

## **Utility-Scale Solar Facilities.**

### **I. Purpose.**

The Purpose of this chapter is to establish requirements for construction, operation, and decommissioning of utility scale/commercial solar facilities; to provide standards for the placement, design, construction, monitoring, and removal of solar facilities; address public safety, minimize impacts on scenic, natural, and historic resources; and provide adequate financial assurance of decommissioning.

### **II. Applicability.**

This chapter shall apply to all solar facility Special Exception petitions submitted after the effective date of this chapter, including any physical modifications to any existing solar energy facilities that materially alter the type, configuration, or size of such facilities or other equipment.

### **III. Definitions**

When used in this chapter, the following words shall have the following meanings :

**APPLICANT** The person or entity who submits an application to the locality for a permit under this chapter.

**BATTERY ENERGY STORAGE SYSTEM** Equipment or devices capable of absorbing electrical energy, storing it for a period of time and redelivering that energy after it has been stored.

**BUFFERYARD** -- A landscaped area intended to separate and partially obstruct the view of two adjacent land uses or lots from one another and consisting of a mix of types and sizes of plant material in accordance with the requirements of this Chapter. For the purposes of this Chapter, the bufferyard shall be located along the exterior side of the fencing and shall be located within fifty (50) of the required fencing (between the fencing and the property line) in order to maximize visual screening.

**DECOMMISSIONING** The procedure to disconnect, remove and properly dispose of all above and underground infrastructure, equipment, facilities, electrical components or devices, and to restore the property to prior use or future use consistent with the Comprehensive plan and future zoning.

**INTEGRATED PV** Photovoltaics incorporated into building materials, such as shingles.

**NET METERING** An electricity billing mechanism that credits solar energy system owners for the electricity they add to the grid.

**OPERATOR** The person responsible for the overall operation and management of the facility.

**OWNER** The person or entity who owns all or a portion of a facility.

**PHOTOVOLTAIC or PV** Relating to materials and devices that absorb sunlight and convert it directly into electricity.

**RATED CAPACITY** The maximum capacity of a solar facility based on the sum total of each photovoltaic system's nameplate capacity.

**SITE PLAN** A plan showing all proposed improvements to the site. The site plan shall include the location of all easements and right-of-way and other conditions relation to use, location, and bulk of buildings, density of development, open space, public facilities, and such other information as is required in applicable sections of this chapter such as with special exception use, rezoning, or variance applications.

**SLOPE** -- The face of an embankment or cut section or any ground whose surface makes an angle with the plane of the horizon. Slopes are usually expressed in a percentage based upon vertical differences in feet per one hundred (100) feet of horizontal distance.

**SOLAR FACILITY** The entire area, including acreage coverage, setbacks, access roads, wildlife corridors, wetlands, and other natural features of a facility that generates electricity from sunlight.

**SOLAR FACILITY, UTILITY SCALE** A facility that generate electricity from sunlight primarily for sale to a utility provider. An energy conversion system consisting of photovoltaic panels, their support structures, and associated infrastructure, such as but not limited to control, conversion, and transmission hardware, and energy storage systems, occupying more than two acres of total land area.

#### IV. Utility-scale solar facility application and procedures

Utility-scale solar facilities shall be permitted by Special Exception in A-1 (Agricultural-Rural), M-1 (Light Industrial) and M-2 (Heavy Industrial) zoning districts. Utility scale solar facilities shall not be permitted in any other zoning district.

In addition to other requirements of the Fayette County Zoning Ordinance and special exception requirements, applications for a utility-scale solar facility shall include the following information:

A. Comprehensive plan review. A review as required for utility-scale solar facility shall be completed. This provision provides for a review by the Planning Commission of public utility proposals to determine if their general or approximate location, character and extent are substantially in accord with the Comprehensive Plan or part thereof.

