

Essex Township Solar Farm ordinance

Ordinance 19-01

Solar Farm- A solar panel or array composed of multiple solar panels on ground-mounted rack or poles which are one of the primary use(s) for the parcel of land on which it is located or any solar energy system that has a primary purpose for wholesale or retail sales of generated electricity. Also known as solar power plants and solar energy generation facilities shall be permitted in the A1 district with an Essex Township special use fee in accordance with the following minimal regulations and design standards.

- A. The design standards and bulk regulations listed in the setbacks, lot size, lot coverage, lot area, height, and signage shall be suspended for all solar farms and the following regulations shall apply instead.
 - i. Foundations-The manufacturer's engineer or another qualified engineer shall certify that the foundation and design of the solar panels is within accepted professional standards, given local soil and climate conditions.
 - ii. Other standards and codes-All solar farms shall be in compliance with any applicable local, state and federal regulatory standards, and the National Electrical Code as amended.
 - iii. Power and Communication lines-Power and communication lines running between banks of solar panels and to electric substations or interconnections with buildings shall be buried underground. Exemptions or variances may be granted in instances where water courses, or other elements of natural landscape interfere with the ability to bury lines.
 - iv. Minimum lot size-No solar farm shall be erected on any lot less than 20 acres in size.
 - v. Height-Systems, equipment and structures shall not exceed 30 feet in height when ground mounted. Excluded from this height requirement, however, are electric transmission lines and utility poles.
 - vi. Setbacks-Ground mounted solar energy systems as part of a solar farm shall have a setback for all equipment excluding fences a minimum of 100 feet on the front and all other property lines, with the exception of residentially zoned property lines or existing residences in which the solar energy setback will be 500 feet. The Essex Township board may grant a variance to such setback requirement if the proposed or existing buffer is sufficient to screen the project from view from adjoining property or public rights-of-way, if the owners of the adjoining properties agree to waive these setback requirements. The Essex Township board if granted of such a variance will be part of the recommendation to the county board.

- vii. Screening and Fencing-Systems equipment and structures shall be fully enclosed and secured by a fence with a minimum height of 8 feet. Lock boxes will be supplied to local police/fire officials for emergency entry. The Essex Township board requires a minimum 30 foot wide buffer surrounding the solar farm consisting of a compact evergreen hedge or foliage around entire perimeter or facility, or an alternative buffer may be also considered. The buffer shall be planted a minimum of 3 feet tall and with the exception that this hedge shall reach the height of at least 8 feet with three years and shall be maintained in good condition. If vegetation buffer is to part of the solar farm development, a landscape plan will be submitted for review and approval. The landscape plan shall take into account the type(s) of evergreens to be planted, along with the proposed spacing of the plantings, along with the evaluation of the soils. An alternative buffer may be considered. Earth berms other topographical features and existing wooded areas may be accepted in lieu or in combination of the above requirements if they conceal the use from public view and are maintained.
- viii. Lighting-If lighting is provided at the site, lighting shall be shielded and downcast such that the light does not spill into adjacent parcels.
- ix. Noise-Noise levels measured at the property shall not exceed 50 decibels when located adjacent to an existing residence or residential district.
- x. Signage-an appropriate warning sign shall be provided at the entrance to the facility and along the perimeter to the solar farm project. The sign at the entrance to the facility shall include the 911 address and a 24 emergency contact number.
- xi. Outdoor storage-Only the outdoor storage of materials, vehicles and equipment directly supporting the operation and maintenance of the solar farm shall be allowed. The storage area shall be paved with a bituminous surface and either fenced or screened to prevent viewing from adjoining properties and uses.
- xii. Aviation protection-For solar energy systems located within 500 feet of an airport or within approach zones of an airport, the applicant shall complete and provide the results of the Solar Glaze Analysis Tool (SGHAT) and follow FAA standards.
- xiii. Training-Essex Township board, local Fire/Police are to have annual training on the hazards than may exist in the solar farm.
- xiv. Natural resource review-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.
- xv. Road Use-All routes on either County or Township Roads that will be used for the construction and maintenance purposes shall be identified on the

site plan. All routes for either egress or ingress need to be shown. The routing shall be approved subject to the approval of the Essex Township Road Commissioner and Kankakee County Highway Engineer. The solar farm developer is to complete and provide a preconstruction baseline survey to determine existing road conditions for assessing potential future damage due to development related traffic. The development shall provide a plan to ameliorate any and all damage, dust control during construction, installation or replacement of roads that may be required by the developer. The developer shall provide a letter of credit or surety bond in an amount and form approved by the Highway/Road Officials when warranted.

