

A RESOLUTION RELATING TO THE ADOPTION OF ZONING TEXT AMENDMENTS TO THE BOONE COUNTY ZONING REGULATIONS APPLICABLE TO THE BOONE FISCAL COURT AND LEGISLATIVE BODIES FOR THE CITIES OF FLORENCE, WALTON, AND THE CITY OF UNION, AS MEMBERS OF THE BOONE COUNTY, KENTUCKY PLANNING UNIT AND RECOMMENDING THAT THESE ZONING TEXT AMENDMENTS BE CONSIDERED FOR ENACTMENT TO REGULATE AND DEFINE SOLAR ENERGY SYSTEMS AND BATTERY STORAGE FACILITIES AND IDENTIFY ZONING DISTRICTS WHERE SUCH USES ARE ALLOWED AS AUTHORIZED USES WITHIN THE BOONE COUNTY PLANNING UNIT FOR BOONE COUNTY, KENTUCKY, THE TEXT AMENDMENTS TO THE BOONE COUNTY ZONING REGULATIONS BEING TO ARTICLE 40, SECTION 4000; ARTICLE 5, SECTION 505.1; ARTICLE 5, SECTION 505.2; ARTICLE 5, SECTION 505.3; ARTICLE 5, SECTION 505.4, ARTICLE 5, SECTION 505.5; ARTICLE 31, SECTION 3117; AND ARTICLE 31, SECTION 3118, SUBJECT TO THE RECOMMENDED TERMS AND PROVISIONS SET FORTH IN THESE RECOMMENDED ZONING TEXT AMENDMENTS SET FORTH IN THE TECHNICAL DESIGN REVIEW COMMITTEE REPORT, AND PROVIDING THIS RESOLUTION AS A RECOMMENDATION BE FORWARDED TO THE BOONE FISCAL COURT AND CITIES COMPRISING THE BOONE COUNTY PLANNING UNIT FOR CONSIDERATION BY THEIR LEGISLATIVE BODIES.

WHEREAS, the Boone County Planning Commission serves the county-wide planning unit for Boone County, Florence, Walton, and Union, Kentucky, and

WHEREAS, the Boone County Planning Commission has previously adopted text regulations for zoning and land use of property in the Boone County Planning Unit, and

WHEREAS, the Boone County Planning Commission has studied appropriate terms and provisions to regulate and define Solar Energy Systems and Battery Storage Facilities and identify those zoning districts where such uses should be allowed as authorized uses for the public if authorized by the Fiscal Court and legislative bodies for local governments within Boone County's planning unit resulting in proposed text amendments to various Articles set forth in the Boone County Zoning Text Regulations as set forth in a Staff Report presented at a Public Hearing conducted November 6, 2024, the contents of that Staff Report for recommended amendments being recommendations for approval by the Technical Design Review Committee, and

WHEREAS, the Boone County Planning Commission has approved those recommendations from the Technical Design Review Committee for consideration by the Boone County Fiscal Court and legislative bodies for the cities of Florence, Walton, and Union, Kentucky.

NOW, THEREFORE, BE IT RESOLVED BY THE BOONE COUNTY PLANNING COMMISSION AS FOLLOWS:

SECTION I

That the proposed text amendments to the Boone County Zoning text regulations currently in effect to consider final enactment by the Boone Fiscal Court as legislative body for the County of Boone and the City Councils as legislative bodies for cities of Florence, Walton, and Union, for the Boone County Planning Unit, shall be and are hereby adopted as proposed in the Staff Report dated November 6, 2024, those proposed text amendments adopted herein being set forth in that Staff Report as Attachment A, for Article 40, Section 4000; Attachment B, for Article 5, Section 505.1; Attachment C for Article 5, Section 505.2; Attachment D for Article 5, Section 505.3; Attachment E for Article 5, Section 505.4; Attachment F for Article 5, Section 505.5; Attachment G for Article 31, Section 3117; and Attachment H for Article 31, Section 3118, a copy of this Staff Report and Attachments being attached marked as Exhibit "A", and incorporated herein by reference as if fully set out. These text amendments as set forth in the Staff Report are hereby approved as a recommendation by the Boone County Planning Commission as set forth in its Minutes and official records for these proposed text amendments that pertain to Solar Energy Systems and Battery Storage Facilities, as land uses in certain zoning districts that may become authorized within the Fiscal Court's legislative area, or the legislative areas for the cities of Florence, Walton, and Union, within the Boone County Planning Unit.



SECTION II

These zoning text amendments as recommended to the current Boone County zoning text regulations for the Boone County Planning Unit have been found to be consistent and in agreement with the current Boone County Comprehensive Plan entitled "OUR BOONE COUNTY PLAN 2040", as set forth in the Staff Report (Exhibit "A"), as well as the ongoing Comprehensive Plan Update of "OUR BOONE COUNTY – PLAN 2045 GOALS AND OBJECTIVES", as a guide for remaining elements of the ongoing update for that Comprehensive Plan and the Technical Design Committee Report dated December 4, 2024, as set forth in Exhibit "B".

SECTION III

Further, the Technical/Design Committee Report dated December 4, 2024, sets forth its Findings of Fact; Committee Vote Sheet; and Public Hearing Minutes for these text amendments dated December 4, 2024, all of which are attached and marked as Exhibit "B", and incorporated herein by reference as if fully set out, and adopted by this Commission to support its Recommendation of Approval to the Boone County Fiscal Court as a legislative body for the unincorporated area of Boone County and the legislative bodies for the cities of Florence, Walton, and Union.

SECTION IV


This Resolution and the zoning text amendments as set forth herein and in Exhibit "A" and Exhibit "B" are hereby declared severable. If a Court having jurisdiction invalidates any part, section, subsection, clause, or provision of this Resolution, or the zoning text amendments adopted herein, even as they may relate to a particular parcel of land, all other parts, sections, subsections, elements, clauses, or provisions of this Resolution, and the zoning text amendments adopted herein and recommended for approval shall remain valid and effective as they are severable.

SECTION V


That the Boone County Planning Commission shall notify, in writing, the Boone Fiscal Court, as the legislative body for the County of Boone and the City Councils as the legislative bodies for the cities of Florence, Walton, and Union comprising the membership of the Boone County Planning Unit of this Resolution and the zoning text amendments recommended herein regarding Solar Energy Systems and Battery Storage Facilities that may become authorized within Boone County's Planning Unit, subject to all restrictions and provisions set forth in Exhibit "A" and Exhibit "B".

PASSED AND APPROVED ON THIS THE 18TH DAY OF DECEMBER, 2024.

APPROVED:


CHARLIE ROLFSON, CHAIRMAN

ATTEST:


TREVA L. BEAGLE
MANAGER, ADMINISTRATIVE SERVICES
KEVIN P. COSTELLO, AICP
EXECUTIVE DIRECTOR AND CUSTODIAN
OF PUBLIC RECORDS FOR BOONE COUNTY

EXHIBIT

“A”

STAFF REPORT

#4

Request of the **Boone County Planning Commission Technical/Design Review Committee** to consider a series of amendments to the **Boone County Zoning Regulations** pertaining to solar energy systems and battery storage facilities.