B. Special Exception application. A complete Special Exception application, including:

- (1) Documents demonstrating the ownership of the subject parcel( s) and, if applicable, proof that a valid land lease agreement otherwise exists.
- (2) Proof that the applicant has authorized to act upon the owner 's behalf.
- (3) A letter of commitment from the utility company who will interconnect to the facility and a statement of line capacity before and after interconnection.
- (4) List of all adjacent property owners, their tax map numbers, and addresses.
- (5) A description of the current use and physical characteristics of the subject parcels.
- (6) A description of existing uses of nearby properties.
- (7) A narrative identifying the applicant, owner of the proposed project, a substantive history of the owner 's solar project developments, including all previous and current solar projects, any legal challenges or claims in which they were named or identified, and the name of any proposed entity under which they intend to operate, if different. The narrative shall further describe the proposed solar facility project, including an overview of the project and its location, maximum rated capacity of the solar facility project, the approximate number of panels, representative types, expected footprint of solar equipment to be constructed, and type and location of interconnection to electrical grid.
- (8) Payment of the application fee and any additional review costs, advertising, or other required staff time
- (9) A preliminary site plan prepared by a Pennsylvania licensed engineer, which shall include the following :
  - (a) A description of the subject parcels.
  - (b) Property lines and setback lines. A land survey by a P ennsylvania licensed surveyor is required.
  - (c) Existing and proposed buildings and structures, including preliminary locations of the proposed solar panels and related equipment: the location of proposed fencing, driveways, internal roads, and structures: and the location of points of ingress/egress.
  - (d) The location and nature of proposed buffers and screening elements, including vegetative and constructed buffers.
  - (e) Existing and proposed access roads, drives, turnout locations, and parking.
  - (f) Location of substations, electrical cabling from the solar facility systems to the substations, ancillary equipment, buildings, and structures, including those within any applicable setback.
  - (g) Limits of all water conveyance systems and wetlands.

C. A proposed grading plan shall be submitted with the special exception application, with a final grading plan to be approved prior to any construction activity commencing on the project site.

D. A proposed landscaping maintenance plan shall be submitted with the special exception application which takes into account the requirements set forth in Section V of this Ordinance. A final landscaping maintenance plan shall be submitted and must be approved prior to any construction activity commencing on the project site.

E. A proposed decommissioning plan shall be submitted with the special exception application. A completed decommissioning plan, certified by an engineer, shall be submitted and approved prior to, or along with, the special exception application, detailing how the applicant proposes to decommission the facility. The proposal shall include the following information:

(1) The anticipated life of the project.

(2) At the expense of the owner/operator, a cost estimate for the decommissioning of the facility that shall be prepared by a third-party Pennsylvania licensed professional engineer who has expertise in the removal of large-scale facilities. The decommissioning cost estimate shall detail the current cost in dollars and projected costs over the life of the project without any reduction for salvage value;

(3) How the estimate was determined.

(4) The manner and method of ensuring that funds will be available for decommissioning.

(5) The proposed methods and steps required for removal of structures, materials, buildings, roads, cabling, electrical components, operational equipment, and any other associated facilities at the end of the anticipated life of the project.

(6) Steps to restore the site to conditions prior to the commencement of the project, including soil stabilization and revegetation (if applicable):

(7) Impacts, if any, on the surrounding properties when decommissioned; and

(8) The name and physical address of the person or entity responsible for the decommissioning plan.

F. The following shall also be submitted with the application for special exception :

(1) The applicant shall provide copies of any permit applications and associated materials submitted to the Pennsylvania Department of Environment Protection, Fayette County Conservation District, and other governmental agencies required for the project when the same are filed with those agencies. This shall include evidence that the Pennsylvania Natural Diversity Inventory ( "PNDI" ) process has been completed and that the applicant has received clearance from the Pennsylvania Game Commission, Pennsylvania Fish and Boat Commission, Pennsylvania Department of Conservation and Natural Resources, Pennsylvania Historical and Museum Commission, and the United States Fish and Wildlife Service. Submission of all such governmental agency approvals and/or clearances shall be provided to the County prior to the commencement of construction.

