

## Chapter 2 Zoning Ordinance Provisions

### Section 2.1 Zoning Districts and Overlay Districts

#### A. General Provisions

1. The list of districts is hereby modified to add a District Designation of RE, which is Primarily For renewable energy facilities.

#### B. Zoning Districts and Overlay Districts

##### 19. Renewable Energy (RE) District.

**a. Intent.** The Renewable Energy District is intended to regulate the construction, modification, and operation of renewable energy facilities subject to restrictions, to preserve the public health, safety, general welfare and avoid adverse impacts on the community that may arise from renewable energy operations. It is the intent of a RE District to preserve the agriculture lands and discourage the interruption of wildlife and farming operations in Huntington County from renewable energy operations without a clear showing that all of the requirements of this ordinance and the UDO are met and satisfied.

The provisions of this text amendment shall amend and modify the Unified Development Ordinance of Huntington County, Indiana (the "UDO"), and shall replace and terminate the June 17, 2024, Solar Energy System, Solar Moratorium ("Moratorium") passed by the Huntington County Commissioners, which repealed Chapter 2, Section 2.3(J) of the prior version of the UDO in its entirety, removed Solar Energy Systems (SES) as a permitted use in all zoning districts, and deleted the definitions of "Solar Energy Facility, Large" and "Solar Energy Facility, Medium" under Chapter 6 of the UDO. The replacement and termination of the Moratorium shall not be interpreted or deemed to reinstate the provisions of the UDO terminated or removed by the Moratorium.

Land Uses: Renewable Energy (RE) District

- The following uses are permitted in a RE District:
  - Dwelling, single-family
  - \*Livestock Operation, minor or intensive
  - Farm
  - Commercial Forestry Production
  - Fish Hatchery
  - \*Manufactured Home Type I
  - \*Home Occupation Type I
  - Park
  - Plant Nursey
  - Kennel

- Child Care Home
- Day Care Home
- \*Solar Energy Systems
- \*Battery Energy Storage Systems

**\*Specific development standards apply to this use. See Chapter 2, Section 2.3 Use Standards**

**Development Standards: Renewable Energy (RE) District**

Development standards for non-renewable energy uses are the same as allowed in the Agricultural (A) District of this ordinance. Development standards for all other permitted uses are as provided in Section 2.3(J).

**SECTION**

**Section 6.3 of the UDO is hereby amended to add the following Definitions, all of which are relevant to the Zoning Ordinance:**

ADJACENT: Lying near, close; contiguous; adjoining; neighboring.

ADJOINING: Being in contact at some point or line; contiguous; bordering.

ACCESSORY USE: As used in Section 2.3(J) only, a use customarily incidental and subordinate to the primary use or building and located on the same lot therewith. A use which dominates the primary use or building in area, extent, or purpose shall not be considered an accessory use.

BATTERY BACK-UP: A battery system that stores electrical energy from a solar PV system, making the electricity available for future use. Battery Back-Up systems are common in Off-Grid Systems and Hybrid Systems. The provisions in Section 2.3(J) dealing with SESs do not apply to Battery Back-Ups if used for private consumption and electricity generated is not sold to third parties except for Net Metering.

BATTERY ENERGY STORAGE SYSTEM (BESS): As defined in Indiana Code 22-14-8-2, a BESS means an energy storage system (as defined in NFPA 855) that is capable of storing and releasing more than one (1) megawatt of electrical energy for a minimum of one (1) hour using an AC inverter and DC storage. In addition to the requirements in this ordinance, a BESS shall follow state law, Indiana Code 22-14-8 and federal law, NFPA 855

BUILDING INTEGRATED PHOTOVOLTAIC SYSTEM: A combination of photovoltaic building components integrated into any building envelope system such as vertical facades including glass and other façade material, semitransparent skylight systems, roofing materials, and shading over windows. The provisions in Section 2.3(J) dealing with SESs do not apply to Building Integrated Photovoltaic System if used for private consumption and electricity generated is not sold to third parties except for Net Metering.

THERMAL POWER (CST) (AKA CONCENTRATED SOLAR POWER (CSP)): Solar Energy Systems that use lenses or mirrors, and often tracking systems, to focus or reflect a large area of sunlight into a small area. The concentrated energy is absorbed by a transfer fluid or gas and used as a heat source for either a conventional power plant, such as a steam power plant, or a power conversion unit, such as a sterling engine. Although several concentrating solar thermal technologies exist, the most developed types are the solar trough, parabolic dish, and

solar power tower.

**ELECTRICITY GENERATION:** With respect to SES, the amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatt-hours (kWh) or megawatt- hours (MWh).