November 6, 2024

REQUEST

- A. The first part of the submitted request is to provide zoning regulations for solar energy systems.
- B. The second part of the submitted request is to provide zoning regulations for battery storage facilities.

STATUTORY REGULATIONS

- A. Kentucky Revised Statute (KRS) 100.211(3), reads as follows:

"A proposal to amend the text of any zoning regulation which must be voted upon by the legislative body or fiscal court may originate with the planning commission of the unit or with any fiscal court or legislative body which is a member of the unit. Regardless of the origin of the proposed amendment, it shall be referred to the planning commission before adoption. The planning commission shall hold at least one (1) public hearing after notice as required by KRS Chapter 424 and make a recommendation as to the text of the amendment and whether the amendment shall be approved or disapproved and shall state the reasons for its recommendation. In the case of a proposed amendment originating with a legislative body or fiscal court, the planning commission shall make its recommendation within sixty (60) days of the date of its receipt of the proposed amendment. It shall take an affirmative vote of a majority of the fiscal court or legislative body to adopt the proposed amendment."

STAFF COMMENTS

- A. The County Attorney's office conducted research relative to solar energy systems and their report is as follows:

- 1. Definitions

Generally, most county ordinances and subsequent regulations define the usage of solar energy as Solar Energy Systems (hereinafter, "SES"). These definitions vary slightly but consist of a device and its necessary components that collect the energy for electricity. This includes generating, consuming, converting, or transmitting the electricity, or for thermal energy.

While some define additional forms of SES, most regulations divide SES into three varying categories: Level 1, Level 2, and Level 3. The systems described under Level 1 are the least impactful systems and are described across most regulations as roof mounted. Some regulations also include ground-mounted systems, but with more stringent design standards. Level 2 systems include the ground-mounted systems that exceed the design standards that would classify it as a Level 1 SES. Accordingly, Level 3 systems are those that do not satisfy the requirements under Levels 1 and 2 and are larger in scale and scope.

2. Permitted Districts

The regulations are also consistent in the districts in which levels of SES are permitted. Level 1 SES are permitted in nearly every district, including residential and commercial. If the system is ground-mounted or nearing a Level 2 classification, the regulations vary slightly as to whether a Conditional Use Permit (hereinafter, "CUP") is required.⁴ Further, any larger scale Level 2 projects are more likely to require a CUP, and in general, Level 2 projects as a whole are not permitted in all districts like Level 1 projects are.

Finally, and most consistently, Level 3 SES require a CUP in nearly every underlying zoning district. Some counties are even more restrictive, prohibiting large-scale Level 2 and Level 3 SES in all districts except for Agriculture and Light and Heavy Industrial. Even in these more impactful zoning districts, a CUP may still be required, the application process may require site plan review by governing boards (i.e., Planning Commission and Fiscal Court), and there may be a requirement that an application agree with a future land use plan.

In still other counties, a CUP is not mentioned, and an SES is simply allowed or is not allowed in various zones. Some counties permit large-scale SES in certain zones but require pre-approval from a governing board and building permits.

3. Design Standards

Generally, most counties reviewed have acreage, dimensional, height, setback, and visibility requirements for each level of SES. The requirements are based on either the level of the SES, the underlying zoning district requirements, or both.

With regard to size, for Level 1 SES many counties require that the size be limited to under 0.5 acres, or less than 50% of the parcel footprint. This is consistent across most counties, varying slightly between 0.5-1.0 acres. Conversely, see regulations in Harrison County, where the permitted size of a Level 2 SES is determined by the underlying zoning district: Agricultural zones permit up to 0.5 acres, Commercial zones up to 10 acres, and Industrial permitting SES of any size.

The same conceptual framework is also used for height and setback requirements, with an average height requirement of Level 1 (and many Level 2) SES to be no more than 20 - 25 feet tall, with some counties allowing for the height and setback to be determined by the underlying district the SES will be

within (e.g., Residential height requirements for any principal building is 25 feet, and therefore the same for SES). Many setback requirements average at 50 feet, but lower in more intense districts such as Industrial and Commercial, and also vary by SES level and zoning district, as well as the type of structure to be distanced from (the greatest being residential structures).

There are increased requirements for Level 3 SES, due to a potentially required CUP and size of the SES. With enhanced screening, lighting, and visibility requirements, a CUP application and subsequent proceedings will allow for better site plan review and provides discretion to governing boards in determining the applicability and nature of the SES use.

There is increased discretion among counties regarding additional site design standards, but most require sufficient buffering (mostly landscaping and fencing), no excessive lighting, and signage pertaining to safety information.

4. Other Requirements

Many ordinances and regulations delineate other specifications and requirements with regard to these systems. Some counties have addressed safety parameters pertaining to design and installation, such as requiring that industry standards and regulations be followed, addressing electrical components, issuing requirements for non-reflective surfaces, directing notices which must be posted, requiring security fencing, and delineating how to handle storage and disposal of materials.

Other items addressed in some county regulations include easements, sewer and water concerns (including water runoff), noise evaluations, ground maintenance, considerations for the protection of farmland and revegetation of disturbed areas, and requirements for liability and environmental insurance.

Some counties have set forth specific complaint procedures to be utilized after a system has been installed and is operating. Others are silent as to complaints specific to solar energy systems (with the understanding that the broader land use regulations address complaints in general, which would also apply to solar energy system complaints).

5. Decommissioning

Those counties which received broad public concern over solar energy systems included a robust framework for decommissioning of the systems. The safest approach appears to include requirements for cost estimates for demolition and removal *prior to* filing an application, to be prepared by a licensed engineer. A revegetation and soil de-compacting/restoration plan may also be required as part of the pre-application decommissioning plan, along with timeframes for accomplishing decommission, the party responsible, removal of equipment, etc.

A bond is a necessary component of a decommissioning plan. Counties vary as to the amount required, with some requiring a bond sufficient to cover 110% of

the net cost of decommissioning of the site, and others requiring 2% of the total project cost, to be recalculated every three years during the life of the project. Many counties require the decommissioning plan and bond to be reviewed, revised, and updated every three to five years by a third-party engineer at the expense of the developer, and some require fiscal court approval.

With regard to decommission, other items addressed include conditions upon which decommissioning will be initiated, who bears the cost under certain conditions, etc.

6. Application Procedures

Some counties create a specific process within their ordinance/regulations for applications for solar energy systems. These processes appear to operate much like zoning map amendment applications, with review conferences, staff reports, and public hearing components. Requirements of the applications can include a general project description, a site plan, a map from the Natural Resources Conservation Service, a statement addressing compliance with FAA and other regulatory requirements, and other related items as a county sees fit. Those counties which have enacted specific application procedures also specify the cost.