(2) An environmental site assessment and impact study prepared by a Pennsylvania certified engineer experienced in landscapes, including, but not limited to, site investigations and an erosion and sediment control plan confirming that the project will not adversely affect groundwater.

G. Additional information may be required to be submitted with the application, as determined by the zoning administration, such as a scaled elevation view of the property and other supporting drawings, photographs of the proposed site, photo or other realistic simulations or modeling of the project from potentially sensitive locations as deemed necessary by Fayette County to assess the visual impact of the project, landscaping and screening plan, coverage map, and additional information that may be necessary for a technical review of the proposal.

## V. General design and installation standards.

A. The design and installation of solar energy facilities shall conform to applicable industry standards, including those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), or other similar certifying organizations and shall comply with all fire and safety requirements as well as the Uniform Construction Code (UCC).

B. Utility scale solar facilities shall be constructed and operated in substantial compliance with the approved site plan. Any change related to the location of structures or related to a change resulting in a 10% increase in overall acreage coverage shall require the plan to be amended and approved by the Zoning Hearing Board .

C. If the solar facility does not receive a building permit within 1-year of approval of the special exception , the permit shall be terminated, unless granted an extension, in writing, by the Zoning Hearing Board . Such extension shall set forth the basis for the extension.

D. Battery energy storage systems and facilities are not authorized, except as necessary for the operations of the site-specific solar energy facility. If such systems are required, they shall be installed with industry best practices, including a battery management system (BMS) with 24/7 monitoring and automated fire suppression.

E. Solar energy facilities size limitations:

(1) The minimum area of utility-scale solar facility shall be two acres .

F. Setbacks for a utility-scale solar facility shall be:

(1) All solar facilities shall be setback 500 feet from all perimeter property lines. This shall not be applicable to power lines, substations, and other parts of the equipment required for the interconnection process.

G. The maximum height of the lowest edge of the photovoltaic panels shall be 12 feet as measured from the finished grade. The maximum height of photovoltaic panels, primary structures, battery storage systems and accessory buildings shall be 15 feet as measured from the finished grade at the base off the structure to its highest point, including appurtenances.

H. Sloped areas of greater than 10% and any stormwater management features should also be closely monitored for at least one full growing season after project completion or until vegetation is 90% established.

I. Wetlands, waterways, floodplains, shall be inventoried, delineated, and avoided, with exception of encroachments permitted by state code and regulations. Applicants shall submit an approved NPDES permit and a PCSM (post construction stormwater management) plan, as applicable, prepared by a Professional Engineer.

J. Baseline water testing shall be completed at the expense of the applicant, or the owner/operator, as applicable. In addition to the baseline testing, testing to monitor water contamination from runoff shall be conducted every 12 months that the utility scale solar facility remains in operation, or upon written request by the Zoning Administrator. Criteria for testing shall be derived from, but not limited to, information contained in the equipment material safety data sheet (MSDS), which shall be provided by the applicant/operator. Findings may be submitted to appropriate state agencies for review and/or enforcement in case of any violation.

K. For any utility scale solar facility, a baseline soil report shall be prepared prior to any clearing or construction activity, with the findings reported to the County. In addition to the baseline testing, testing to monitor soil contamination shall be conducted every two years for the duration of the permit. In addition, a final soil report shall be prepared at the time of decommissioning. Soil testing shall be completed at the expense of the applicant, or the owner/operator, as applicable.

L. Utility-scale solar facilities, including fencing, shall be significantly screened from the ground-level view of adjacent properties by a buffer zone at least 50 feet wide that shall be landscaped with native and noninvasive plant materials consisting of an evergreen and deciduous mix (as approved by the Zoning Hearing Board ), except to the extent that existing vegetation or natural landforms on the site provide such screening as determined by Fayette County. Trees shall be a minimum of six feet in height at time of planting and in staggered rows of 10 feet on center. In the event existing vegetation or landforms providing the screening are disturbed, new plantings shall be provided which accomplish the same. The effectiveness of screening shall be maintained as the plant materials mature.