**ELECTRICAL EQUIPMENT:** With respect to SES, any device associated with a solar energy system, such as an outdoor electrical unit/control box, that transfers the energy from the solar energy system to the intended on-site structure.

**GROUND-MOUNTED SYSTEM:** A solar energy system that is directly installed on specialized solar racking systems, which are attached to an anchor in the ground and wired to connect to an adjacent home, building or utility. Ground-mount systems may be applicable when insufficient space, structural and shading issues or other restrictions prohibit rooftop solar. The provisions in Section 2.3(J) dealing with SESs do not apply to Ground-Mounted Systems if for private use and electricity is not sold to a third party except for Net Metering.

**HYBRID SOLAR PHOTOVOLTAIC SYSTEMS (AKA GRID-TIED PV WITH BATTERY BACK-UP):** Solar photovoltaic electricity generation systems designed to serve the electricity needs of the building to which it is connected, thus offsetting a home or business's electricity usage, while also utilizing a battery back-up in the event of a power outage. This is the only system that provides the ability to have power when the utility grid is down. Typical system components include PV panels, inverter(s) and required electrical safety gear, battery bank, and a charge controller. The provisions in Section 2.3(J) dealing with SESs do not apply to Hybrid Solar Photovoltaic Systems if for private use and electricity is not sold to a third party except for Net Metering.

**INVERTER:** A device that converts the direct current (DC) electricity produced by a solar photovoltaic system to usable alternating current (AC).

**NATIONAL ELECTRIC CODE (NEC):** Sets standards and best practices for wiring and electrical systems.

**NET METERING:** A billing arrangement that allows customers with grid-connected solar electricity systems to receive credit for electricity generated on-site and provided to the utility grid. The provisions in Section 2.3(J) dealing with SESs do not apply to Net Metering. The generating capacity of the solar electricity system for which Net Metering is used shall not exceed the anticipated peak electric demand of the use on the property.

**NONPARTICIPATING PROPERTY:** With respect to SES, means a lot or parcel of real property:

- (1) that is not owned by a project owner; and
- (2) with respect to which the project owner does not seek (A) to install or locate one (1) or more SES facilities or other facilities related to a SES system project (including power lines, temporary or permanent access roads, or other temporary or permanent infrastructure); or to otherwise enter into a lease or any other agreement with the owner of the property for use of all or part of the property in connection with a SES system project; **or** (B) The owner of the property does not consent to having one (1) or more SES system **or** other facilities related to a SES system project (including power lines, temporary or permanent access roads, or other temporary or permanent infrastructure) installed or located; or to otherwise enter into a lease or any other agreement with the project owner for use of all or part of the property in connection with a SES system project.

The term does not include a lot or parcel of real property otherwise described in subsection (a)

if the owner of the lot or parcel consents to participate in a CSE system project through a neighbor agreement, a participation agreement, or another similar arrangement or agreement with a project owner.

**NUISANCE GLARE:** A continuous source of excessive brightness. It could be experienced by a stationary observer located in the path of reflected sunlight from the face of the panel.

**OFF-GRID SOLAR PHOTOVOLTAIC SYSTEMS WITH BATTERY BACK-UP:** Solar photovoltaic electricity systems designed to operate independently from the local utility grid and provide electricity to a home, building, boat, RV (or remote agricultural pumps, gates, traffic signs, etc.). These systems typically require a battery bank to store the solar electricity for use during nighttime or cloudy weather (and/or other back-up generation). Typical system components include PV panels, battery bank, a charge controller, inverter(s), required disconnects, and associated electrical safety gear. The provisions in Section 2.3(J) dealing with SESs do not apply to Off-Grid Solar Photovoltaic Systems with Battery Back-Up if for private use and electricity is not sold to a third party except for Net Metering.

**OPACITY:** The state or quality of being opaque; the degree to which something is opaque.

**OPAQUE:** Not transparent or translucent; impenetrable to light; not allowing light to pass through. As applied to this article, it refers to completely excluding visual contact (100% opacity) with solar panels and equipment.

**PARTICIPATING PROPERTY:** With respect to SES, a property in which land is leased (by a signed contract) by the SES owner in order to facilitate the SES development.

**PERMIT AUTHORITY:** With respect to SES, the Plan Commission is the permit authority concerning the permitting, construction, installation, siting, modification, operation, or decommissioning of SES system in the unit.

**PRIME FARMLAND:** Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. It has the combination of soil properties, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner if it is treated and managed according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, an acceptable level of acidity or alkalinity, an acceptable content of salt or sodium, and few or no rocks. Its soils are permeable to water and air. Prime farmland is not excessively eroded or saturated with water for long periods of time, and it either does not flood frequently during the growing season or is protected from flooding. Users of the lists of prime farmland map units should recognize that soil properties are only one of several criteria that are necessary. Other considerations include land use, frequency of flooding, irrigation, water table, and wind erodibility.

