AGENDA

Meeting of the Winchester/Clark County Advisory Committee
Location – Commission Chambers – City Hall, Winchester, KY
Tuesday October 27, 2020 @ 7:00 pm.

The meeting can be viewed via Zoom. Please follow the link below to join the webinar:
https://zoom.us/j/99922802792

Phone: 1-669-900-6833
Webinar ID: 999 2280 2792

This is a public meeting, not a public hearing.

Committee Member Introductions

Welcome

Why are we here?

All information will be considered.

We must understand our mission is to research information sufficient to draft text language that
will be presented to the Planning Commission.

Number of Committee Meetings and Length of Each
Meeting 1 – October 27, 2020 @ 7:00 pm – 9:00 pm
Meeting 2 – November 9, 2020 @ 7:00 pm – 9:00 pm
Meeting 3 – November 24, 2020 @ 7:00 pm – 9:00 pm

Ms. Kim Mathias will record the meeting discussion.

The Committee Scope of Work -
The advisory committee is a collection of individuals, each bringing a unique knowledge and
skill to more effectively guide the flow of information for proposed text language.

The advisory committee does not have formal authority to govern the Planning Commission
decision.

The advisory committee cannot issue directives which must be followed by the Commission.

The advisory committee serves to make recommendations and/or provide key information and
materials to the Planning Commission.
The advisory committee focus issue is to review language that can be considered for the solar farm text language consideration, if the Planning Commission so desires to do so.

It is envisioned the work of the advisory committee should be completed within no more than four meetings, each lasting no more than two hours, and the committee will be sunset at the completion of the text language being delivered to the commission.

**Exhibits for consideration** - Examples of solar farm text language within other communities of Kentucky and elsewhere will be reviewed, and a final product will be developed for delivery to the Winchester/Clark County Planning Commission to consider.

Each member is requested to be respectful of all members opinions and not become contentious or have a conflict of interest that might prohibit a fair decision.

First Meeting Discussion:
- **Dispel Myths of what is and what isn’t the work of the committee**
- **Re-zoning is not an option, instead conditional use**
- **What options does the Planning Commission Have**
  - ✓ Do nothing at all, fail to insert any language for solar farms
  - ✓ Draft language necessary for a hearing to be held for any request

If the option selected is to do nothing, a group can be formed to hear the matter with six ex officio members and two ad hoc members, one ad hoc member being the chairperson of the Planning Commission with jurisdiction over the site. (See George Chalfant material)

The following handouts will be used in decision of the language that will be developed and presented to the Planning Commission for consideration.

**Exhibits of Existing Language for review in making a decision:**
- Solar Ordinance Collaboration Timeline
- Proposed Commercial Solar Ordinance
- Kentucky Resources Council - Model Solar Zoning Ordinance
- Madison County, KY Solar Ordinance
- Mercer County, KY Solar Ordinance
- Harrison County, KY Solar Ordinance

**The following can be browsed for greater knowledge enhancement:**
- Local Solar – What do leading solar communities have in common? (APA)
- APA Resources – Planning for Solar Energy Use (APA)
- Planning for Utility-Scale Solar Energy Facilities (APA)
- Center for Environmental Policy – Publication No. 20-02

Member discussion

Adjourn

Winchester/Clark County, KY Citizen Committee Meeting #1
Discussion – Solar Farm Ordinance Language
Page 2 of 2
SOLAR Sub Committee

Larry Disney (Chair) - 859-200-2912

Brian McGuire - 859-953-1610

Gary Witt - 859-749-5290

Travis Purvis - 859-771-7982

Stefan Fink - 859-771-8441

Will Mayer - 859-556-0680

Steve Berryman - 859-556-4057

Dr. Rex Smith - 859-749-8393

Christy Bush - 859-595-3419

George Chalfant - 859-595-2959

Rob Miller - 859-771-1249

Kelley Nisbet - 859-621-3561

Kim Mathias (Recording Secretary) - 859-644-2226

First Meeting 10/27/2020, other meetings as needed and decided by sub committee
Solar Ordinance Collaboration Timeline

**Early September 2019** – Developer, Swift Current Energy (Swift), contacted Winchester/Clark County Planning and Zoning Director Robert Jeffries (Jeffries) regarding the mutual benefits of the development of a Solar Farm in Clark County. Jeffries set up a meeting inviting Todd Denham, Director of the Winchester/Clark County Industrial Authority (Denham), and Matt Belcher, City Manager (Belcher).

**Wednesday, September 18, 2019** – Swift met with Jeffries and Denham. Following this initial meeting, Jeffries set up a second meeting inviting Judge Pace; Denham; Hon. William Dykeman, Attorney for the City of Winchester and for Planning & Zoning (Hon. Dykeman); and Hon. William Elkins, County Attorney (Hon. Elkins).

**Thursday, September 26, 2019** – Swift, Jeffries, Judge Pace, Hon. Elkins, and Denham met for a preliminary discussion of the potential development of a solar project in Clark County.

**October 3, 2019** – Following these initial meetings, Swift secured its option to purchase real estate in Clark County and obtained local counsel to assist in the process.

**March 26, 2020** – Scheduled meeting with County and City officials cancelled due to COVID-19.

**Wednesday, April 8, 2020** – A Zoom video-conference call took place; Jeffries, Judge Pace, Hon. Elkins, Hon. Dykeman; Swift and legal counsel for Swift participated [Denham and Belcher were also invited]. The group discussed the specifics of the proposed development and the potential processes for such a development under the zoning ordinance. County and City officials offered insights, potential concerns, and suggestions for moving the project forward. At this meeting it was requested that the developer prepare a draft ordinance for review. A follow-up meeting was scheduled for early May to review the proposed ordinance.

**Monday, May 4, 2020** – A draft proposed solar ordinance was emailed to Jeffries, Judge Pace, Hon. Elkins, Hon. Dykeman, Denham, and Belcher for review and comment.

**Wednesday, May 6, 2020** – A zoom video-conference call took place. Jeffries, Judge Pace, Hon. Dykeman, Hon. Elkins, Swift and legal counsel for Swift participated [Denham and Belcher were also invited]; the group discussed the proposed draft ordinance. Officials from the County and City offered proposed suggestions and revisions. Jeffries offered to having a preliminary discussion of the draft ordinance at the May 19 Planning Commission Meeting.

**Tuesday, May 12, 2020** – A revised ordinance incorporating the suggestions of City and County officials was emailed to Jeffries, Judge Pace, Hon. Dykeman, Hon. Elkins, Denham, and Belcher.

**Tuesday, May 19, 2020** – The Planning Commission discussed the proposed ordinance. Following the discussion, the Commission moved to table consideration of the ordinance.

**Tuesday, June 9, 2020** – The Planning Commission further discussed the proposed ordinance and upon the advice of counsel tabled the proposal until further direction was received from the Fiscal Court and City Commission.

**Thursday, June 25, 2020** – The Clark County Fiscal Court directed the Planning Commission to review the proposed ordinance within 60 days.
WINCHESTER/CLARK COUNTY
PROPOSED SOLAR ORDINANCE
WITH COMMENTS IN RED FROM TOM FITZGERALD
My review of the proposed ordinance is in the form of comments in track change format, so that they are highlighted for consideration. My recommendation is that the ordinance not be approved as written, but rather that a committee be empaneled including a broad range of public interests and solar developers, to develop an ordinance that better balances the public interest in development of solar in appropriate locations, with the protection of the use and enjoyment of surrounding properties.