M. Utility-scale solar facilities shall be enclosed by security fencing on the interior of the buffer area (not to be seen by other properties) not less than eight (8) feet in height. The fence shall not be topped with razor/barber wire. A performance bond reflecting the costs of anticipated fence maintenance shall be posted and maintained. Failure to maintain the security fencing shall result in revocation of the Special Exception and the facility's decommissioning.

N. For utility -scale solar facilities, ground cover on the site shall be pollinator-friendly native and noninvasive vegetation and maintained in accordance with the landscaping maintenance plan in accordance with established performance measures. A performance bond reflecting the costs of anticipated landscaping maintenance shall be posted and maintained. Failure to maintain the landscaping shall result in revocation of the Special Exception and the facility's decommissioning. Incorporation of noninvasive plant species that require no pesticides, herbicides, and fertilizers or the use of pesticides and fertilizers with low toxicity, persistence, and bioavailability is recommended.

O. The design of support buildings and related structures shall use materials, colors, textures, screening, and landscaping that will blend the facilities to the natural setting and surrounding structures.

P. All structures, racks, and associated facilities shall have a nonreflective finish or appearance. Solar panel arrays shall be designed to maximize absorption and minimize glare toward adjoining properties and upward toward aircraft. Panel arrays shall be designed and constructed in such a way as to limit glare towards vehicles traveling on state- maintained roads.

Q. The owner/operator of a solar facility shall maintain the solar facility in good condition

R. Prior to construction, the owner/operator of a utility scale solar facility shall be required to submit an incident response plan and emergency action plan to Fayette County and Fayette County Emergency Management.

S. A utility - scale solar facility shall be designed and maintained in compliance with standards contained in applicable local, state and federal building codes and regulations that were in force at the time of the permit approval.

T. A utility-scale solar facility shall comply with all permitting and other requirements of the Pennsylvania Department of Environmental Protection (DEP), Public Utility Commission (PUC), Uniform Construction Code (UCC) and all other local, state, & federal regulations.

U. The applicant shall provide proof of adequate liability insurance for a solar facility prior to beginning construction and before the issuance of a zoning or building permit from Fayette County. The applicant shall provide proof of said liability insurance policy upon request by the County.

V. Lighting fixtures as approved by the County shall be the minimum necessary for safety and / or security purposes to protect the night sky by facing downward and to minimize off-site glare. No facility shall produce glare that would constitute a nuisance to the public. Any exceptions shall be enumerated on the site plan and approved by Fayette County.

W. No advertising signage may be placed on the solar facility. No signage of any type may be placed on the solar facility other than notices, warnings, and identification information required by law.

X. All facilities must meet or exceed the standards and regulations of the Federal Administration (FAA), Pennsylvania Department of State or equivalent, and any other agency of the local, state or federal government with the authority to regulate such facilities that are in force at the time of the application.

Y. Knox-Boxes and keys shall be provided at locked entrances for emergency personal access. Warning signage shall be placed on high voltage electrical equipment and utility - scale facility entrances.

Z. Any other condition approved by Fayette County Zoning Hearing Board as part of the special exception process.

## VI. Decommissioning of utility-scale solar facilities.

- A. A decommissioning plan shall be developed by the applicant, owner or operator and included as part of the special exception permit.
- B. A solar facility which has reached the end of the term of the special exception permit and not been granted an extension shall be deemed abandoned.
- C. A solar facility project for which on-site construction has begun, but then ceases for a period of nine consecutive months prior to beginning operation, shall be presumed abandoned, unless the operator provides evidence that it does not intend to abandon the project, due to permitting delays, weather delays, material delays or failures, labor shortages, strikes or other matters beyond the control of the operator, as acceptable to the County Planning Director.