Related to application procedures, some counties require certain contingencies prior to construction: approval from the FAA; a decommissioning plan (addressed above); road use, drainage, and maintenance agreements; erosion and/or stormwater runoff plans; utility plans; dust control plans; engineering certifications; and an emergency management plan. Post-construction requirements include road repair, final construction plans, staging area remediation, and postconstruction sound studies.

- B. Staff reviewed existing regulations from other jurisdictions within Kentucky. The result of that research is summarized in the following table:

	DEFINITIONS				ALLOWED ZONES								REQUIREMENTS							
					Rooftop				Ground Mounted				Rooftop		Ground Mounted					
	Rooftop	Small Scale Ground Mounted	Intermediate Scale Ground Mounted	Large Scale Ground Mounted	Ag	Res	Comm	Ind	Ag	Res	Comm	Ind	Height	Lighting	Height	Lighting	Setback From Property Line	Setback From Closest Residence	Screening Required	Decommissioning Required
Kentucky Model Ordinance	X	X	X	X	P	P	P	P	C	C	C	C	3' above roof	No	20'	Yes	50'	100'	Yes	Yes
McCracken County	X				P	P	P	P	C								150'	500'	Yes	Yes
Hopkinsville	X	X	X	X	P	P	P	P					3' above roof	No	20'	Yes	30' (small scale)/100' (to res. Zone) 1,000' (large scale)/2,000' (to res. Zone)	50'	Yes	Yes
Simpson County				X					C		C				15'	Yes	50'	250'		Yes
Daviess County	X	X	X	X	P	P	P	P			C		20'		50'		100'		No	Yes
Owensboro	X	X	X	X	P	P	P	P			C		20'		50'		100'		No	Yes
McLean County	X	X	X	X									25'		25'		100'		Yes	Yes
Henderson County	X	X	X	X									25'		25'		100'		Yes	Yes
City of Henderson	X	X	X	X					P		P		25'		30'		100'		Yes	Yes
Breckenridge County					P	P	P	P					25'		50'		300'		Yes	Yes
Meade County	X	X	X	X					C		C	P	25'		150'				Yes	Yes
Madison County									C		C	P								
Jessamine County	X	X	X	X					5' above roof	No			20'	Yes	150'			100'	Yes	Yes
Georgetown - Scott County	X	X	X	X	P	P	P	P	C	C	C	C	3' above roof	No	20'	Yes	100'		Yes	Yes
Harrison County	X	X	X	X	P	P	P	P	C	C	C	C	20'	Yes	15' - 100'				Yes	Yes
Villa Hills					P	P	P	P					10'							

RELATIONSHIP TO COMPREHENSIVE PLAN

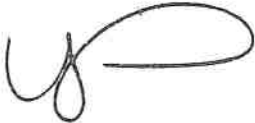
- A. The following Our Boone County – Plan 2045 Goals and Objectives apply to this application:
1. Continue to employ a combination of established and innovative design methods, land use management tools, coordination among agencies and development of public infrastructure to produce a healthy, well-designed community that supports residents and businesses (Overall Goal A, Objective 1).
 2. Strengthen and promote sound planning practices focusing on technical expertise, clear and transparent proactive communication, collaborative efforts with local and regional public and private partnerships, creating an appropriate balance of residential, commercial and industrial land use, addressing current and future trends and balancing development while protecting natural resources, and the creation and maintenance of efficient and adequate infrastructure systems and services to support a well-designed and healthy environment (Overall Goal A, Objective 2).
 3. Continue to ensure development policies do not discriminate against any person and strive to promote the establishment of appropriate services, housing, employment, and shopping opportunities to meet the needs of the population in all geographic areas of the County to retain and attract residents (Demographics Goal A, Objective 1).
 4. Preserve areas which possess unique environmental characteristics and use as passive or active recreational areas or be appropriately incorporated into development design (Environment and Natural Resources Goal A, Objective 1).
 5. Utilize careful design and development review of proposed developments to protect and maintain agricultural lands along with the environmental and structural integrity of Developmentally Sensitive areas, watersheds, and scenic areas, especially hillsides. Evaluate impacts related to ecological systems, wildlife habitats, soils, water, and agricultural lands during development design (Environment and Natural Resources Goal A, Objective 2).
 6. Protect and sustain resource lands such as agriculture and other agricultural uses by encouraging preservation, diversification of agricultural uses, and assessment of impacts on agricultural operations by proposed developments (Environment and Natural Resources Goal A, Objective 4). [City of Florence, City of Union, City of Walton only]
 7. Protect and sustain resource lands such as agriculture and other agricultural uses across all of Unincorporated Boone County by encouraging preservation, diversification of agricultural uses, and assessment of impacts on agricultural operations by proposed developments (Environment and Natural Resources Goal A, Objective 4). [Unincorporated Boone County only]

8. Encourage the efficient use of energy resources by development of emerging and renewable energy systems for responsible energy use and conservation (Economy Goal A, Objective 3).

CONCLUSION

The proposed zoning text amendment needs to be evaluated in terms of the Our Boone County – Plan 2040 Comprehensive Plan, which "is intended to be a tool for the management of growth and development in Boone County".

Respectfully submitted,



Michael D. Schwartz
Director, Zoning Services

MDS/ss

Attachments:

*Proposed text amendment wording

ATTACHMENT A

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 40

Section 4000 Interpretation Of Terms And Words

Battery(ies). A single cell or a group of cells connected together electronically in series, in parallel, or a combination of both, which can charge, discharge, and store energy electromechanically. For the purposes of these regulations, batteries utilized in consumer products are excluded from these requirements.

Battery Energy Storage System. One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt battery or an electric motor vehicle. A battery energy storage system is classified as a Tier 1 or Tier 2 Battery Energy Storage System as follows:

- A. Tier 1 Battery Energy Storage Systems have an aggregate energy capacity less than or equal to 600 kWh or consist of only a single energy storage system technology.
- B. Tier 2 Battery Energy Storage Systems have an aggregate energy capacity greater than 600 kWh or consist of more than one energy storage system technology.

Solar Energy System. A system, including its individual components and/or subsystems, that collects solar energy for electricity generation, consumption, or transmission, or for thermal applications.

Solar Energy System, Footprint. The solar energy system footprint is calculated by drawing a perimeter around the outermost solar energy system panels and any equipment necessary for the equipment to function, such as transformers and inverters. The footprint does not include perimeter fencing, visual buffers, transmission lines, or portions thereof, that are required to connect the system to a utility or customer outside of the solar energy system perimeter.

Solar Energy System, Ground Mounted. A solar energy system that is structurally mounted to the ground and does not qualify as a solar energy system, integrated.

- A. Tier 1: A solar energy system, ground mounted, with a footprint of less than 2,500 square feet or no more than ten (10) percent of the roof area of the principal structure.
- B. Tier 2: A solar energy system, ground mounted, with a footprint between 2,500 square feet and five (5) acres.

