feet, plus at least one evergreen tree per 25 linear feet of the landscaped area. Shrubs must be at least 3 feet in height at time of planting. Evergreen trees must be at least 5 feet in height at time of planting; or,
 - 2. A landscaped area at least ten (10) feet in width a solid wall or privacy fence with a minimum height of seven (7) feet. At least one (1) evergreen tree is required per thirty (30) linear feet of fence or wall.

Landscaping, including weed and grass control, shall be maintained by the owner-operator. In the event that existing landscaping intended to provide screening from nonparticipating properties is disturbed, removed, perishes, or ceases to serve its intended purpose, new plantings shall be provided which accomplish the original intended buffer. Said new plantings shall be completed by the owner-operator in a timely, reasonable, and good-faith manner depending on the availability and time of year.

- D. Glare – Solar energy systems must 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.
- E. Soil and Ground Cover
- (1) The owner-operator will use reasonable efforts to not remove topsoil from the site during development. Some grading of the site may be required and will be addressed by the Site Development plan submitted for permit approval.
 - (2) Perennial vegetative ground cover must be maintained or established in all areas containing solar arrays and in required setbacks to prevent erosion and manage run-off.
- F. Security Barrier – Solar energy systems that are part of a solar farm must be enclosed by perimeter security fencing or other Board approved barrier with a minimum height of at least seven (7) feet. The use of barbed wire or razor wire is prohibited unless otherwise expressly approved by the Board at the time of Special Exception approval or required by the National Electric Code.
- G. Approved Solar Components – All electrical components shall conform to applicable state and national codes, and relevant national and international standards.
- H. Lighting – Solar Farms may not be artificially illuminated, unless required by the FAA (Federal Aviation Administration) or other applicable government agency or authority. Lighting around substation is permitted as required by the National Electric Code. Any on-site 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.
- I. 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.
- J. Outside Storage – Outside storage of materials and equipment is prohibited unless otherwise expressly approved by the Board at the time of Special Exception approval.
- K. Underground Utilities – All medium voltage cables between inverter locations and project substations shall be located and maintained underground. Other solar infrastructure, 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.
- L. Coordination of local emergency services – the owner-operator of the Solar Farm must coordinate with local emergency services staff to provide materials, education, and training to the departments serving the property with emergency services in how to respond safely to on-site emergencies, if necessary.

- M. Environmental Impact – the owner or operator shall have a third party, qualified professional, conduct an analysis to identify and assess potential impacts on the natural environment, including wetlands and other sensitive ecosystems, and species of concern.
- N. Abandonment and Decommissioning – Solar farms that do not produce energy for a continuous period of one year or more are presumed to have been abandoned.
1. The owner-operator shall notify the Lake County Plan Commission by certified mail, return receipt requested, of the proposed date of discontinued operations and plans for removal. Decommissioning and removal shall be performed in compliance with the approved decommissioning plan. The Board may approve any appropriate amendments or modification of the decommissioning plan. Any solar farm that has been abandoned must be decommissioned and removed within three hundred sixty-five (365) days.
 2. Decommissioning must consist of:
 - a. Physical removal of all solar photovoltaic installations, structures, equipment, security barriers, and transmission lines from the site.
 - b. Recycling or disposal of all solid and hazardous waste in accordance with local, state and federal regulations.
 - c. Stabilization of re-vegetation of the site is necessary to minimize erosion. The Director, with direction from the Lake County Plan Commission, is authorized to allow the owner or operator to leave landscaping or any designated below-grade foundations in-place in order to minimize erosion and disruption to vegetation.
 3. Decommissioning Plan
 - a. A decommissioning plan outlining the anticipated means and costs of removing the solar farm must be submitted with the Special Exception application
 - b. The decommissioning plan must ensure that the owner or operator properly removes the equipment and facilities upon the end of project life or after their useful life. The plan must include provisions for the removal of all structures and foundations, the removal of all electrical transmission components, and the restoration of soil and vegetation.
 - c. The owner or operator must provide a present-day decommissioning cost estimate and identify the parties responsible for decommissioning.
 - d. The owner-operator must provide a current decommissioning cost estimate prepared by an Indiana State Licensed independent Professional Engineer who is satisfactory to Lake County and which cost estimate shall identify the parties responsible for decommissioning. Cost estimates must address all activities necessary to restore the Solar Farm site to its pre-development condition. Decommissioning cost estimates shall be revised (increased or decreased) during the project lifespan based on updated cost estimates provided by an Indiana State Licensed independent Professional Engineer agreeable to Lake County. Said decommissioning cost estimate shall be recalculated and revised every five (5) years throughout the life of the Solar Farm and reflected in an updated surety amount approved by Lake County during each five (5) year increment.

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, cash, or other surety approved by Lake County. Such surety shall be submitted and approved by the Lake County Board of Commissioners before any building permits are

issued for the Solar Farm. The financial guarantee is required to secure the financial ability of the owner-operator to decommission the Solar Farm.

If the owner-operator fails to remove the Solar Farm in accordance with the requirements of the decommissioning plan, Lake County may collect the surety and hire a third-party to enter the property to physically remove the installation.