- D. A solar facility that is completely inactive, or that has substantially discontinued the delivery of electricity to a grid, for a continuous six-month period shall be presumed abandoned, unless the operator provides evidence that it does not intend to abandon the project, due to permitting delays, weather delays, material delays or failures, labor shortages, strikes or other matters beyond the control of the operator, as acceptable to the County Planning Director.
- E. The applicant, owner of the real estate, or owner or operator of the solar facility shall notify Fayette County Zoning Hearing Board, Planning Commission, and Municipality by certified mail that the facility is abandoned.
- F. At such time that the project is anticipated to become abandoned, or within two years of anticipated decommissioning, whichever earlier, the owner, operator, or owner of the real estate shall notify Fayette County Zoning Hearing Board, Planning Commission, and Municipality, in writing, of the anticipated cessation of operation.
- G. Within six months of utility-scale solar facility being declared abandoned by the owner, operator, or Municipality, the owner or operator shall, at its sole cost and expense, complete the decommissioning of the utility scale solar facility in accordance with the decommissioning plan approved by the Zoning Hearing Board. This time limitation may be extended at the request of the owner or operator, upon approval by the Fayette County Zoning Hearing Board.
- H. If the owner or operator fails to either notify the Fayette County Zoning Hearing Board, Planning Commission, and Municipality that the utility scale solar facility has been abandoned, or failed to decommission the abandoned utility scale solar facility, the property owner shall conduct the decommissioning in accordance with the plan and may use bonded resources to do so, as approved and released by the Municipality.
- I. Applicant, owner default; decommission by the Municipality.
  - (1) If the applicant, its successor, and the property owners fail to decommission the solar energy facility within six months, the Municipality shall have the right, but not the obligation, to commence decommissioning activities and shall have access to the property, access to the full amount of the decommissioning surety, and the rights to the solar energy equipment and materials on the property. The applicant, and property owners, or successors, shall be responsible for reimbursing the Municipality for all costs and expenses of decommissioning in excess of the decommissioning surety, and such excess amounts shall attach to the real estate as a tax lien until paid in full.
  - (2) Any excess decommissioning surety funds shall be released to the owners of the property completion of decommissioning.
  - (3) Prior to the issuance of any permits, the applicant and the property owners shall execute a legal agreement with the Municipality granting the Municipality the right to access the property and the solar energy facility equipment and materials so the Municipality can complete the decommissioning, should it choose to do so, upon the applicant's and property owners' default. Such agreement shall bind the applicant and property owners and their successors, heirs and assigns. Nothing herein shall limit other rights or remedies that may be available to the Municipality to enforce the obligations of the applicant, operator, or property owner.
- J. Surety
  - (1) The estimated cost of decommissioning shall be guaranteed by the deposit of security in a form authorized by the Pennsylvania Municipalities Planning Code, in an amount equal to the estimated cost of decommissioning. Said security shall be posted prior to the issuance of the Certificate of Occupancy. Said surety shall be on the United States Department of Treasury, Circular 570.
  - (2) The applicant shall deposit the required amount into the approved escrow account before any zoning/building permit(s) is issued to allow construction of the solar facility.
  - (3) The amount of funds required to be deposited in the escrow account shall be the full amount of the estimated decommissioning cost without regard to the possibility of salvage value.
  - (4) At the expense of the owner/operator, a Pennsylvania licensed engineer shall recalculate the estimated cost of decommissioning every five years. If the recalculated estimated cost of decommissioning exceeds the original estimated cost of decommissioning by 10%, then the

owner or occupant shall deposit additional funds into the escrow account to meet the new cost estimate. If the recalculated estimated cost of decommissioning is less than 90% of the original estimated cost of decommissioning, then the Municipality may approve reducing the amount of the escrow account to the recalculated estimate of decommissioning cost.