C. Tier 3: A solar energy system, ground mounted, with a footprint greater than five (5) acres.

Solar Energy System, Integrated. A solar energy system 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 solar energy system is structurally an integral part of the building.

Solar Energy System, Rooftop. A solar energy system that is structurally mounted to the roof of a building and does not qualify as a solar energy system, integrated.

ATTACHMENT B

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 5

Section 505.1 Use/District Matrix – Agricultural, Recreation, and Conservation Districts

Use	A-1	A-2	R	CONS	Use Standards
<u>Battery Energy Storage System Facility, Tier 1</u>	A	A	A	A	<u>Sec. 3118</u>
<u>Battery Energy Storage System Facility, Tier 2</u>	-	-	-	-	<u>Sec. 3118</u>
<u>Solar Energy System, Integrated</u>	P	P	P	P	<u>Sec. 3117</u>
<u>Solar Energy System, Rooftop</u>	A	A	A	A	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 1</u>	A	A	A	A	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 2</u>	-	-	-	-	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 3</u>	-	-	-	-	<u>Sec. 3117</u>

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Article 5

[illegible]

ATTACHMENT D

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 5

Section 505.3 Use/District Matrix – Commercial Districts

Use	C-1	C-2	C-3	C-4	Use Standards
<u>Battery Energy Storage System Facility, Tier 1</u>	A	A	A	A	<u>Sec. 3118</u>
<u>Battery Energy Storage System Facility, Tier 2</u>	-	-	-	-	<u>Sec 3118</u>
<u>Solar Energy System, Integrated</u>	P	P	P	P	<u>Sec. 3117</u>
<u>Solar Energy System, Rooftop</u>	A	A	A	A	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 1</u>	A	A	A	A	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 2</u>	-	-	-	-	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 3</u>	-	-	-	-	<u>Sec. 3117</u>

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Article 5

[illegible]

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Article 5

Use PF A SC FMS WD UC UTC UNO GR-R GR-C GR-BP Use Standards

[illegible]

ATTACHMENT G

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck-out~~.

Article 31

Section 3117 Solar Energy Systems

A. Purpose

1. Facilitate the siting, development, construction, installation, and decommissioning of Solar Energy Systems (SES) in a predictable manner that promotes and protects the safety, health, and welfare of the community.
2. Provide a framework for the development of SES, which balances the benefits of renewable energy production and economic development with the protection of agricultural and residential uses, the built environment, and historic, natural, and other sensitive areas.

B. Requirements for Rooftop Solar Energy Systems

1. Shall conform to the requirements of Section 3124.
2. Shall be positioned on the roof so as not to extend above or beyond the edge of any ridge, hip, valley, or eave.
3. Shall not be illuminated and all surfaces shall be matte or non-reflective.

C. Requirements for Ground Mounted Solar Energy Systems

1. Lighting shall be regulated by Section 3316
 - a. Shall be limited to the minimum necessary for safe operation.
 - b. Shall be directed downward.
 - c. Shall incorporate full cut-off features.
 - d. Shall incorporate motion sensors, where feasible.
2. All surfaces shall be matte or non-reflective.
3. Shall not exceed twenty (20) feet in height, as measured from the average grade below each solar panel to the top of each solar panel.
4. The footprint of an accessory ground mounted solar energy system shall be less than the footprint of the principal structure on the site.
5. Siting Restrictions:
 - a. The footprint of a Tier 1 solar energy system shall follow the regulations for accessory structures as outlined in Section 3153.
 - b. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of two hundred (200) feet from an adjoining property that is zoned with an agricultural, recreation, conservation, residential, or public facility district.
 - c. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of one hundred (100) feet from an adjoining property that is

- zoned with a business, employment, airport, small community, or special study district.
 - d. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of fifty (50) feet from the right-of-way line of any public street.
 - e. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of five hundred (500) feet from a residential or school building, other than those on the property where the system is to be located.
 - f. The location of solar arrays on impermeable surfaces, including but not limited to, gravel and asphalt shall be prohibited.
 - 6. Screening:
 - a. The perimeter of the footprint of a Tier 2 or Tier 3 solar energy system shall be provided with a Buffer Yard C.
 - b. Any tree that is planted in the required Buffer Yard shall have a minimum height of six (6) feet when planted and shall have an expected mature growth height of a minimum of fifteen (15) feet.
 - 7. Fencing:
 - a. All fences in the front yard, as measured from the front lot line to the closest solar array, shall meet the requirements of Section 3655.D.
 - b. Fences used as security shall have a maximum height of eight (8) feet and shall not be placed along the perimeter of the property.
 - c. All other fencing shall meet the requirements of Section 3655.
 - 8. Decommissioning:
 - a. A decommissioning plan shall be submitted at the time of either the submittal of a Conditional Use Permit application or a Site Plan application, whichever is first.
 - b. Other than as specified by the Board of Adjustment or other authority having jurisdiction, decommissioning shall begin no later than six (6) months after a ground mounted solar energy system has ceased to generate electricity or thermal energy.
 - c. All structures and facilities associated with the solar energy system, including any underground wiring, conduits, equipment, shall be removed within six (6) months from the beginning of the decommissioning operation.
- D. Protection of Farmland and Revegetation of Disturbed Areas
- 1. Compaction of soils associated with the location of roads and installation staging areas for Tier 2 and Tier 3 ground mounted systems shall be minimized to the extent possible.
 - 2. In Agricultural districts, upon completion of construction and installation of ground mounted solar energy systems, all temporary roads shall be removed and all disturbed areas shall be graded and reseeded with short-term cover crops and sustainable, non-weed native vegetation in order to establish an effective ground cover and to minimize erosion and sedimentation.
- E. Permitting and Processing
- 1. Integrated and roof mounted solar energy systems shall follow the Zoning Permit procedures identified in Article 4.

2. Tier 1 solar energy systems in agricultural or residential districts shall follow the Zoning Permit procedures identified in Article 4.
3. Tier 1 solar energy systems in any district, other than agricultural or residential districts, shall follow the Site Plan procedures identified in Article 30.
4. Tier 2 or Tier 3 solar energy systems shall follow the Site Plan procedures identified in Article 30.

ATTACHMENT H

PROPOSED TEXT AMENDMENT BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 31

Section 3118 Battery Energy Storage Systems

A. Applicability

1. Tier 1 systems shall meet the same requirements as other accessory uses/structures allowed by this ordinance.
2. Tier 2 systems, whether permitted as free standing operations or as an accessory use, shall meet the requirements identified in Subsection B, in addition to other requirements of this ordinance.

B. Tier 2 Requirements

1. Facilities shall meet the following minimum setbacks:
 - a. Two hundred (200) feet from the property line of any property within a residential district.
 - b. Fifty (50) feet from any other property line.
2. A Buffer Yard D shall be provided where a battery energy storage system facility is adjacent to a property within a residential district. In all other cases, Buffer Yards shall be provided per the requirements of Section 3645.
3. All on site utility lines shall be placed underground to the extent feasible as permitted by the serving utility, with the exception of the main service connection.
4. Areas within ten (10) feet of the Battery Energy Storage System facility shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as grass, ivy, or similar plants used as ground cover shall be permitted provided that they do not form a means of readily transmitting fire.
5. The average noise generated from the battery energy storage system facility, and its associated ancillary equipment, shall not exceed a noise

level of sixty (60) dBA, as measured at the property line of the site upon which the facility is located.