**PROJECT OWNER:** With respect to SES, means a person that (1) will own one (1) or more SES systems proposed to be located in a unit; or (2) owns one (1) or more SES systems located in a unit. The term includes an agent or a representative of a project owner.

**PV-DIRECT SYSTEMS:** The simplest of solar photovoltaic electric systems with the fewest components (no battery back-up and not interconnected with the utility) designed to only provide electricity when the sun is shining. Typical system components include PV panels, required electrical safety gear, and wiring. The provisions in Section 2.3(J) dealing with SESs do not apply to PV-Direct Systems if used for private use and electricity generated is not sold to third parties except for Net Metering.

**RACKING**: Solar energy systems are attached securely and anchored to structural sections of the roof-mounted or pole-mounted systems. Specially designed metal plates called flashings prevent leaks and are placed under shingles and over bolts to create a water-tight seal.

**ROOF-MOUNT SYSTEM**: A solar energy system consisting of solar panels are installed directly on the roof of a home, commercial building, and/or an accessory structure, such as a garage, pergola, and/or shed. Solar panels are mounted and secured using racking systems specifically designed to minimize the impact on the roof and prevent any leaks or structural damage. Roof-mount systems can be mounted flush with the roof or tilted toward the sun at an angle. The provisions in Section 2.3(J) dealing with SESs do not apply to Roof Mount Systems if used for private use and electricity generated is not sold to third parties except for Net Metering.

**SOLAR ACCESS**: The ability of one property to continue to receive sunlight across property lines without obstruction from another's property that contains buildings, foliage, or another impediment.

**SOLAR CARPORT**: A solar energy system of any size that is installed on a carport structure that is accessory to a parking area, and which may include electric vehicle supply equipment or energy storage facilities. The provisions in Section 2.3(J) dealing with SESs do not apply to Solar Carports if used for private use and electricity generated is not sold to third parties except for Net Metering.

**SOLAR COLLECTOR**: A solar PV cell, panel, or array, or solar thermal collector device, which relies upon solar radiation as an energy source for the generation of electricity or for the transfer of stored heat.

**SOLAR EASEMENT**: An easement recorded pursuant to IC 32-23-4, obtained for the purpose of insuring exposure of a solar energy device or a passive solar energy system to the direct rays of the sun. Solar easements are to follow the State requirements of Recording (IC 32-23-2-5).

**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, buffer yard, and landscaping. The term applies, but is not limited to, solar photovoltaic (PV) systems, solar thermal systems, and solar hot water systems. The term includes solar panels, collection and feeder lines, generation tie lines, substations, ancillary buildings, battery energy storage systems, solar monitoring systems, and accessory equipment or structures.

**SOLAR GLARE**: The potential for solar panels to reflect sunlight, with intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

**SOLAR HOT AIR SYSTEM**: (also referred to as Solar Air Heat or Solar Furnace) A solar energy system that includes a solar collector to provide direct supplemental space heating by heating and re-circulating conditioned building air. The most efficient performance includes a solar collector to preheat air or supplement building space heating, typically using a vertically mounted collector on a south-facing wall. The provisions in Section 2.3(J) dealing with SESs do not apply to Solar Hot Air System used exclusively on the property on which it is located.

**SOLAR PHOTOVOLTAIC SYSTEM (SOLAR PV)**: Solar systems consisting of photovoltaic cells, made with semiconducting materials, which produce electricity (in the form of direct current (DC) when they are exposed to sunlight. A typical PV system consists of PV panels (or modules) that combine to form an array. Other system components may include racks and

hardware, wiring for electrical connections, power conditioning equipment, such as an inverter and/or batteries.

SOLAR PANEL: A device for the direct conversion of sunlight into usable solar energy (including electricity or heat).

SOLAR THERMAL SYSTEM: A solar energy system that directly heats water or other liquid using sunlight. Consists of a series of tubes that concentrate light to heat either water or a heat-transfer fluid (such as food-grade propylene glycol, a non-toxic substance) in one of two types of collectors (flat-plate collectors and evacuated tube collectors). The heated liquid is used for such purposes as space heating and cooling, domestic hot water, and heating pool water. The provisions in Section 2.3(J) dealing with SESs do not apply to Solar Thermal System if used exclusively for the property on which it is located.

WATTS (W): A measure of the use of electrical power; [power (Watts) = voltage (volts) x current (Amps) or by the formula  $W=VA$ ].