- B. Application requirements-Due to the unique nature and special requirements of solar power plants and their potential impacts to adjoining properties and government services, solar power plants shall be required to submit and obtain approval on the following items in addition to any requirements specified by the Kankakee County zoning board. The applicant to provide 10 copies to the Essex Township Board and 2 copies proving ownership or interest in the property.
 - a. A site plan consists of the following:
 - i. Existing property lines and property lines extending 100 feet from the exterior boundaries, including the names of adjacent property owners and current use of those properties.
 - ii. Existing public and private roads, showing widths of the roads and any associated easements.
 - iii. Location and size of any abandoned wells, and sewage systems.
 - iv. Existing buildings and any impervious surfaces.
 - v. A contour map showing at 2 foot intervals. A contour map of surrounding properties may be required.
 - vi. Existing vegetation (list type and percent coverage: i.e. cropland/plowed fields, grassland, wooded areas etc.)
 - vii. Waterways, watercourses, lake and public water wetlands.
 - viii. Any delineated wetland boundaries.
 - ix. A copy of current FEMA FIRM map that shows the subject property. And, the 100 year flood elevation and any regulated flood protection elevation, if available.
 - x. Mapped soil survey
 - xi. Surface water drainage patterns
 - xii. Locations of any sub surface drainage tiles.
- C. Site plan of Proposed Conditions:
 - i. Location and spacing of solar panels
 - ii. Location of access roads and access points

- iii. Planned location of underground or overhead electric lines connecting the solar farm to a building, substation or other electric load.
 - iv. New electrical equipment other than at the existing building or a substation that is to be the connection point for the solar farm.
 - v. Sketch elevation of the premises accurately depicting proposed solar energy conversion system and its relationship to structure on adjacent land.
 - vi. Weed/Grass control-Applicant must present an acceptable weed control plan for the property inside and outside fenced area for entire property. The Operating Company during the operation of the solar farm must maintain the fence and adhere to the weed/grass control plan. If the operating company does not there can be a fine of \$500 per week if the fence is not secure or the weed/grass control plan is not followed.
- D. All solar power plant applications shall be accompanied by a preliminary map and plan showing the roads and rights-of-ways that will be utilized for both the construction and operation of the solar power plant. Prior to starting construction the solar power plant owner/operator and Essex Township Road Commissioner shall be in agreement of the following:
- i. A final map identifying the routes that will be used
 - ii. A plan for maintaining and /or repairing the affected roads
 - iii. Weights of equipment that will be on the roads
 - iv. Other inclusions as specified by Township or County board or affected road authority.
 - v. Manufacturer's specifications and recommended installation methods for all major equipment, including solar panels, mounting systems and foundation poles or racks.
 - vi. A description of the method of connecting the array to a building or substation.
 - vii. A decommission plan shall be required to ensure that facilities are properly removed in a timely manner after their useful life. Decommissioning of solar panels must occur in the event they are not in use for 12 consecutive months, the operating company and or land owner have 6 months to complete the decommission plan or the Township will take necessary decommission steps. The plan shall include provisions for removal of all structures (including equipment, fencing and roads) and foundations, restoration of soil and vegetation and a plan ensuring financial resources will be fully available to fully decommission the site. The decommission plan and financial security must be presented to and accepted by the Essex Township board before issuance of a permit from the county.
- E. Fees
- i. The fees for a solar farm is \$5,000 per location.
- F. Certificate of contract