PROPOSED COMMERCIAL SOLAR ORDINANCE

The following is a proposed text amendment to the Revised Zoning Ordinance, City of Winchester and Revised Zoning Order, Clark County, Kentucky ("Zoning Order") in order to add a new Section 6.144 under the "Special Uses" section of the Zoning Order to allow for solar energy generating facilities. The proposed amendments to the Zoning Order are set forth below.

1. That Section 6.144 shall be added to the Zoning Order as follows:

   "6.144 Solar Energy Facilities as regulated by Article 8, Section 8.10."

2. That Section 8.10 shall be added to the Zoning Order as follows:

   "Section 8.10 Solar Energy Facilities (SEFs)

8.101 This section sets forth the procedure and regulations for the approval and maintenance of ground-mounted solar energy facilities, including the components, equipment and infrastructure required to convert solar energy into electrical energy, store such energy, and inject such electrical energy onto the transmission grid, that have a nameplate capacity of 20 megawatts or more ("Solar Energy Facility" or "SEF"). A Solar Energy Facility may be constructed and maintained in an Agricultural District as a special use. To the extent any provision of Section 8.10 is inconsistent with any other term or provision of the Zoning Order, the terms set forth in this Section 8.10 shall govern.

The limit of 20 MW or more fails to properly zone for facilities that at 10 MW or more in aggregate capacity are regulated by the state Electric Generation and Transmission Siting Board. In order to properly coordinate the state review with local zoning, and to address utility-scale arrays, the threshold should be much lower than 20 MW.

Additionally, the limitation of siting to agricultural districts ignores the opportunity to site utility-scale solar arrays in industrial, commercial, and other non-agricultural zones, and creates unnecessary conflict between preservation of farmland capability and siting of renewable facilities.

8.102 Any person or entity desiring to construct a SEF ("Applicant" or "Owner") shall first submit to the Winchester-Clark County Planning Commission a Site Plan, Screening Plan, and Decommissioning Plan (as defined below, together the "Plans"), which shall contain the following:
1. **Site Plan.** The project site plan ("Site Plan") shall be prepared by an experienced professional engineer licensed in Kentucky and contain at least the following elements:

   (A) A vicinity map showing the location of the entire project, including each parcel on which the SEF will be located ("Project Parcels") and each adjacent parcel, with lot lines, ownership information (from the tax assessor rolls or title research), and parcel ID numbers on each parcel. The Site Plan shall have an overlay, or shall include on a separate sheet, the topographical elevations of the Project Parcels.

   (B) A depiction of (i) all existing buildings and structures on adjacent non-participating property, specifically noting any dwellings that exist and are occupied, or capable of being occupied, as a residence served by sanitary service or a septic system, on the date of the application ("Occupied Residences"), (ii) any existing buildings and structures on Project Parcels that will remain after the SEF is built, (iii) all public and private roads with names, if applicable, that are adjacent to the Project Parcels, (iv) all existing above ground utilities and underground utilities (to the extent they can be field-located by above ground indicators or from information from Kentucky 811), (v) FEMA mapped flood plain designations applicable to the Project Parcels, (vi) the location of the proposed Solar Energy Facility and related infrastructure, including site roads and proposed groundcover (vii) all setback lines from Occupied Residences, property lines, and public rights-of-way in accordance with Section 8.103.

   (C) A certification by the engineer that the SEF depicted on the Site Plan does not exceed any of the height and setback requirements provided in the Zoning Order.

2. **Site Screening Plan.** The screening plan ("Screening Plan") shall provide for reasonable perimeter screening to reduce the site view of the SEF from Occupied Residences located within 200 feet of the SEF on parcels adjacent to the Project Parcels, including adjacent parcels located across any public right-of-way. The Screening Plan shall depict perimeter screening on that portion of the perimeter of the SEF directly visible from such Occupied Residences, which may be located on the Project Parcels within the setback areas required by Section 8.104. Applicant may satisfy the screening requirements by incorporating one or a combination of the following:

   Vague standards such as "reasonable" screening to "reduce" the site view should be avoided.

   (A) When reasonably practical, any existing natural tree growth and land forms along the applicable boundary of the Project Parcels shall be preserved and may create a sufficient buffer.

   See comment above. "reasonably practical" is a meaningless standard.

   (B) A vegetative buffer consisting of shrubbery, trees, hedges or other non-invasive plant species that are at least four feet high when planted and will grow to at least eight feet high within five years of
planting. Once fully grown, gaps between the shrubs, trees, hedges or plants shall not be more than six feet in width. A vegetative screen may also be grown on a fence; provided, that, the vegetation on the fence provides a minimum of 50% opacity in winter and 70% opacity in summer within four years of installation.

**What is the basis for 50 and 70% rather than 100% percent?**

(C) In lieu of the vegetative buffer described above, an opaque fence may be used; provided, that, the fencing material or veneer is, or has the appearance, of wood, stone, or other natural material, and is at least eight feet high.

**Why is the fence 8 feet high yet vegetation need not be for 5 years after planting?**

3. **Decommissioning Plan.** A decommissioning plan prepared by a professional engineer or contractor ("Decommissioning Plan") and shall provide the estimated cost to remove the SEF and related infrastructure, including: foundations, pads, underground collector lines, and permanent roads built on the Project Parcels as part of the construction of the SEF, all to a depth of four feet below the surface, (ii) the estimated cost to restore the Project Parcels to a condition substantially similar to the condition of the Project Parcels prior to construction of the SEF, and (iii) the estimated salvage value of the SEF. The estimated cost to decommission the SEF and restore the Project Parcels minus the estimated salvage value of the SEF is referred to hereafter as the "Decommissioning Cost".

Reference should be made to objective standards for determining the salvage value of the SEF in order to assure that it is not inflated.

**8.103 Pre-Construction Deliverables.**

Prior to issuance of a building permit, the applicant shall provide the following to the county planning director, or applicable governing body (if noted below):

**Why are these requirements part of the building permit, which has no public input, rather than part of the approval by the zoning body.**

1. **Decommissioning Security.** Security in the form of a performance bond or letter of credit, in the amount of the Decommissioning Cost, if the Decommissioning Cost is a positive number, securing Owner's decommissioning obligations under Section 8.105, naming the County as beneficiary ("Decommissioning Security"). The Decommissioning Security will be delivered to the applicable governing body, with a copy to the planning director. Decommissioning Security shall be required to be posted to reflect the revised Decommissioning Cost every five years as set forth in Section 8.105.

2. **Traffic Map.** A traffic map ("Traffic Map") that depicts the primary county roads that will be used as haul routes and as ingress and egress routes to and from the SEF for material and equipment deliveries ("Impacted Roads"). Owner shall work with the Clark County road superintendent and planning director to coordinate impacts to traffic.
including revising the Traffic Map as may be reasonably required to accommodate school bus routes or planned construction of public roads.

3. Pre-Construction Inspection. Applicant shall document the existing condition of the Impacted Roads prior to construction of the SEF by submitting an inspection report that includes either (i) a series of still images of the Impacted Roads surfaces taken every 20 feet and compiled to provide a viewer a “virtual drive” of the roads, or (ii) a video of the entire length of the Impacted Roads, and any other applicable road surface documentation the Owner produces in preparation for construction, including copies of any documents such as cross-section surveys, centerline profiles, and culvert condition inventory (“Pre-Construction Inspection”).