C. Decommissioning

1. A decommissioning plan shall be submitted at the time of submittal of a Site Plan application.
2. Decommissioning shall begin no later than six (6) months after the facility has ceased operations.
3. All structures and facilities associated with the battery energy storage system, including any underground wiring, conduits, equipment, shall be removed within six (6) months from the beginning of the decommissioning operation.

D. Permitting and Processing

1. Tier 1 systems shall follow the Zoning Permit procedures identified in Article 4 or the Site Plan procedures identified in Article 30, whichever is applicable.
2. Tier 2 systems shall follow the Site Plan procedures identified in Article 30.

4/15/25 PUBLIC HEARING

ATTACHMENT A

PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck-out~~.

Article 40

Section 4000

Battery(ies). A single cell or a group of cells connected together in series, in parallel, or a combination of both, which can charge, discharge, and store energy electromechanically. For the purposes of these regulations, batteries utilized in consumer products are excluded from these requirements.

Battery Energy Storage System. One or more devices. Assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt battery or an electric motor vehicle. A battery energy storage system is classified as a Tier 1 or Tier 2 Battery Energy Storage System as follows:

- A. Tier 1 Battery Energy Storage Systems have an aggregate energy capacity less than or equal to 600 kWh or consist of only a single energy storage system technology.
- B. Tier 2 Battery Energy Storage Systems have an aggregate energy capacity greater than 600 kWh or consist of more than one energy storage system technology.

Solar Energy System. A system, including its individual components and/or subsystems, that collects solar energy for electricity generation, consumption, or transmission, or for thermal applications.

Solar Energy System, Footprint. The solar energy system footprint is calculated by drawing a perimeter around the outermost solar energy system panels and any equipment necessary for the equipment to function, such as transformers and inverters. The footprint does not include perimeter fencing, visual buffers, transmission lines, or portions thereof, that are required to connect the system to a utility or customer outside the solar energy system perimeter.

Solar Energy System, Ground Mounted. A solar energy system that is structurally mounted to the ground and does not qualify as a solar energy system, integrated.

- A. Tier 1: A solar energy system, ground mounted, with a footprint of less than 2,500 square feet or no more than ten (10) percent of the roof area of the principal structure.
- B. A solar energy system, ground mounted, with a footprint between 2,500 square feet and five (5) acres.
- C. Tier 3: A solar energy system, ground mounted, with a footprint greater than five (5) acres.

Solar Energy System, Integrated. A solar energy system where the solar materials are incorporated into the building materials, such that the building and solar systems are reasonably indistinguishable, or where the solar materials are used in place of traditional building components, such that the solar energy system is structurally an integral part of the building.

Solar Energy System, Rooftop. A solar energy system that is structurally mounted to the roof of a building and does not qualify as a solar energy system, integrated.

ATTACHMENT B
PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck-out~~.

Article 5

Section 505.1 Use/District Matrix – Agricultural, Recreation, and Conservation Districts

Use	A-1	A-2	R	CONS	Use Standards
<u>Battery Energy Storage System Facility, Tier 1</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3118</u>
<u>Battery Energy Storage System Facility, Tier 2</u>	-	-	-	-	<u>Sec. 3118</u>
<u>Solar Energy System, Integrated</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>Sec. 3117</u>
<u>Solar Energy System, Rooftop</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 1</u>	<u>A⁴/C²</u>	<u>A⁴/C²</u>	<u>A⁴</u>	<u>A⁴</u>	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 2</u>	-	-	-	-	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 3</u>	-	-	-	-	<u>Sec. 3117</u>

(2) Applies only in the City of Florence

(4) Applies only in Unincorporated Boone

(5) Applies only in the City of Florence and Unincorporated Boone

A - Accessory Use C - Conditional Use P - Permitted Use - - Prohibited Use

ATTACHMENT C
PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 5

Section 505.2 Use/District Matrix – Residential Districts

Use	RSE	RS	SR-1	SR-2	SR-3	UR-1	UR-2	UR-3	MHP	R-1F	Use Standards
<u>Battery Energy Storage System, Facility, Tier 1</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3118</u>
<u>Battery Energy Storage System, Facility, Tier 2</u>	=	=	=	=	=	=	=	=	=	=	<u>Sec. 3118</u>
<u>Solar Energy System, Integrated</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>Sec. 3117</u>
<u>Solar Energy System, Rooftop</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 1</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 2</u>	=	=	=	=	=	=	=	=	=	=	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 3</u>	=	=	=	=	=	=	=	=	=	=	<u>Sec. 3117</u>

(4) Applies only in Unincorporated Boone

(5) Applies only in the City of Florence and Unincorporated Boone

A - Accessory Use P - Permitted Use - - Prohibited Use

ATTACHMENT D
PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 5

Section 505.3 Use/District Matrix – Commercial Districts

Use	C-1	C-2	C-3	C-4	Use Standards
<u>Battery Energy Storage System Facility, Tier 1</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3118</u>
<u>Battery Energy Storage System Facility, Tier 2</u>	=	=	=	=	<u>Sec. 3118</u>
<u>Solar Energy System, Integrated</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>Sec. 3117</u>
<u>Solar Energy System, Rooftop</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 1</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 2</u>	=	=	=	=	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 3</u>	=	=	=	=	<u>Sec. 3117</u>

(4) Applies only in Unincorporated Boone

(5) Applies only in the City of Florence and Unincorporated Boone

A - Accessory Use P - Permitted Use - - Prohibited Use

ATTACHMENT E
PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck-out~~.

Article 5

Section 505.4 Use/District Matrix – Employment Districts

Use	O-1	O-1A	O-2	I-1	I-2	I-3	I-4	Use Standards
<u>Battery Energy Storage System Facility, Tier 1</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3118</u>
<u>Battery Energy Storage System Facility, Tier 2</u>	-	-	-	<u>P⁴/C²</u>	<u>P⁴/C²</u>	<u>P⁴/C²</u>	<u>P⁴/C²</u>	<u>Sec. 3118</u>
<u>Solar Energy System, Integrated</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>Sec. 3117</u>
<u>Solar Energy System, Rooftop</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 1</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 2</u>	-	-	-	-	-	-	-	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 3</u>	-	-	-	-	-	-	-	<u>Sec. 3117</u>

(2) Applies only in the City of Florence

(4) Applies only in Unincorporated Boone

(5) Applies only in the City of Florence and Unincorporated Boone

A - Accessory Use C - Conditional Use P - Permitted Use - - Prohibited Use

ATTACHMENT F

PROPOSED TEXT AMENDMENT

BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 5

Section 505.5 Use/District Matrix – Public Facility, Airport, Small Community Overlay, and Special Study District