Unit: With respect to SES, a unit refers to:

- (1) A county, if a project owner, as part of a single SES system project or development, seeks to locate one (1) or more SES systems: (A) entirely within unincorporated areas of the county; within both unincorporated areas of the county and one (1) or more municipalities within the county; or (3) entirely within two (2) or more municipalities within the county; or
- (2) A municipality, if: the project owner seeks to locate one (1) or more SES systems, in more than one (1) county as part of a single SES system project or development; and each municipality in which a project owner seeks to locate one (1) or more SES systems, if the project owner seeks to locate SES systems in two (2) or more municipalities, each of which located in a different county.

## **Section 2.3**

### **J. Solar Energy System (SES) Standards**

#### **1. Purpose and Intent**

The purposes of this ordinance are:

- i) to ensure that the development and production of solar-generated electricity in Huntington County is safe, effective and in accordance with State and Federal guidelines;
- ii) to support and facilitate economic opportunities for local residents that are consistent with public health, safety, and general welfare; and
- iii) to promote the effective and efficient use of solar energy production.

It is the intent of this Solar Energy System (SES) ordinance to provide the basic siting regulations to properly allow commercial and utility SES placement throughout Huntington County. Siting is subject to reasonable restrictions.

These regulations are intended to preserve the health and safety of the citizens of Huntington County. While the provisions of this Ordinance are part of the UDO and adopted pursuant to IC 36-7-4, it is the intent of the Board of

Commissioners of Huntington County, Indiana, that the provisions of this Ordinance that do not specifically involve where a Solar Energy System can be located are further adopted pursuant to Huntington County's general police powers for the health, safety, welfare and benefit of the citizens of Huntington County, Indiana, and all such provisions that deal with how an SES must be operated shall be deemed a duplicate ordinance adopted independently of the UDO to the extent permitted by Indiana law.

2. **Applicability**

The provisions of this ordinance are applicable to the Renewable Energy District. All Solar Energy Systems (SES's) will require Development Plan approval.

3. **Compliance Required**

No applicant shall construct, operate, locate, or enlarge a Solar Energy System (SES) or Battery Energy Storage System (BESS) within Huntington County without first obtaining Development Plan approval and must fully comply with the provisions of this ordinance.

4. **Conflict with Other Ordinances**

Nothing in this ordinance shall preempt other applicable state and federal laws or regulations. This ordinance and the regulations contained within shall not interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law. In the event that any provision of the regulations contained within this ordinance impose restrictions different from any other ordinance, rule of regulation, statute, or other provision of law, then the provisions that are more restrictive and/or impose a higher standard shall govern SES's. This ordinance No. \_\_\_\_\_ shall replace and terminate the June 17, 2024, Solar Energy System, Solar Moratorium (the "Moratorium") passed by the Huntington County Commissioners,, which repealed the prior version of Chapter 2, Section 2.3J of the UDO in its entirety, deleted the definitions of "Solar Energy Facility, Large" and "Solar Energy Facility, Medium" under Chapter 6 of the UDO, and removed Solar Energy Systems (SES) as a permitted use in all zoning districts. . The replacement and termination of the Moratorium shall not be interpreted or deemed to reinstate the provisions of the UDO terminated or removed by the Moratorium.

5. **Severability Clause**

Should the courts declare any section, subsection, paragraph, subparagraph, clause, word, or provision of this ordinance to be unconstitutional or invalid, such decision shall not affect the validity of the chapter as a whole or any part thereof other than the part so declared to be unconstitutional or invalid.

6. **Application for Rezoning of Property**

An application for rezoning to an RE district must be submitted to the Huntington County Plan Commission and follow the rules of procedure of the Plan Commission and the Indiana Code regarding a rezoning application.

7. **Exemptions**

SES that has vested under IC 36-7-4-1109, prior to the effective date of this Article shall not be required to meet the terms and conditions of this Ordinance regarding the approval of development standards but shall meet the terms of UDO in effect when vesting occurred. The developer or owner of a vested SES under IC 36-7-4-1109, however, is encouraged to adhere to the development standards of this Section 2.3(J). Any physical modification to an existing SES whether existing prior to the effective date of this Section 2.3(J) that materially alters the SES shall require new approvals under this Ordinance, including a new Development Plan approval for all changes. Routine maintenance or like-kind replacements do require a permit under this Ordinance. A SES that loses its status as vested due to the lapse of time as provided in IC 36-7-4-1109 shall be required to comply with this Section 2.3(J) and the UDO.

8. **Permitted Use**

Solar Energy Systems or SES are a Permitted use only within the zoning districts shown as "Permitted" in the relevant Permitted Use Tables or as otherwise specifically provided herein.