4. Road Repair Security. The planning director may, in the director’s reasonable discretion, require Owner to provide a letter of credit or performance bond, naming the County as beneficiary, to secure Owner’s obligations to repair the Impacted Roads in an amount equal to $25,000 per mile of Impacted Roads, not to exceed a total amount of $250,000 (“Road Security”). After completion of construction of the SEF, including any repairs to the Impacted Roads, Owner shall submit to the planning director a post-construction inspection report, which shall include the same forms of documentation as the Pre-Construction Inspection (“Post-Construction Inspection”). Within 15 calendar days after submission of a Post-Construction Inspection showing the Impacted Roads are in substantially the same condition as they were prior to construction of the SEF, the County shall release the Road Security.

8.104 Solar Energy Facility Requirements.
All SEF installations shall comply with the following requirements:

Where are the public notice requirements associated with the proposed siting?

1. Height. Notwithstanding Section 6.15 of the Zoning Order, no SEF shall exceed 20 feet in height measured from the highest edge of a panel to the ground beneath; provided, however, excluded from this height restriction are overhead power lines, poles, operations and maintenance buildings, and substations/switch yards, if applicable. What about transformers and other structures such as utility poles, storage batteries, and antennae?

2. Side and Rear Setback. Notwithstanding Section 6.15 of the Zoning Order, all SEFs, measured from the outer edge of the panels or perimeter fence, whichever is closer to the applicable property line, shall be set back at least 50 feet from property lines of non-participating adjacent landowners. If the Solar Energy Facility is located on multiple adjacent tracts, no setback from such contiguous participating parcels’ interior property lines shall be required.

3. Front Setback. Notwithstanding Section 6.15 of the Zoning Order, all SEFs, measured from the outer edge of the panels or perimeter fence whichever is the furthest exterior edge of the SEF, shall be set back at least 50 feet from the centerline of any public road. This setback requirement shall not apply to the SEF access roads, nor shall it apply to collector and transmission lines.
4. **Occupied Residence Setback.** Notwithstanding Section 6.15 of the Zoning Order, all SEFs shall be set back 100 feet from any Occupied Residence, measured from the outer edge of the panels or perimeter fence of the SEF, whichever is closer to the Occupied Residence, and the nearest edge of the Occupied Residence's foundation.

5. **Waiver.** Property owners of non-participating parcels that are within the setback distances required by Section 8.102(2) and Section 8.104(2)–(4) may waive such setback and screening requirements by executing a written waiver. Such waiver shall be recorded in the official records of the County, be a burden on the adjacent parcel(s) and a benefit on the Project Parcels, and run with the land so long as the SEF is located on the Project Parcels.

6. **Compliance with Laws.** All SEF installations shall comply with all applicable federal, state and local laws; provided, however, to the extent that any provision of this Section 8.10 is in conflict with any other provision of the Zoning Order, the provisions of this section shall govern.

7. **Lighting.** SEF installations shall include outdoor lighting as required for security purposes or required by federal, state or local law. To the extent commercially reasonable, all lighting shall be shielded and downcast.

8. **Screening.** If applicable, SEFs shall incorporate the screening requirements set forth in Section 8.102(2).

9. **Signage.** Notwithstanding any other provision in the Zoning Order, all SEFs may include signage with warning and safety information and any other information required by federal, state and local law, or otherwise allowed under this Zoning Order.

10. **Assignment.** The special use approval and building permit issued under this Section may be assigned to a successor Owner of the Solar Energy Facility. Any successor Owner shall comply with all terms and conditions of the approval and/or building permit, as applicable.

**8.105 Decommissioning and Abandonment.**

1. **Project Abandonment.** Owner shall decommission and remove the SEF in compliance with this Zoning Order within six months after the date Project Abandonment occurs, and restore the Project Parcels to as close to pre-construction condition as reasonably practical. "Project Abandonment" means the SEF has not, for 12 continuous months (i) generated electric energy and delivered such energy to the utility grid, (ii) been decommissioned in accordance with this Zoning Order, and (iii) such cessation of operations is not attributable to an event beyond the reasonable control of Owner.

2. **Updated Decommissioning Plan.** Owner shall submit a revised and updated Decommissioning Plan to the planning office five years after the date the building permit was issued for the SEF, and each five year anniversary thereafter until the SEF has been fully decommissioned and the Project
Parcels have been restored as required by this Zoning Order. Such revised Decommissioning Plan may be submitted up to 180 days prior to the dates due.

3. **Updated Decommissioning Plan Contents.** The revised Decommissioning Plans shall include the same information as the original and shall provide an updated Decommissioning Cost. Decommissioning Security shall be posted or revised in the amount of the new Decommissioning Cost within 60 calendar days after delivery of the updated Decommissioning Plan and shall replace the existing Decommissioning Security, if applicable.

4. **Decommissioning Security Release.** Within 45 calendar days after the date the SEF is fully decommissioned and the Project Parcels have been restored to a condition substantially similar to the condition they were in prior to construction of the SEF, the County shall release the Decommissioning Security.

**Section 8.106 Application and Review Fee.**

The assignment of the review to the planning commission, rather than to the Board of Adjustment, will inevitably make the siting of these facilities more political. More precise standards for appropriate siting, including protection of the productive capability of prime and important farmlands, and a level of respect for the integrity or rural communities correlative to protection of more densely populated, commercial, and industrial areas, would make for a far more predictable siting process. The Board of Adjustment should review such proposals and the mechanism for assuring application of standards appropriate to the specific circumstance, is through a conditional use permit rather than a special use authorization.

An application, review and inspection fee equal to: $10,000 for a Solar Energy Facility with an alternating current (AC) nameplate capacity up to 50 megawatts plus $5,000 for each additional 50 megawatts, not to exceed a total of $30,000 ("Review Fee") shall be payable to the planning commission as follows:

1. One-third of the Review Fee shall be paid to the planning commission upon submission of the application and Plans.

2. One-third of the Review Fee shall be paid to the planning commission upon submission of the Traffic Map, Decommissioning Security, Pre-Construction Inspection, and Road Security, if applicable.

3. One-third of the Review Fee shall be paid to the planning commission upon issuance of the building permit.

*What is the justification for such high costs for processing the application, and for scaling up the costs based on additional megawatts? There should be an analysis of the workload and cost of processing to support any review fees.*

**Section 8.106 Solar Energy Facility Approval Procedures.**

An application to construct a SEF under Section 6.144 and 8.10 shall be considered and approved by the planning commission after a public hearing noticed in
accordance with KRS 100.211. To request approval for the placement of a SEF the Owner shall file an application with the planning office and submit the following, which shall be considered under the following procedures:

1. **Filing** – The Owner shall file three completed copies of the Site Plan, Screening Plan, and Decommissioning Plan “collectively “Plans””) as required by Section 8.102. If the Owner is not the fee simple owner of the Project Parcels, the Owner must also file an affidavit of the owner of the Project Parcels consenting to the filing of the Plans.

2. **Review** – The planning commission staff shall review the Plans and consult as necessary with the county road department and other professionals, and shall take the necessary action to give notice of, advertise and schedule a public hearing before the planning commission within 35 days.