- (5) The Municipality may approve alternative methods to secure the availability of funds to pay for the decommissioning of utility-scale solar facility, such as performance bond, letter of credit, or other security provided by a company licensed, or otherwise authorized to conduct business in Pennsylvania and approved by the Municipality. In the event the bond is approved as an alternative security, such bond shall be posted prior to the commencement of construction, and maintained thereafter, in an amount to be reassessed every five years based on estimated decommissioning costs. The applicant shall provide proof to such bonding after each reassessment and shall provide a copy thereof to the Municipality or their designee. Following completion of decommissioning of the utility-scale solar facility, the bond shall be released and, if the Municipality has called upon the bond and takes control of bond resources, any remaining resources held by the Municipality shall be distributed to the property owners in proportion to their ownership interests.
  - (6) In the event that an owner/operator or municipality is notified that a bond is expiring, terminated, &/or cancelled, they are required to replace the bond with a suitable surety.
  - (7) The owner/operator shall submit annual reports to the Fayette County Zoning Hearing Board as well as municipality with updates on the bond to ensure that it is in place with no lapse in coverage due to expiration/cancellation/termination. These reports will be due on January 1st of each year. The first report will be due after a Certificate of Occupancy is issued by the appointed Building Code Official (BCO) or Department of Labor & Industry.
- K. Decommissioning shall include removal of all solar electric systems, buildings, cabling, electrical components, security barriers, roads, foundations, pilings, and other associated facilities. The site shall be decompacted, graded and reseeded to restore it to as natural a predevelopment condition as possible, or replanted with seedlings to stimulate pretimber, predevelopment conditions as indicated on the approved site plan. Any exception to site restoration, such as leaving access roads in place or seeding instead of planting seedlings must be requested by the landowner in writing, and this request must be approved by the Municipality (other conditions might be more beneficial or desirable at that time).
  - L. Land disturbance activities as a result of removal of solar facilities shall adhere to all local, state and federal requirements.
  - M. Decommissioning shall be performed in compliance with the approved decommissioning plan. The County Zoning Hearing Board may approve any appropriate amendments to or modifications of the decommissioning plan.
  - N. Hazardous materials, panels or pieces thereof from the property shall be transferred to a reclamation or repurposing facility that specializes in recycling, reclaiming or repurposing solar facility materials, or shall otherwise be disposed of in accordance with federal and state law. In no event shall such material be disposed of in Fayette County. A receipt of disposal shall be submitted to the County or their designee within 60 days of such disposal.
  - O. Partial decommissioning. Any reference to decommissioning shall include the obligation to decommission all or portions of the facility, whichever is applicable with respect to a particular situation. If decommissioning is triggered for a portion, but not the entire solar energy facility, then the partial decommissioning shall be completed in accordance with the decommissioning plan and this section for applicable portion of the solar energy facility.

## VII. Coordination of local emergency services.

The applicant, owner, or operator of utility-scale solar facility shall coordinate with the County's emergency services staff as well as the local municipality's emergency services to provide annual materials, education and/or training to the departments serving the property with emergency services in how to safely respond to on-site emergencies. In the event specialized equipment is necessary to safely respond to on-site emergencies, the applicant, owner, or operator shall be responsible for furnishing the County and municipality with such equipment.

#### **VIII. Other Conditions**

The Zoning Hearing Board shall consider conditions when considering a proposed utility-scale solar facility, including, but not limited to, the following:

- A. Maximum generation capacity of the solar facility.
- B. More restrictive criteria pertaining to location and proximity of facility to other uses, including but not limited to, residential uses, highways, entry corridors, scenic highways.
- C. More restrictive criteria pertaining to buffer zones and wildlife corridors.
- D. More restrictive criteria pertaining to prime soils, soil analysis, and deforestation.
- E. Job fairs, hours of construction, public safety and EMS training.

#### **IX. Severability.**

If any portions of this chapter shall be declared invalid by a competent court of law, such invalidity shall not affect the validity of any of the remaining provisions of this chapter.