Use	PF	A	SC	FMS	WD	UC	UTC	UNO	GR-R	GR-C	GR-BP	Use Standards
<u>Battery Energy Storage System, Facility, Tier 1</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3118</u>
<u>Battery Energy Storage System, Facility, Tier 2</u>	=	<u>P⁴/C²</u>	=	=	=	=	=	=	=	=	=	<u>Sec. 3118</u>
<u>Solar Energy System, Integrated</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁴</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>P⁵</u>	<u>Sec. 3117</u>
<u>Solar Energy System, Rooftop</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>A⁵</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 1</u>	<u>A⁴</u>	<u>A⁵</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>A⁴</u>	<u>Sec. 3117 & 3153</u>
<u>Solar Energy System, Ground Mounted, Tier 2</u>	=	=	=	=	=	=	=	=	=	=	=	<u>Sec. 3117</u>
<u>Solar Energy System, Ground Mounted, Tier 3</u>	=	=	=	=	=	=	=	=	=	=	=	<u>Sec. 3117</u>

(2) Applies only in the City of Florence

(4) Applies only in Unincorporated Boone

(5) Applies only in the City of Florence and Unincorporated Boone

A - Accessory Use C - Conditional Use P - Permitted Use - - Prohibited

ATTACHMENT G
PROPOSED TEXT AMENDMENT
BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 31

Section 3117 Solar Energy Systems

A. Purpose

1. Facilitate the siting, development, construction, installation, and decommissioning of Solar Energy Systems (SES) in a predictable manner that promotes and protects the safety, health, and welfare of the community.
2. Provide a framework for the development of SES, which balances the benefits of renewable energy production and economic development with the protection of agricultural and residential uses, the built environment, and historic, natural, and other sensitive areas.

B. Requirements for Rooftop Solar Energy Systems

1. Shall conform to the requirements of Section 3124.
2. Rooftop solar panel visibility and roof location requirements:
 - a. Rooftop solar panels can be visible from streets and adjoining properties when located in agricultural and residential zoning districts if 2e. and 2f. are met below.
 - b. Rooftop solar panels shall not be visible from streets when located in Commercial, Office, Industrial, Public Facilities, Airport and Florence Main Street zoning districts.
 - c. Rooftop solar panels shall not be visible from adjoining properties when located in Commercial, Office, Public Facilities, and Florence Main Street zoning districts.
 - d. Rooftop solar panels shall not be visible from adjoining properties when located in Industrial or Airport zones unless the adjoining property is zoned Industrial or Airport. However, in no case shall a rooftop solar panel extend more than ten (10) feet above the highest portion of the roof or parapet in an Industrial or Airport zoning district.
 - e. Rooftop solar panels on flat roofs shall not be visible when located in a residential zone.
 - f. Solar panels on pitched roofs shall be positioned so as not to extend above or beyond the edge of any ridge, hip, valley, or eave.

3. Shall not be illuminated and all surfaces shall be matte or non-reflective.
4. Associated wires or cables shall not be visible from public view or shall be concealed in conduit, which is color coordinated with the subject structure in all zoning districts.
5. Associated equipment cabinets, inverters, etc. shall:
 - a. Be inside the structure or attached to the side or rear of the structure where the rooftop system is proposed or
 - b. Not be visible from public roadways. They can be screened with fencing or landscaping.

C. Requirements for Ground Mounted Solar Energy Systems

1. Lighting shall be regulated by Section 3316
 - a. Shall be limited to the minimum necessary for safe operation.
 - b. Shall be directed downward.
 - c. Shall incorporate full cut-off features.
 - d. Shall incorporate motion sensors, where feasible.
2. All surfaces shall be matte or non-reflective.
3. The permitted height of ground mounted solar energy systems, shall be measured from the average grade below each solar panel to the top of each solar panel.
 - a. Permitted Tier 1 heights shall be limited as follows:
 - 10' maximum when the subject property adjoins a residential or agriculturally zoned property.
 - 20' maximum when the subject property does not adjoin a residential or agriculturally zoned property.
 - b. Permitted Tier 2 and Tier 3 heights shall be limited as follows:
 - 20' maximum.
4. The footprint of an accessory ground mounted solar energy system shall be less than the footprint of the principal structure on the site.
5. Wires or cables associated with ground mounted SES shall not be visible from public view. Wire or cables must be buried or concealed in conduit.
6. Siting Restrictions:
 - a. The footprint of a Tier 1 solar energy system shall meet the most restrictive of the following:
 - The Tier 1 ground mounted solar energy system definition.

- The accessory structures regulations from Section 3153.
- # 4 above.
- b. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of two hundred (200) feet from an adjoining property that is zoned with an agricultural, recreation, conservation, residential, or public facility district.
- c. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of one hundred (100) feet from an adjoining property that is zoned with a business, employment, airport, small community, or special study district.
- d. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of fifty (50) feet from the right-of-way line of any public street.
- e. The footprint of a Tier 2 or Tier 3 solar energy system shall be set back a minimum of five hundred (500) feet from a residential or school building, other than those on the property where the system is to be located.
- f. The location of solar arrays on impermeable surfaces, including but not limited to, gravel and asphalt shall be prohibited.

7. Screening:

- a. The perimeter of the footprint of a Tier 2 or Tier 3 solar energy system shall be provided with a Buffer Yard C.
- b. Any tree that is planted in the required Buffer Yard shall have a minimum height of six (6) feet when planted and shall have an expected mature growth height of a minimum of fifteen (15) feet.

8. Fencing:

- a. All fences in the front yard, as measured from the front lot line to the closest solar array, shall meet the requirements of Section 3655.D.
- b. All other fencing shall meet the requirements of Section 3655.

9. Decommissioning:

- a. A decommissioning plan or statement shall be submitted with all Conditional Use Permit applications, Site Plan applications, and Zoning Permit applications.
- b. Other than as specified by the Board of Adjustment or other authority having jurisdiction, decommissioning shall begin no later than six (6) months after a ground mounted solar energy system has ceased to generate electricity or thermal energy.

- c. All structures and facilities associated with the solar energy system, including any underground wiring, conduits, equipment, shall be removed within six (6) months from the beginning of the decommissioning operation.

D. Requirements for Integrated Solar Energy Systems:

1. Wires or cables shall not be visible from public view or shall be concealed in conduit, which is color coordinated with the subject structure.
2. Associated equipment cabinets, inverters, etc. shall:
 - a. Be inside the structure or attached to the side or rear of the structure on which the integrated system is proposed.
 - b. Not be visible from public roadways. They can be screened with fencing or landscaping.

E. Protection of Farmland and Revegetation of Disturbed Areas

1. Compaction of soils associated with the location of roads and installation staging areas for Tier 2 and Tier 3 ground mounted systems shall be minimized to the extent possible.
2. In Agricultural districts, upon completion of construction and installation of ground mounted solar energy systems, all temporary roads shall be removed and all disturbed areas shall be graded and reseeded with short-term cover crops and sustainable, non-weed native vegetation in order to establish an effective ground cover and to minimize erosion and sedimentation.