3. **Report** – At least seven days prior to the public hearing, the planning commission staff shall provide a written recommendation to the planning commission and provide Owner a copy thereof.

4. **Commission Action** – At the public hearing the planning commission will review staff’s report and recommendations and comments from the Owner and the public, and then act for approval, conditional approval with conditions noted, postponement, or disapproval. The planning commission may modify or disapprove the Plans if it finds the Plans do not comply with the requirements of the Zoning Order. The planning commission shall take final action on the Plans and application within 65 days of its filing.

5. **Building Permit** – Upon approval of the Plans by the planning commission and satisfaction of the requirements of Section 8.103, a building permit may be issued by the planning director for construction of the Solar Energy Facility on the Project Parcels. Construction of the Solar Energy Facility must commence within one year after the date on which the building permit is issued.

6. **Minor Amendments** – A minor amendment to a Site Plan or Screening Plan that has already been approved by the planning commission may be approved by the planning director to expedite approval in those situations where amendments are of minor significance and generally relate to the shifting of previously approved spaces, locations of facilities or access; provided, that, such amendments do not cause the Solar Energy Facility to be out of compliance with the requirements set forth in Section 8.104. Any material modification to the Plans that causes the Solar Energy Facility to be out of compliance with the requirements of Section 8.104 shall be approved by the planning commission, after notice and a public hearing, in accordance with the procedures in Section 8.106."
KENTUCKY MODEL
SOLAR ZONING
ORDINANCE

FROM THE KENTUCKY RESOURCES COUNCIL
In response to the increasing interest in the development of solar energy resources in Kentucky, the Kentucky Resources Council has developed this Model Solar Zoning Ordinance to assist localities in adopting provisions to regulate the siting of solar energy facilities in their communities. This Model Solar Zoning Ordinance is based upon a review of best practices from across the United States and is tailored to meet the unique needs of Kentucky, with the goals of encouraging appropriate siting of solar facilities and protection of the correlative rights of landowners to the use and enjoyment of their lands. All counties in Kentucky are unique, and planning and zoning should be tailored to meet and guide current development and future aspirations of the county residents. The ordinance offers a “menu” of options in certain areas, to allow local officials in conjunction with county residents, to select the options that best meet their needs. Explanatory text is provided in footnotes.

HOW TO USE THIS ORDINANCE

This Ordinance provides the framework for the regulation of land uses involving the construction and operation of solar facilities. It is intended to provide suggestions for consideration by communities, Planning and Zoning Commissions, and County governments as revisions are made to Comprehensive Plans and zoning ordinances, and may need to be modified or adapted to conform to the framework of local planning and zoning ordinances.

1 This model ordinance is developed by the Kentucky Resources Council for general use and consideration by the public and by local planning and zoning agencies. It is not intended to provide legal advice.
MODEL SOLAR ZONING ORDINANCE

Section 1. Purpose

The purpose of this ordinance is to facilitate the siting, development, construction, installation, and decommissioning of solar energy systems (SESS) in [city/county] in a predictable manner that promotes and protects the safety, health, and welfare of the community. This ordinance encourages the appropriate siting of SESSs to bolster local economic development and job creation, diversify the state’s energy portfolio, strengthen energy and grid security, and reduce other environmental impacts. The appropriate siting of SESSs considers, avoids to the extent possible, and mitigates any adverse impacts to wildlife, productive and nationally important agricultural lands, forests, endangered species habitat, and historic, natural, and other sensitive lands. The appropriate siting of SESSs also establishes standards and requirements to assure that the use and enjoyment of lands located adjacent to and in the proximity of SESSs are fully protected. ²

The requirements of this Ordinance are intended to be supplemental to any safety, health, or environmental requirements of federal, state, or local laws, and regulations.

Section 2. Definitions

Solar Energy System (SES) means a device, including its components and subsystems, that collects solar energy for electricity generation, consumption, or transmission, or for thermal applications. SESSs are in turn divided into three types depending on how the system is incorporated into the existing land use:

Integrated Solar Energy System means an SES where the solar materials are incorporated into the building materials, such that the building and solar system are reasonably indistinguishable, or where the solar materials are used in place of traditional building components, such that the SES is structurally an integral part of the house, building, or other structure. An Integrated SES may be incorporated into, among other things, a building façade, skylight, shingles, canopy, light, or parking meter.

Rooftop Solar Energy System means an SES that is structurally mounted to the roof of a house, building, or other structure and does not qualify as an Integrated SES.

² A community may wish to incorporate into the solar zoning ordinance, a preference for siting of large ground mounted solar arrays on brownfield properties. EPA’s initiative RE-Powering American’s Land: Siting Renewable Energy on Potentially Contaminated Lands, Landfills, and Mine Sites, has tools and resources to help: https://www.epa.gov/re-powering. Developing solar on brownfields may involve additional challenges in financing, permitting, and remediation, but may also offer incentives to assist in defraying those costs.
Ground Mounted Solar Energy System means an SES that is structurally mounted to the ground and does not qualify as an Integrated SES. Ground Mounted SESs are subcategorized as follows:

- **Small Scale Ground Mounted Energy System (Small Scale SES)** which is a Ground Mounted SES with a Footprint of less than 2,500 square feet

- **Intermediate Scale Ground Mounted Energy System (Intermediate Scale SES)** which is a Ground Mounted SES with a Footprint of between 2,501 square feet and ten (10) acres.

- **Large Scale Ground Mounted Solar Energy System (Large Scale SES)** means a Ground Mounted SES with a Footprint of more than ten (10) acres.

Exempt Solar Energy System (Exempt SES) means a SES that is a facility of a municipally owned electric system or public utility regulated by the Kentucky Public Service Commission or Federal Energy Regulatory Commission, which is exempt from planning and zoning requirements under KRS 100.324.

Farmland of Statewide Importance means a map unit identified by the Natural Resources Conservation Service as including soils that nearby meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.

Footprint of the SES is calculated by drawing a perimeter around the outermost SES panels and any equipment necessary for the equipment to function, such as transformers and inverters. The footprint does not include perimeter fencing or visual buffers, nor transmission lines or portions thereof that are required to connect the SES to a utility or customer outside the SES perimeter.

Prime Farmland means a map unit identified by the Natural Resources Conservation Service of the United States Department of Agriculture as having the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses.

Siting Board Regulated SES means a SES that constitutes a “merchant electric sitting facility” under KRS 278.700(2), the construction and siting of which is subject to review and approval of the Kentucky State Board on Electric Generation and Transmission Siting. A merchant electric siting facility is an electricity generating facility or facilities that, together with all associated structures and facilities are capable of operating at an aggregate capacity of ten megawatts (10 MW) or more and sell the electricity produced in the wholesale market, at rates and charges not regulated by the Kentucky Public Service Commission.

Section 3. Applicability

(a) This ordinance applies to the siting, construction, installation, and decommissioning of any new SES within the jurisdiction of [the city/county] after the effective date of this ordinance.
(b) An SES in operation, or which has begun physical construction prior to adoption of this ordinance, shall be considered to have legal nonconforming status in accordance with KRS 100.253.

(c) The following are not subject to this ordinance:

1. Modification to an existing SES that alone or in combination increases the total SES Footprint by no more than 5% of the original Footprint.

