

Article 23.

Solar Energy System

1. Definitions:

Solar Energy System (SES): the components and subsystems required to convert solar energy into electric or thermal energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing.

Level 1 Solar Energy System- Level 1 SESs include the following:

- i. Roof-mounted on any code-compliant structure
- ii. Ground –mounted on an area of up to 50% of the footprint of the primary structure on the parcel but no more than 1 acre
- iii. Covering permanent parking lot and other hardscape areas.
- iv. Building integrated solar (i.e., shingle, hanging solar, canopy, etc.)

Level 2 Solar Energy System- Level 2 SESs are ground-mounted systems not included in Level 1 that meet the area restriction listed below:

- v. Agricultural: SES up to $\leq \frac{1}{2}$ acre
- vi. Residential: SES up to $\leq \frac{1}{2}$ acre
- vii. Commercial: SES up to ≤ 10 acres
- viii. Industrial: SES of any size

Level 3 Solar Energy System- Level 3 SESs are systems that do not satisfy the parameters for a Level 1 or Level 2 Solar Energy System.

2. Applicability

- a. This Ordinance applies to the construction of any new SES within the County/City.
- b. An SES established prior to the effective date of this Ordinance shall remain exempt
 - i. Exception: Modifications to an existing SES that increases the SES area by more than 5% of the original footprint or changes the solar panel type (e.g. photovoltaic to solar thermal) shall be subjected to this Ordinance.
- c. Maintenance and repair are not subject to this Ordinance.
- d. The ordinance does not supersede regulations from local, state, or federal agencies.

3. Permits Required- Table 1

Table 1: Permit Requirements

Types of Permits Required: P=Permitted Use; CUP=Conditional Use Permit				
Zoning District	Agricultural	Residential	Commercial/ Business	Industrial
Solar Energy Facilities				
Roof-mounted, parking lot cover, or building integrated (Level 1)	P	P	P	P
Ground-mounted:				
up to 50% of the footprint of the primary structure (Level 1)	CUP	CUP	P	P
Up to < 1/2 acre (Level 2)	CUP	CUP	CUP	CUP
Up to 10 acres <(Level 2 or 3)	CUP	CUP	CUP	CUP
In excess of >=10 acres (Level 2 or 3)	CUP	CUP	CUP	CUP

4. A₂ Parcel Line Setbacks from nonparticipating properties and roadways- Table 2

Table 2: Parcel Line Setbacks

A. Zoning District	Level 1	Level 2	Level 3		
			Front	Side	Rear
Agricultural	Per Zoning District	Per Zoning District	100'*	50'*	50'*
Residential			50'*	50'*	50'*
Commercial/Business			30'*	15'*	25'*
Industrial			30'*	15'*	25'*
Ground mounted SES must comply with district front yard limitation and setbacks, or the setbacks of this section, whichever is greater, or otherwise not impair sight distance for safe access to or from the property or other properties in vicinity. AND					
b. SES equipment shall be located no closer than 200' from any residential structure/dwelling unit.					
c. Fencing and vegetative buffer shall be installed on all sides of the facility.					
d. Level 1 SESs are not subject to screening requirements typically applied to accessory utility systems (HVAC, dumpsters, etc.)					

d. Height Limitations- Table 3

Table 3: Height Limitations*

Zoning Districts	Level 1	Level 2	Level 3
Agricultural	Roof-mounted: Per zoning district Ground-mounted 20'	20'	20'
Residential		20'	20'
Commercial/Business		20'	20'
Industrial		20'	20'
*This excludes utility poles and any antennas constructed for the project. Also excludes substation equipment needed for interconnection with the utility.			

- e. Level 1 Solar Energy Systems are a permitted use provided they meet the applicable height, setback and related district standards.
- f. Levels 2 & 3 Solar Energy Requirements- these requirements are in addition to height, setback, and applicable district standards.

A. Site Plan

- i. A site plan shall be submitted demonstrating compliance with:
 1. Setback and height limitations established in Tables 2 and 3,
 2. Applicable zoning district requirements,
 3. Applicable requirements per this Ordinance.