- O. Monitoring and Maintenance – The owner or operator of the solar farm is responsible for keeping the facility in safe and well-maintained condition, including painting, grounds-keeping, structural repairs, maintaining internal access drives, and the integrity of security measures.

- P. Avoidance and Mitigation of Damages to Public Infrastructure
 - 1. Roads – Prior to construction, the owner or operator must identify all roads to be used for the purpose of transporting components and equipment for construction, operation, or maintenance of the solar farm and obtain applicable permits from the Lake County Board of Commissioners through the Lake County Highway Department before any construction occurs on the site.
 - 2. Existing Road Conditions – Prior to construction, the owner or operator must conduct a pre-construction survey, in coordination with the Lake County Highway Department to determine existing roadway conditions. The pre-construction survey must include photographs and a written agreement to document the condition of the roads and applicable public facilities. The owner or operator is responsible for ongoing road maintenance and dust control measures identified by the Lake County Highway Department during all phases of construction and installation.
 - 3. Drainage System – The owner-operator will work with the landowners and Lake County Surveyor using reasonably practicable methods to identify existing subsurface drainage systems. The owner-operator will repair damage to drain tiles and other drainage systems that result from construction, operation, or maintenance of the solar farm within 15 days of damage occurring, weather permitting. The repair may include the option to repair as originally found, re-routing, or installing new tile so as to not negatively impede the flow of water outside the fenced project boundary.

- Q. Proof of Capability and Expertise - 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.

- R. Submittal Requirements – All applications for Special Exception approval shall include the following information in addition to the customary submittal requirements for Special Exception applications.
 - 1. 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, and any zoning district designation for the subject property and all adjacent and abutting properties.
 - 2. Approximate number, location, and spacing of solar panels or arrays.
 - 3. Product cut-sheets.
 - 4. Proposed locations of underground or overhead electric lines.

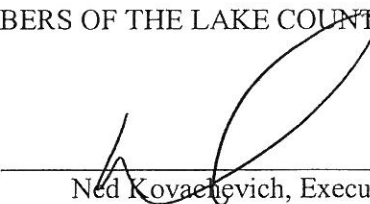
5. Interconnection service agreement or evidence of filing required interconnection service applications with the electric utility.
 6. Operation and maintenance plan of the solar farm, including measures for maintaining safe access to the installation, storm water controls, as well as general procedures for operation and maintenance of the installation.
 7. All required agency comments, approvals, along with respective ordinance conformance, including Lake County Highway Department, Lake County Health Department, and Lake County Surveyor's Department (regardless of the amount of disturbed area).
 8. Proof of liability insurance.
 9. Emergency response plan.
 10. Decommissioning plan in accordance with this Section.
- S. Prohibited Systems – Concentrated solar power systems are prohibited.
- T. Signage – No signage, other than an appropriate warning sign at the entrance of the facility no larger than 3' x 2' that provides a twenty-four (24) hour contact phone number and any other necessary emergency contact information. Any additional signage may be permitted as expressly approved by the Board at the time of the Special Exception.
- U. The staff of the Lake County Plan Commission, including the building official, code enforcement officer, or any other official governed under approved ordinances, codes, and permits of Lake County, shall be allowed to enter the Solar Farm at any reasonable time, with proper notice, to determine compliance with the provisions of the approved special exception, building permit, site development plan, building codes, zoning ordinance, or any other related code or ordinance of Lake County.
- V. A Building Permit must be obtained within thirty-six (36) months of approval of the Special Exception (including Site Development Plan approval). Commencement of the operation of the Solar Farm shall occur within two (2) years from the date of Building Permit. These time-frames may be extended for cause upon application, review, and approval by the Board.

HEREBY RECOMMENDED FOR, ✓
APPROVAL DENIAL

_____ BY THE COUNTY PLAN COMMISSION OF LAKE
NO ACTION

COUNTY, INDIANA, THIS 19th DAY OF August, 2020.

MEMBERS OF THE LAKE COUNTY PLAN COMMISSION



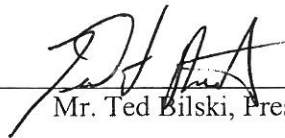
Ned Kovachovich, Executive Secretary
(on behalf of the Lake County Plan Commission)

Motion for approval made by Plan Commission Member Rebecca Koetz, seconded by Member Jerry Tippy. In addition, voting yea were Members Bill Emerson, Ken Huseman, Martin Kroll, Frank Kalvaitis, Dan Dernulc, and Shad Whisler (vote 8-0) with Member James Metro absent.

IS HEREBY X BY THE
APPROVED DENIED NO ACTION

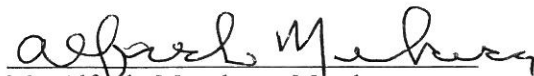
COUNTY COUNCIL OF LAKE COUNTY, INDIANA, THIS 8th DAY OF
 September , 2020.

MEMBERS OF THE LAKE COUNTY COUNCIL


Mr. Ted Bilski, President



Mr. Dan Dermic, Vice President


Mr. Charlie Brown, Member


Mr. Alfredo Menchaca, Member


Mrs. Christine Cid, Member


Mr. Dave Hamm, Member


Mr. Christian Jorgensen, Member