2. Routine maintenance and repair, including replacement of solar panels, not increasing the SES Footprint.

(d) Any Exempt SES shall provide the Planning Commission, Board of Adjustment or other authority having jurisdiction, and Fiscal Court with information concerning service facilities which have been located on and relocated on private property in accordance with KRS 100.324(3).

(e) An SES shall comply with all applicable federal, state, and local laws, regulations, and permitting and other requirements, and applicable building, fire, electrical, and plumbing codes.

Section 4. Conditional Use Permit Requirements and Allowed Uses

P: The SES is a use that is allowed in the district without the necessity of obtaining a zoning permit or prior planning approval, provided that the applicable requirements below are met. A variance from any of the standards applicable to a SES may be obtained through the Board of Adjustment or other authority having jurisdiction.

CUP: Conditional Use Permit required. The SES is allowed in the district subject to the requirements set forth below and only if the applicant first obtains a Conditional Use Permit in accordance with the [city/county] zoning code.

<table>
<thead>
<tr>
<th>Accessory Use</th>
<th>Residential</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Agricultural</th>
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<tbody>
<tr>
<td>Integrated SES</td>
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<td>Ground Mounted SES</td>
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</table>

3 The SES facilities of a municipally owned electric system or public utility regulated by the Kentucky Public Service Commission or Federal Energy Regulatory Commission, are exempt from planning and zoning requirements under KRS 100.324. The statute does allow planning units to request information on their facilities. This provision eliminates the need to ask on a case-by-case basis, making a standing request to such entities for that information.

4 Some communities may decide not to adopt any standards for rooftop or small ground mounted SESs, and to limit the focus of planning and zoning to larger ground mounted SESs. The standards are offered to provide guidance and to minimize conflict among neighbors, by prescribing some minimal standards for rooftop and small ground mounted SESs without requiring any zoning approval or prior authorization unless a variance is sought from the standards on a case-by-case basis.
<table>
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<tr>
<td>Rooftop SES</td>
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</table>

* A Small-Scale Ground Mounted SES qualifies as an accessory use only if its area is less than 50% of the footprint of the primary structure.

Section 5. General Requirements Applicable to Integrated and Rooftop Solar Energy Systems

(a) Solar Access. Consistent with KRS 381.200(2), a property owner may obtain a solar easement from another property owner for the purpose of ensuring adequate exposure to sunlight for an Integrated or Rooftop SES. Such easement shall be recorded.

(b) Tree Removal. The removal of trees or natural vegetation for an Integrated or Rooftop SES shall be limited to the extent practicable and shall comply with all the requirements of the [city/county] zoning code regarding tree removal, and any applicable state or federal requirements.

(c) Height Restrictions. A rooftop SES shall conform to any height restrictions for rooftop-mounted mechanical devices or equipment for the applicable zoning district and may exceed the maximum permitted height for the structure type by no more than five (5) feet. A rooftop SES shall be positioned on the roof so as not to extend above or beyond the edge of any ridge, hip, valley, or eave, provided that where it is mounted on a sloped roof, the SES shall not vertically exceed the highest point of the roof to which it is attached by more than five (5) feet.

(d) Lighting. Integrated and Rooftop SESs shall not be illuminated and shall be designed and installed to prevent off-site glare.

(e) Historic Preservation. Where an integrated or rooftop SES is proposed to be installed on a property located within an historic district or which is listed on or eligible for listing on the National Register of Historic Places, the proposed installation shall be coordinated with any review required by the zoning ordinance for exterior renovations or additions to such structures.

KENTUCKY RESOURCES COUNCIL | 5
Section 6. General Requirements Applicable to Ground Mounted SESs

(a) Solar Access. Consistent with KRS 381.200(2), a property owner may obtain a solar easement from another property owner for the purpose of ensuring adequate exposure to sunlight for a Ground Mounted SES. Such easement shall be recorded.

(b) Tree Removal. The removal of trees or natural vegetation for a Ground Mounted SES shall comply with all the requirements of the [city/county] zoning code regarding tree removal and mitigation, and any applicable state or federal requirements.

(c) Lighting. Lighting of a Ground Mounted SES shall be limited to the minimum necessary for safe operation, and shall be directed downward, incorporate full cut-off features, and incorporate motion sensors where feasible. Lighting shall be designed to avoid light trespass. Nothing in this Ordinance is intended to preclude installation of lighting required by the Federal Aviation Administration.

(d) Height Requirements for Ground Mounted SES. A Ground Mounted SES shall not exceed twenty (20) feet in height as measured from the highest natural grade below each solar panel without approval by the Board of Adjustment or other authority having jurisdiction. The height restriction excludes utility poles, storage batteries, substation structures, and antennas constructed for the project. A Ground Mounted SES may exceed twenty (20) feet in height upon a finding that the SES would be more productive, use less land, or provide other environmental, economic, or other benefits if the height limitation is increased.

(e) Siting Restrictions for Ground Mounted SES

1. An Intermediate or Large Scale Ground Mounted SES, measured from the closer of the outer edge of the nearest panel or perimeter fencing, shall be located at least fifty (50) feet from the property line of any property zoned for residential or agricultural use, at least thirty (30) feet from the property line of any property zoned for commercial, business, industrial, office, or institutional use, and at least fifty (50) feet from the centerline of any public road.

2. An Intermediate or Large Scale Ground Mounted SES, measured from the closer of the outer edge of the nearest panel or perimeter fencing, shall be located no closer than one hundred (100) feet from a residence located on a property other than that on which the Ground Mounted SES is to be installed.

3. These setback provisions above can be waived in writing by the adjacent property owner to whom the property line or residence setback is applicable.

4. Setbacks are not required where the property line is shared by two or more participating landowners.
5. Setback requirements may be reduced by 25% where effective existing or proposed visual screening is determined to exist by the Board of Adjustment or other authority having jurisdiction.⁵

6. Setback requirements may be expanded by a Board of Adjustment or other authority having jurisdiction, as a condition of approval of a Conditional Use Permit, where deemed necessary to assure effective screening.

(f) Screening. Ground Mounted SESs shall be effectively screened from properties zoned for residential use other than that on which the SES is to be constructed.

1. Ground Mounted SESs approved as a conditional use shall have or install a visual buffer of natural vegetation, plantings, earth berms, and/or fencing that will provide an effective visual and lighting screen between the SES and properties zoned for residential use, unless waived by the Board of Adjustment or other authority having jurisdiction. Existing buffers along an SES perimeter shall be preserved when reasonably practicable.

(g) Protection of Farmland And Revegetation Of Disturbed Areas

1. Compaction of soil associated with the location of roads and installation staging areas for Intermediate and Large Scale Ground Mounted SES on land zoned for agricultural use shall be minimized to the extent possible. Compaction of soil associated with the location of roads and installation staging areas for all Ground Mounted SES on land zoned for agricultural use that are classified either as prime farmland or farmland of statewide importance shall be avoided to the extent possible, and the soils shall be de-compacted as part of the decommissioning process.⁶

2. Upon completion of construction and installation of the Ground Mounted SES, all temporary roads constructed by the applicant shall be removed, and all disturbed

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⁵ The phrase “or other authority having jurisdiction” is intended to cover those instances where an entity other than the Board of Adjustment or other authority having jurisdiction is empowered to grant waivers or CUPs.

⁶ A community may want to consider whether the screening requirement could be waived by the owner of the adjoining property, or whether such a waiver would be a factor but not the only factor in a Board of Adjustment or other authority having jurisdiction, deciding to waive some or all of the screening requirement.