B. Visibility

- i. SESs shall be constructed with buffering that includes:
 1. Associated outside storage shall be completely screened with a vegetative buffer from view from all streets and adjacent residential uses.
 2. Any existing tree or group of trees which stands within or near a require planting area and meets or exceeds the standards of this Ordinance may be used to satisfy the tree requirements of the planting area. The protection of tree stands, rather than individual trees, is strongly encouraged.
 3. Double row of plant material 6 feet of height at planting. Evergreen trees will be placed no more than 20 feet apart, with the second row centered between the first rows, to be a layered look. A chain link fence coated in green or black coating no less than 6 feet in height and no more than 8 feet in height shall be placed along the perimeter of the property. The vegetation shall be placed on the outside of the fence. The health of the landscaping shall be maintained, with trees replaced within 6 months upon death.
 4. Public signage as permitted by the local ordinance, including appropriate or required security and safety signage.
 5. If lighting is provided at the site, lighting shall be shielded and downcast such that the light does not spill onto adjacent parcel or the night sky. Motion sensor control is preferred.

C. Decommissioning / Security - Prior to the issuance of a Building Permit, a Decommissioning Plan and Cost Estimate shall be prepared by a licensed and Registered Professional Engineer from the Commonwealth of Kentucky who is not an employee of the Applicant or the landowner.

- 1. The Decommissioning Plan shall include:

1. Defined conditions upon which the decommissioning will be initiated. In this case, if there has been no power production for 12 months, or the land lease has ended, or cessation of use of abandoned facility unless an extension is granted.
 2. Description of any agreement with Landowner regarding decommissioning.
 3. Provide details for the removal and disposal of all non-utility owned above ground equipment, transformers, inverters, conduit stub outs, or other above ground structures including, foundations. The roads and fencing may be left in place if they are in good working condition and with approval by the land owner.
 4. The Decommissioning Plan shall ensure the property be returned to a condition as it was prior to development of the SES or that is suitable to the use that is granted by the Zoning Ordinance at the time of decommissioning.
 5. Provide a timeframe for completion of decommissioning activities.
 6. Identify the party currently responsible for decommissioning.
 7. Prior to beginning actual decommissioning work, provide a decommissioning plan to be approved by the Planning Commission.
2. The Cost Estimate will provide a detailed estimate of the cost of implementing the Decommissioning Plan.
 3. The developer or Landowner as appropriate, shall post a combination performance and warranty surety in the amount indicated by the Cost Estimate in the form of either a Cash Deposit, Irrevocable Letter of Credit, or Surety Bond (Security, which shall be both to ensure repair of defective materials and/or abandonment of the site. Defective materials are described as any part of the project that is not properly functioning and is shown to be in obvious disrepair for a period of time greater than six months. Abandonment shall be when the SES ceases to produce energy on a continuous basis for 12 months. An extension of this date shall be granted by the Planning Director upon proof of need provided by the plant owner within 90 days of decommissioning date. Security, if provided in form other than cash, must be issued from a surety company licensed to operate in Kentucky and having an A.M. Best rating of B++ or better, or an equivalent rating by Standard & Poor, Fitch Or Moody's.
 4. The Security shall be made in favor of the Cynthiana - Harrison County - Berry Joint Planning Commission in a form approved to the satisfaction of the Planning Commission.
 5. The Decommissioning Plan, cost estimate, and form of security shall be provided for review and approval by the Planning Commission before a Building Permit is approved.
 6. The Decommissioning Plan and Cost Estimate shall be updated every five years, submitted to the Planning Commission for approval, and the Security revised as appropriate based upon the revised cost estimate.
 7. The Applicant and the County shall enter into a recorded agreement in a form approved by the Planning Commission that ensures that the decommissioning is carried out in accordance with this Ordinance. The agreement at a minimum shall include a Decommissioning Plan, Cost Estimate, and language binding the applicant or landowner and the County to implement the decommissioning activities.