F. Permitting and Processing

1. Integrated and roof mounted solar energy systems shall follow the Zoning Permit procedures identified in Article 4.
2. Tier 1 solar energy systems in agricultural or residential districts shall follow the Zoning Permit procedures identified in Article 4.
3. Tier 1 solar energy systems in any district, other than agricultural or residential districts, shall follow the Site Plan procedures identified in Article 30.
4. Tier 2 or Tier 3 solar energy systems shall follow the Site Plan procedures identified in Article 30.

ATTACHMENT H

PROPOSED TEXT AMENDMENT BOONE COUNTY ZONING REGULATIONS

Text to be added is underlined and text to be deleted is ~~struck out~~.

Article 31

Section 3118 Battery Energy Storage Systems

A. Applicability

1. Tier 1 systems shall meet the same requirements as other accessory uses/structures allowed by this ordinance and Subsection B. below.
2. Tier 2 systems, whether permitted as free-standing operations or as an accessory use, shall meet the requirements identified in Subsection C., in addition to other requirements of this ordinance.

B. Tier 1 Requirements

Exterior battery cabinets/boxes/containers shall:

1. Not be visible from public streets. They can be screened with privacy fencing and/or landscaping.
2. Not exceed the maximum fence height of the zoning district.
3. Not have associated wires or cables visible from public view. All such wires or cables shall be hidden or concealed in conduit which correlates to the subject structure.

C. Tier 2 Requirements

1. Facilities shall meet the following minimum setbacks:
 - a. Two hundred (200) feet from the property line of any property within a residential district.
 - b. Fifty (50) feet from any other property line.
2. A Buffer Yard D shall be provided where a battery energy storage system facility is adjacent to a property within a residential district. In all other cases, Buffer Yards shall be provided per the requirements of Section 3645.

3. All on site utility lines shall be placed underground to the extent feasible as permitted by the serving utility, with the exception of the main service connection.
4. Areas within ten (10) feet of the Battery Energy Storage System facility shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as grass, ivy, or similar plants used as ground cover shall be permitted provided that they do not form a means of readily transmitting fire.
5. The average noise generated from the battery energy storage system facility, and its associated ancillary equipment, shall not exceed a noise level of sixty (60) dBA, as measured at the property line of the site upon which the facility is located.
6. Shall be limited to 20' in height.
7. Wires or cables associated with the battery energy storage system shall not be visible from public view or be concealed in conduit.

D. Decommissioning

1. A decommissioning plan or statement shall be submitted with all Conditional Use Permit, Site Plan, and Zoning Permit applications.
2. Decommissioning shall begin no later than six (6) months after the facility has ceased operations.
3. All structures and facilities associated with the battery energy storage system, including any underground wiring, conduits, and equipment, shall be removed within six (6) months from the beginning of the decommissioning operation.

E. Permitting and Processing

1. Tier 1 systems shall follow the Zoning Permit procedures identified in Article 4 or the Site Plan procedures identified in Article 30, whichever is applicable.
2. Tier 2 systems shall follow the Site Plan procedures identified in Article 30.

EXHIBIT

“B”

TECHNICAL/DESIGN REVIEW COMMITTEE REPORT

#6

TO: Boone County Planning Commission

FROM: Rick Lunnemann, Chairperson

DATE: December 4, 2024

RE: Request of the **Boone County Planning Commission Technical/Design Review Committee** to consider a series of amendments to the **Boone County Zoning Regulations** pertaining to solar energy systems and battery storage facilities.

REMARKS:

A. We, the Committee, recommend approval of the proposed text amendments pertaining to retail filling stations, based on the following findings of fact:

1. FINDINGS OF FACT:

- a. The proposed text is allowed to be included within the zoning regulations pursuant to Kentucky Revised Statute (KRS) 100.203, which states that the text of a zoning ordinance may contain regulations: (1) for the activity on the land; (2) the size, width, bulk, and location of structures, buildings, and signs; and (3) minimum or maximum areas or percentages of areas, courts, yards, or other open spaces.

The proposed text provides definitions for solar energy systems and battery storage facilities and identifies zoning districts where such uses should be allowed.

- b. The proposed Zoning Text Amendment is in general agreement with the following Our Boone County – Plan 2044 Goals and Objectives:
 - (1) Continue to employ a combination of established and innovative design methods, land use management tools, coordination among agencies and development of public infrastructure to produce a healthy, well-designed community that supports residents and businesses (Overall Goal A, Objective 1).
 - (2) Strengthen and promote sound planning practices focusing on technical expertise, clear and transparent proactive communication, collaborative efforts with local and regional public and private partnerships, creating an appropriate balance of residential, commercial and industrial land use, addressing current and future trends and balancing development while protecting natural resources, and the creation and maintenance of efficient and adequate infrastructure systems and services to support a well-designed and healthy environment (Overall Goal A, Objective 2).

- (3) Continue to ensure development policies do not discriminate against any person and strive to promote the establishment of appropriate services, housing, employment, and shopping opportunities to meet the needs of the population in all geographic areas of the County to retain and attract residents (Demographics Goal A, Objective 1).
- (4) Preserve areas which possess unique environmental characteristics and use as passive or active recreational areas or be appropriately incorporated into development design (Environment and Natural Resources Goal A, Objective 1).
- (5) Utilize careful design and development review of proposed developments to protect and maintain agricultural lands along with the environmental and structural integrity of Developmentally Sensitive areas, watersheds, and scenic areas, especially hillsides. Evaluate impacts related to ecological systems, wildlife habitats, soils, water, and agricultural lands during development design (Environment and Natural Resources Goal A, Objective 2).
- (6) Protect and sustain resource lands such as agriculture and other agricultural uses by encouraging preservation, diversification of agricultural uses, and assessment of impacts on agricultural operations by proposed developments (Environment and Natural Resources Goal A, Objective 4). [City of Florence, City of Union, City of Walton only]
- (7) Protect and sustain resource lands such as agriculture and other agricultural uses across all of Unincorporated Boone County by encouraging preservation, diversification of agricultural uses, and assessment of impacts on agricultural operations by proposed developments (Environment and Natural Resources Goal A, Objective 4). [Unincorporated Boone County only]
- (8) Encourage the efficient use of energy resources by development of emerging and renewable energy systems for responsible energy use and conservation (Economy Goal A, Objective 3).

The proposed text amendments provide for uses and activities that are not currently regulated in the county.

The proposed text amendments provide for protections when the proposed uses may not be compatible with adjacent land uses.

The proposed text amendments allow the uses to be located in zoning districts within the county while protecting agricultural lands.

A copy of the Public Hearing minutes accompanies the findings and recommendation serving as a summary of the evidence and testimony presented by the proponents and opponents of this request.