⁷ Other alternatives may be employed to address siting on prime farmland or farmland with statewide importance, in order to avoid damage to productive farmland. Those include, at one end of the spectrum, a flat prohibition of compaction of such soils, which would cause the arrays to be located on less productive or more marginal agricultural land. Alternatively, “smart solar siting” such as that advocated by the American Farmland Trust (AFT), can be employed to guide solar development onto land where it has the least impact on agriculture and the environment, and to use innovative design and construction to make solar energy compatible with continued farming. AFT’s Smart Solar Siting project tackles these issues and provide new resources for communities, organizations, landowners, and farmers to achieve the dual goals of expanding solar energy generation and protecting farmland.
areas shall be graded and reseeded with native vegetation in order to establish an effective ground cover and to minimize erosion and sedimentation.

(h) Signage. A Ground Mounted SES may include such signage as is required by law to provide safety information, and other signage as may be allowed under this Ordinance.

(i) Decommissioning. Other than as specifically approved by the Board of Adjustment or other authority having jurisdiction upon application and notice, decommissioning shall begin no later than twelve (12) months after a Ground Mounted SES has ceased to generate electricity or thermal energy:

1. If the Ground Mounted SES was a permitted use without a conditional use permit, all structures and facilities associated with the SES shall be removed within six (6) months of the beginning of decommissioning. All materials shall be recycled or otherwise reused to the extent reasonably practicable and the disturbed areas shall be reclaimed, revegetated, and restored consistent with the zoning classification of the property.

2. If the Ground Mounted SES was allowed under a conditional use permit, the SES shall be decommissioned according to the decommissioning plan approved in the Conditional Use Permit.

Section 7. Conditional Use Permit Application Requirements

(a) Applications for an SES requiring a conditional use permit shall include the following information:

1. Name, address, telephone number, and email address (if available) of the applicant, the project owner, and the project operator.

2. The address of the property on which the SES will be located and the property owner’s name, address, telephone number, and email address if available.

3. Documentation, such as a deed, lease, or other agreement with the landowner, demonstrating the applicant’s right to use and control the property.

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* The use of the phrase “native vegetation” with respect to erosion and sediment control, is not intended to preclude the use of beneficial species incorporated into a project in order to create pollinator habitat. The use of invasive or nuisance species should be prohibited. Information on invasive species is available from the Office of Nature Preserves [https://eec.ky.gov/Nature-Preserves/conserving_natural_areas/Pages/Habitat_Mgmt.aspx](https://eec.ky.gov/Nature-Preserves/conserving_natural_areas/Pages/Habitat_Mgmt.aspx)

  Minimizing the time from site disturbance until establishment of an effective ground cover, is the essence of good reclamation. There are companies that have developed seed mixes of Kentucky-native species intended specifically to assist in erosion control and soil stabilization. Cf Roundstone Native Seed, LLC. [https://roundstoneseed.com/17-erosion-control-mixes](https://roundstoneseed.com/17-erosion-control-mixes). The Kentucky Native Plant Society maintains a list of Kentucky native plant nurseries. [https://www.knps.org/native-plant-nurseries/](https://www.knps.org/native-plant-nurseries/)

  For communities, landowners, and project proponents seeking to incorporate the creation or enhancement of pollinator habitat into project buffer areas, refer to Kentucky Pollinator Protection Plan. [https://www.lyagri.com/statevet/documents/OSV_Bee_KY-Pollinator-Pro-Plan.pdf](https://www.lyagri.com/statevet/documents/OSV_Bee_KY-Pollinator-Pro-Plan.pdf)
4. A topographic map that depicts vegetative cover, watersheds, floodplains, and other geographic information about the property and surrounding area.

5. A conceptual description of the project, including the maximum number of modules, mounting type (fixed-tilt or tracking), system height, system capacity, total land area covered by the system, and information about all associated structures or facilities such as transformers, substations, feeder lines, and battery storage.

6. A conceptual site plan including property lines, zoning classification of the property and all adjacent properties, existing buildings and proposed structures, the proposed location of the solar equipment, transmission lines, any associated structures and facilities, and substations. The conceptual site plan shall also identify existing and proposed temporary or permanent roads, drives, and parking, fencing or other methods to ensure public safety, and a visual buffer plan demonstrating how proposed visual buffers will effectively screen the proposed SES from adjacent properties zoned for residential use.

7. A map from the Natural Resources Conservation Service identifying prime farmland and farmland of statewide importance (if in a district zoned as agricultural), documentation from the U.S. Fish and Wildlife Service regarding the presence any identified critical habitat for rare or endangered federal or state species. The application shall also contain a Federal Emergency Management Agency map delineating floodplains, shall include evidence of any water quality or stormwater permit needed for the project,9 and shall contain a letter from the State Historic Preservation Office regarding known archaeological or cultural resources listed or eligible for listing on the National Register.

8. Information demonstrating that approval of the SES will not result in any disproportionate individual or cumulative environmental burden on low-income communities or communities of color.

9. A decommissioning plan10 prepared by a registered professional engineer, and updated every seven (7) years, containing the following:

   a. The anticipated life of the project and defined conditions upon which decommissioning will be initiated;

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9 The “evidence” contemplated by the ordinance could be a copy of the water quality or stormwater permit obtained from the appropriate state agency, or documentation that the agency has indicated that such a permit is not required; or could be a notation that such a permit is required and will be applied for prior to any disturbance of the land associated with the project. Depending on several factors, the developer of a Ground Mounted SES may apply for such environmental permits before or after the zoning process.

10 Pre-funding the decommissioning of solar arrays is intended to avoid future problems with solar arrays that have exceeded their useful life and need to be decommissioned. The prospect of significant volumes of e-waste is a legitimate matter of concern that is avoided with proper planning during the permitting process.

b. The estimated decommissioning cost, including removal of the SES and related foundations, pads, underground collector lines and roads, and the salvage value of any equipment in current dollars and the calculations supporting the decommissioning estimate. The estimated salvage value of the material using current, publicly available material indices and/or firm quotes from a decommissioning or recycling company experienced in the decommissioning of SES, shall be provided. The Board of Adjustment or other authority having jurisdiction shall consider the salvage value identified in computing the amount, if any, of financial assurance required under subsection c.

c. The manner in which the project will be decommissioned, including provision and a timetable for the removal of all structures and foundations, and for the revegetation and restoration of the property to its original condition or a condition compatible with the zoning of the parcel(s);

d. The party responsible for decommissioning;

e. A performance bond, letter of credit, or other financial assurance payable to [Board of Adjustment or applicable governmental unit], sufficient to cover the net costs identified in subsection 9b and to assure that decommissioning of the site can be achieved by a third party in the event that a permittee defaults in that obligation, which financial assurance shall be provided prior to commencement of construction;

f. A copy of any lease containing specific agreements regarding decommissioning with the landowner;

10. Proof of adequate casualty and liability insurance covering installation and operation of the SES;

11. A description of the measures that will be taken to minimize erosion and sedimentation, and to promptly stabilize and revegetate disturbed areas with native vegetation.\(^{11}\)

12. Where the applicant for a Conditional Use Permit is also seeking a construction certification pursuant to KRS 278.700 – 278.716, the applicant may submit a copy of a complete state siting board application and site assessment

\(^{11}\)The use of the phrase “native vegetation” with respect to erosion and sediment control, is not intended to preclude the use of beneficial species incorporated into a project in order to create pollinator habitat. The use of invasive or nuisance species should be prohibited. The Kentucky Department of Fish and Wildlife Resources maintains lists of such species.

Minimizing the time from initial site disturbance until establishment of an effective ground cover, is the essence of good reclamation. There are companies that have developed seed mixes of Kentucky-native species intended specifically to assist in erosion control and soil stabilization. Cf Roundstone Native Seed, LLC, Upton, Kentucky https://roundstoneseed.com/17-erosion-control-mixes. The Kentucky Native Plant Society maintains a list of Kentucky native plant nurseries. https://www.khaps.org/native-plant-nurseries/

For communities, landowners, and project proponents seeking to incorporate the creation or enhancement of pollinator habitat into project buffer areas, refer to Kentucky Pollinator Protection Plan. https://www.kyagr.com/statevet/documents/OSV_Bee_KY-Pollinator-Pro-Plan.pdf

KENTUCKY RESOURCES COUNCIL | 10
report meeting the requirements of KRS 278.706 and 278.7008 in lieu of the above requirements of Section 7(a)1-7.

(b) A conditional use permit issued by a Board of Adjustment or other authority having jurisdiction shall include, at a minimum, all applicable requirements of Sections 6 and 7 of this Ordinance, and any additional conditions deemed by the Board necessary or appropriate pursuant to KRS 100.237 to allow the proper integration of the proposed SES into the zone and location in which it is proposed.

Section 8. Public Notice and Public Comment

Public notice of an application for a Conditional Use Permit for a Ground-Mounted SES shall conform to the public notice requirements generally applicable to conditional use permit applications. The public notice and hearing requirements of this Chapter shall be in addition to and independent of any local hearing conducted pursuant to KRS 278.712.
MADISON COUNTY
ZONING ORDINANCE
AMENDMENT
CONCERNING COMMERCIAL SOLAR
ENERGY FACILITIES
MADISON COUNTY, KENTUCKY FISCAL COURT
ORDINANCE NO. 20-17
AMENDMENT TO ORDINANCE #00-02

AN ORDINANCE OF THE MADISON COUNTY FISCAL COURT, KENTUCKY,
AMENDING ORDINANCE #00-02, THE MADISON COUNTY PLANNING AND
ZONING REGULATIONS REGARDING USES ALLOWED.

BE IT ORDAINED BY THE FISCAL COURT OF MADISON COUNTY,
KENTUCKY:

WHEREAS, the Madison County Office of Planning and Development identified a need
to make provision for Commercial Solar Energy Facilities in the Land Use Regulations of
Madison County;

AND WHEREAS, Madison County Planning Commission defined said Commercial
Solar Energy Facilities as being private commercial enterprises or occupancies which are
engaged in the process of solar resource evaluation, solar energy development,
converting solar energy into electrical energy, collecting, storing and transmitting the
electrical energy converted from solar energy, and any and all other activities related to
the preceding.

AND WHEREAS, the Madison County Planning Commission held a public hearing on
Tuesday, June 16, 2020 to consider said amendment to the Regulations; after discussion
of same, the Commission found that making Commercial Solar Energy Facilities a
conditional use in specific zones desirable when developed with a proper site
development plan;

AND WHEREAS, the Commission voted to recommend to the Madison County Fiscal
Court that the text of Section 402.6 Uses Allowed and Section 402.7 Moderate
Hazard Occupancies of the Madison County Planning and Zoning Regulations be
changed to make Commercial Solar Energy Facilities a Conditional use in the following
sub-districts and zones:

- UC-3 Neighborhood Commercial
- UC-4 General Commercial
- UC-7 Urban Agricultural
- RC-3 Neighborhood Commercial
- RC-4 General Commercial
- RC-7 Urban Agricultural
- C-3 Rural Community Neighborhood Commercial
• C-4 Rural Community General Commercial
• C-7 Rural Community Agricultural
• R-7 Rural Agriculture

AND FURTHER, to make Commercial Solar Energy Facilities a **Permitted** use in the following sub-districts and zones:

• UC-5A Light Industrial
• UC-5B Heavy Industrial
• UC-8 Urban Development Resource Extraction
• RC-5A Light Industrial
• RC-5B Heavy Industrial
• RC-8 Urban Development Resource Extraction
• C-5A Rural Community Light Industrial
• C-8 Rural Community Resource Extraction
• R-8 Rural Resource Extraction

**NOW, THEREFORE BE IT ORDAINED AND ENACTED BY THE FISCAL COURT OF THE COUNTY OF MADISON, COMMONWEALTH OF KENTUCKY**, that the findings of Madison County Planning Commission are hereby adopted and that the text of **Section 402.6 Uses Allowed** and **Section 402.7 Moderate Hazard Occupancies** of the Madison County Planning and Zoning Regulations be changed to make Commercial Solar Energy Facilities a **Conditional** use in the following sub-districts and zones:

• UC-3 Neighborhood Commercial
• UC-4 General Commercial
• UC-7 Urban Agricultural
• RC-3 Neighborhood Commercial
• RC-4 General Commercial
• RC-7 Urban Agricultural
• C-3 Rural Community Neighborhood Commercial
• C-4 Rural Community General Commercial
• C-7 Rural Community Agricultural
• R-7 Rural Agriculture

AND FURTHER, to make Commercial Solar Energy Facilities a **Permitted** use in the following sub-districts and zones:
• UC-5A Light Industrial
• UC-5B Heavy Industrial
• UC-8 Urban Development Resource Extraction
• RC-5A Light Industrial
• RC-5B Heavy Industrial
• RC-8 Urban Development Resource Extraction
• C-5A Rural Community Light Industrial
• C-8 Rural Community Resource Extraction
• R-8 Rural Resource Extraction

Further, the text of the Madison County Planning and Zoning Regulations shall be amended to add a definition of Commercial Solar Energy Facilities as being “private commercial enterprises or occupancies which are engaged in the process of solar resource evaluation, solar energy development, converting solar energy into electrical energy, collecting, storing and transmitting the electrical energy converted from solar energy, and any and all other activities related to the preceding.”

The Madison County Office of Planning and Development shall make the appropriate textual changes to the Madison County Planning and Zoning Regulations to effect this change.

THIS ORDINANCE NO. 20-17 SHALL BECOME EFFECTIVE ON THE DATE OF THE SECOND READING AND ADOPTION.

That the County Clerk cause this Ordinance to be published in accordance with the Kentucky Revised Statutes.

DATE OF FIRST READING: _______________________

MOTION BY: _______________________

SECONDED BY: _______________________

VOTE: YES NO

Magistrate Larry Combs
Magistrate Roger Barger
Magistrate John Tudor
Magistrate Tom Botkin
Judge Reagan Taylor
DATE OF SECOND READING: 

MOTION BY: 

SECONDED BY: 

VOTE: 

YES NO 

Magistrate Larry Combs 
Magistrate Roger Barger 
Magistrate John Tudor 
Magistrate Tom Botkin 
Judge Reagan Taylor 

MADISON COUNTY JUDGE/EXECUTIVE 

Attest: 

Madison County Clerk, Kenny Barger
HENDERSON
KENTUCKY ORDINANCE
CONCERNING SOLAR ENERGY SYSTEMS
Sec. 4.22. - Solar energy systems (SES).