TECHNICAL/DESIGN REVIEW COMMITTEE VOTE

TO: Boone County Planning Commission
FROM: Rick Lunnemann, Chairman
DATE: November 20, 2024

TECHNICAL/DESIGN REVIEW, Rick Lunnemann, Chairman, Michael Schwartz, Staff


1. Zoning Text Amendment – Solar Energy Systems/Battery Storage Facilities

REMARKS:

We, the Committee Members were present at the Committee Meeting and voted on the above request or else were absent from voting. Further, based upon the vote, the Committee directs the Staff to draft the findings of fact and conditions if deemed necessary in order to complete the Committee Report.

TECHNICAL/DESIGN REVIEW COMMITTEE
SOLAR ENERGY SYSTEMS/BATTERY STORAGE FACILITIES
NOVEMBER 20, 2024

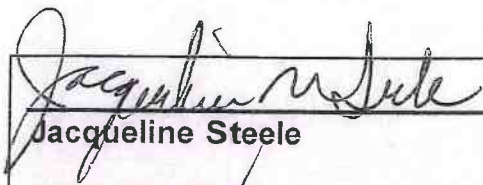
PAGE 2


Rick Lunnemann, Chairman

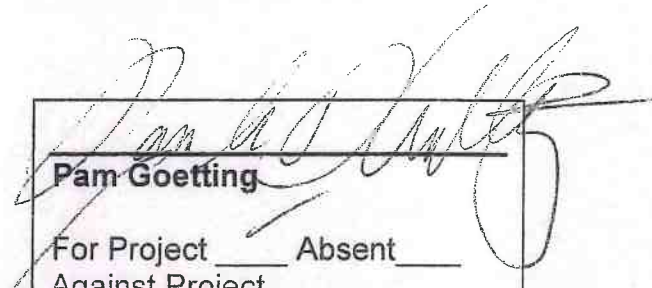
For Project ☒ Absent ☐
Against Project ☐
Abstain ☐ Deferred ☐

David Hincks

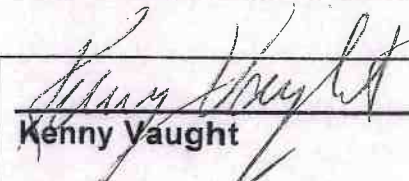
For Project ☐ Absent ☐
Against Project ☐
Abstain ☐ Deferred ☐


Jacqueline Steele

For Project ☒ Absent ☐
Against Project ☐
Abstain ☐ Deferred ☐


Pam Goetting

For Project ☐ Absent ☐
Against Project ☐
Abstain ☐ Deferred ☐


Kenny Vaught

For Project ☒ Absent ☐
Against Project ☐
Abstain ☐ Deferred ☐

TOTAL:	<u> 3 </u>	DEFERRED	<u> 2 </u>	FOR PROJECT	<u> 1 </u>	ABSENT
	<u> 1 </u>	AGAINST PROJECT	<u> 1 </u>	ABSTAIN		

COMMISSION MEMBERS PRESENT:

Mr. Randy Bessler
Mrs. Kathy Clark
Mrs. Pamela Goetting
Ms. Corrin Gulick, Vice Chairwoman
Mr. Steve Harper, Temporary Presiding Officer
Mr. David Hincks
Mrs. Janet Kegley
Mr. Rick Lunnemann
Mr. Charlie Rolfsen, Chairman
Mr. Bob Schwenke
Mrs. Jackie Steele, Secretary/Treasurer
Mr. Tom Szurlinski
Mr. Steve Turner
Mr. Kenny Vaught

COMMISSION MEMBERS NOT PRESENT:

Mr. Eric Richardson

LEGAL COUNSEL PRESENT:

Mr. Dale Wilson

STAFF MEMBERS PRESENT:

Mr. Kevin P. Costello, AICP, Executive Director
Mr. Michael D. Schwartz, Director, Zoning Services
Mr. Steve Lilly, PLS, GISP, Planner

Chairman Rolfsen introduced the fourth item on the Agenda at 8:37 p.m.

ZONING TEXT AMENDMENTS, Michael Schwartz, Staff

4. Request of the **Boone County Planning Commission Technical/Design Review Committee** to consider a series of amendments to the **Boone County Zoning Regulations** pertaining to solar energy systems and battery storage facilities.

Staff member, Michael Schwartz, stated that the request is in two parts. The first part deals with Solar Energy Systems (e.g. solar farms, solar panels, integrated solar absorbing building materials, etc.). The proposed language has been vetted by the Boone County Fiscal Court and the Cities of Florence, Union and Walton. It is important to note that the Boone County Attorney's office conducted its own research. Their entire report is included in the Staff Report. Staff also examined existing regulations from other jurisdictions within the State. The results are summarized in a table on the bottom of page four of the Staff Report. Mr. Schwartz explained there are several types of solar energy systems – integrated (windows and roof tiles, roof top panels and ground mounted). Tier 1 of ground mounted are small residential systems or a factory. Tier 2 and Tier 3 are more closely aligned with solar farms. It was decided that larger solar farms would not be allowed in the unincorporated area. However, the integrated systems would be allowed everywhere and to allow roof top and Tier 1 ground mounted as accessory uses only. They will have to be smaller in size when compared with the principal use/structure.

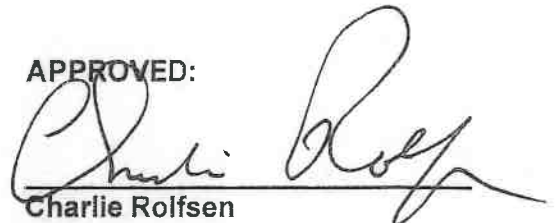
In regard to the battery energy storage systems, Tier 1 involves a unit serving as a backup for a residence or business. Tier 2 would be a collection of units. Tier 2 units would be allowed in industrial zones. Tier 1 units are considered accessory uses in other zoning districts. There are proposed regulations relative to the requirements of roof top and ground mounted units. In addition, there are requirements for decommissioning for the protection of farmland and revegetation of disturbed areas. There are also special setback rules.

In response to Chairman Rolfsen, Mr. Schwartz noted that existing farms are being protected since solar farms are being prohibited. Mrs. Steele asked if the Board could scratch the proposed ground mounted and only allow roof mounted? Mr. Schwartz replied that the Technical/Design Review Committee could change or modify what is being proposed.

Chairman Rolfsen asked if anyone in the audience would like to speak in favor or against the request or had any questions? There were none. He asked if the Commissioners had any questions or comments? There were none.

Seeing no further questions or comments, Chairman Rolfsen announced that the Committee Meeting for this item will be on November 20, 2024 at 6:30 P.M. This item will be on the Agenda for the Business Meeting on December 4, 2024 at 7:00 p.m. in the Fiscal Courtroom. Chairman Rolfsen closed the Public Hearing at 9:43 p.m.

APPROVED:


Charlie Rolfsen
Chairman

Attest:


Kevin P. Costello, AICP
Executive Director