The components and subsystems required to convert solar energy into electric energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing. For the purposes of these zoning regulations, solar energy systems are divided into three (3) classes.

a. **Level 1 Solar Energy System.** A roof mounted system on any code compliant structure.
   1. Level 1 Solar Energy Systems are prohibited in Riverfront 1 and Riverfront 3 zones.
   2. Level 1 Solar Energy Systems, other than solar shingles, are allowed in Riverfront 2, Riverfront 4, Central Business District, Gateway Zone, and Henderson Innovative Planning District only if the SES is enclosed or screened to ensure that such features are not visible from street level and are compatible to the architectural style of the building.
   3. Level 1 Solar Energy Systems which are solar shingles if visible from the street are a conditional use in Riverfront 2, Riverfront 4, Central Business District, Gateway Zone, and Henderson Innovative Planning District and must match the existing façade and architecture of the building.
   4. Level 1 Solar Energy Systems are allowable in all other zones other than the those listed in subsections (1) and (2) above.

b. **Level 2 Solar Energy System.** Any ground-mounted system not included in a Level 1 SES and meets the following area restrictions and requirements:
   1. Level 2 Solar Energy Systems are only allowed in Agricultural Zone and Light Industrial (M-1) and Heavy Industrial (M-2) zones.
   2. In an agricultural zone the area of the SES shall not exceed one-half (½) acre in size and shall require a building permit issued by the Henderson City Codes Department.
   3. In an industrial zone, the SES shall not exceed ten (10) acres in size.
   4. The height of any ground mounted SES shall not exceed twenty-five (25) feet as measured from the highest natural grade below each solar panel (excludes utility poles and antennas constructed for the project).
   5. Setback requirements for Level 1 and Level 2 SES shall be in compliance with the zoning classification for the parcel.
   6. There shall be no signs permitted on Level 2 SES except those displaying emergency information, owner contact information, warning or safety instructions or signs that are required by a federal, state or local agency. Such signs shall not exceed five (5) square feet in area.
   7. In an Industrial Zone, a Level 2 SES shall require a site plan approved by the Henderson City-County Planning Commission and a building permit by the Henderson City Codes Department.
   8. Lighting on Level 2 SES shall be prohibited except that required by federal or state regulations.

c. **Level 3 Solar Energy System.** Any ground mounted system that is greater than the one-half (½) acre in size for agricultural zone or exceeds the ten (10) acres in size for an industrial zone satisfy the parameters for a Level 2 SES and must meet the following restrictions and requirements.
   1. Level 3 SES are only allowed in Agricultural Zone and Light Industrial (M-1) and Heavy Industrial (M-2) zones.
2. The height of any ground mounted Level 3 SES shall not exceed twenty-five (25) feet as measured from the highest natural grade below each solar panel (excludes utility poles and antennas constructed for the project).

3. Setback requirements for Level 3 SES shall be as follows: (1) All equipment shall be at least fifty (50) feet from the perimeter property lines of the project area; (2) No interior property line setbacks shall be required if the project spans multiple contiguous properties; (3) All equipment shall be located at least one hundred (100) feet from any residential structure and; the maximum height of any individual component will be twenty-five (25) feet measured from the local ground level of the component.

4. All Level 3 SES shall be screened with an eight-foot tall fence and a double row of staggered evergreen trees (minimum eight-foot height at planting) planted fifteen (15) feet on center from any public right-of-way or adjacent residential use. The evergreen trees shall be located outside of the fence. The use of barbed wire or sharp pointed fences shall be prohibited in or along any boundary adjoining residential properties.

5. There shall be no signs permitted on Level 3 SES except those displaying emergency information, owner contact information, warning or safety instructions or signs that are required by a federal, state or local agency. Such signs shall not exceed five (5) square feet in area.

6. Level 3 SES shall require a site plan approved by the Henderson City-County Planning Commission and a building permit by the Henderson City Code Enforcement Division.

7. Lighting on Level 3 SES shall be prohibited except that required by federal or state regulations.

[d.] Decommissioning of Level 3 SES shall be as follows:

1. The developer shall post a Surety Bond with the Henderson City-County Planning Commission for the abandonment of the site and in the event the Commission must remove the facility. Abandonment shall be when the SES ceases to transfer energy on a continuous basis for twelve (12) months. The surety bond shall be one (1) percent of the total cost of the installed SES.

2. A decommissioning plan shall be submitted at the time of application by the party responsible for decommissioning and the land owner and must include the following: (1) defined conditions upon which the decommissioning will be initiated, i.e. there has been no power production for 12 months, the land lease has ended, or succession of use of abandoned facility, etc.; (2) removal of all non-utility owned equipment, conduit, structures, fencing, roads, and foundations; (3) restoration of the property to its original condition prior to development of the SES; (4) the time frame for completion of decommissioning activities; (5) the party currently responsible for decommissioning, and; (6) plans for updating the decommissioning plan.

(Ord. No. 30-19, 11-19-19)
CYNTIANNIA/HARRISON COUNTY ORDINANCE
CONCERNING SOLAR ENERGY SYSTEMS
REGULATIONS FOR DEVELOPMENT

PLANNING AND ZONING ORDINANCES FOR CYNTHIANA, HARRISON COUNTY, AND BERRY
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 <¼ acre
  vi. Residential: SES up to <½ 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

<table>
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<th>Zoning District</th>
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<td>Roof-mounted, parking lot cover, or building integrated (Level 1)</td>
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<td>Ground-mounted:</td>
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<td>up to 50% of the footprint of the primary structure (Level 1)</td>
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</tr>
<tr>
<td>Up to &lt; 1/2 acre (Level 2)</td>
<td>CUP</td>
<td>CUP</td>
<td>CUP</td>
<td>CUP</td>
</tr>
<tr>
<td>Up to 10 acres &lt; (Level 2 or 3)</td>
<td>CUP</td>
<td>CUP</td>
<td>CUP</td>
<td>CUP</td>
</tr>
<tr>
<td>In excess of &gt;10 acres (Level 2 or 3)</td>
<td>CUP</td>
<td>CUP</td>
<td>CUP</td>
<td>CUP</td>
</tr>
</tbody>
</table>

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

Table 2: Parcel Line Setbacks

<table>
<thead>
<tr>
<th>A. Zoning District</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>Per Zoning District</td>
<td>Per Zoning District</td>
<td>Front</td>
</tr>
<tr>
<td>Residential</td>
<td>100*'</td>
<td>50*'</td>
<td>50*'</td>
</tr>
<tr>
<td>Commercial/Business</td>
<td>50*'</td>
<td>50*'</td>
<td>50*'</td>
</tr>
<tr>
<td>Industrial</td>
<td>30*'</td>
<td>15*'</td>
<td>25*'</td>
</tr>
<tr>
<td></td>
<td>30*'</td>
<td>15*'</td>
<td>25*'</td>
</tr>
</tbody>
</table>

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*

<table>
<thead>
<tr>
<th>Zoning Districts</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td></td>
<td></td>
<td>20'</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td>20'</td>
<td>20'</td>
</tr>
<tr>
<td>Commercial/Business</td>
<td>Ground-mounted</td>
<td>20'</td>
<td>20'</td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
<td>20'</td>
<td>20'</td>
</tr>
</tbody>
</table>

*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.
   i. 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.