9. **Approval Agency**

The Plan Commission shall review any SES Plan or its modification that satisfies the development requirements of this Ordinance.

10. **Plan Commission Approval**

If the Plan Commission determines that the following criteria are met: (1) the SES development is compatible with surrounding land uses; (2) the SES development does not create a public nuisance or threat; (3) the SES development will bring economic value to the community; (4) the SES development plan creates conditions favorable to health, safety, convenience, and the harmonious development of the community; and (5) the SES development will not interfere with the use and value of surrounding real estate; then the Plan Commission shall consider approval of the development as long as the development requirements in this ordinance are met.

11. **Development Requirements**

The following development requirements in subsections twelve (12) through thirty-five (35), thirty-seven subpart c (37(c)), and thirty-eight (38) shall be satisfied before the Plan Commission considers an approval of a Development Plan. No development requirements for approval of a development plan for an SES under this Section 2.3(J) may be waived by the Plan Commission.

12. **Agricultural Protection**

An applicant for an SES shall conduct and present a soil identification study or investigation that is intended to identify agricultural soils. The soil study shall utilize the soil classification system utilized by either the Purdue Extension or as provided in the most current edition of Soil Taxonomy, A Basic System of Soil Classification for Making and Interpreting Soil Surveys published by the Soil Survey Staff of the United States Department of Agriculture. Use of prime farmlands for solar array placement and SESs is not permitted and shall be the

basis for the denial of a requested rezoning and/or Development Plan Approval.

13. **Environmental Performance**

- a. All SESs shall meet environmental performance requirements in addition to satisfying dimensional and site-condition standards. Requirements include not causing nuisance glare or noise, and follow tree preservation, habitat protection, and erosion control and stormwater management standards. Widespread tree removal is prohibited, and post-construction stormwater runoff volume and quality shall mimic or improve upon pre-development conditions.
- b. An erosion control plan shall be developed by an SES applicant, developed in accordance with the Natural Resources Conservation Services (NRCS), and any storm water quality management plan adopted by the County.

14. **Compliance with Building, Electric and Plumbing Codes**

All SESs shall meet approval of local building code officials, consistent with the State of Indiana Building Code, and solar thermal systems shall comply with HVAC-related requirements of the Energy Code.

All applicable portions of a SES shall comply with the Indiana State Electric Code. Solar thermal systems shall comply with applicable Indiana State Plumbing Code requirements.

15. **Setbacks**

- a. SES equipment must adhere to the following setback(s)
  - i) One Thousand (1,000) feet from the nearest edge of the right-of-way of a federal, state, or county highway
  - ii) One Thousand (1,000) feet from the nearest edge of the right-of-way from a collector road.
  - iii) One Thousand (1,000) feet from the nearest edge of the right-of-way from a local road.
  - iv) One Thousand (1,000) feet from a nonparticipating property line.
  - v) One Thousand (1,000) feet from the nearest wellhead in order to protect potable water.
- b. Battery energy Storage Systems must adhere to the following setback(s):
  - i) One Thousand (1,000) feet from all property lines.

16. **Lot Coverage**

Solar panels shall have a 25' min. space between panel rows, regardless of panel angle.

17. **Height Restrictions**

- a. No part of a solar panel, rack, inverter or other equipment associated with an

SES system shall be less than three (3) feet above the BFE (Base Flood Elevation) if within a 100-year-old flood plain. An SES shall comply with all other provisions in the UDO involving development or construction in a flood plain.

- b. No part of a solar panel or rack shall be over twelve (12) feet tall as measured from the natural grade level directly below the panel to the top of each panel at its maximum tilt in the vertical position.
  - c. The Zoning Administrator or the Plan Commission may hire an appropriate company, at the SES's owner's expense, to determine if noise levels have been exceeded.
18. **Maximum Vibrations**
- Any item that could create vibrations as part of a SES facility shall be located centrally within the SES facility to reduce any potential impacts on non-participating properties.
19. **Interference with Reception**
- A SES facility shall be constructed and operated so that it does not interfere with television signals, microwave signals, agricultural global positioning systems, GPS, military defense radar, radio reception and navigational or radio reception to neighboring areas.
20. **Glare**
- a. A SES facility at no time shall create glare on any non-participating property line or right-of-way; and
  - b. A SES facility at no time shall create glare that shall interfere with vehicular traffic, including air traffic.
  - c. A professional study shall be presented to the Approving Agency as part of the Development Plan Application to demonstrate that the glare requirements are met.
21. **Equipment**
- All components of the SES facility shall be new, commercially available equipment. Used, experimental, or proto-type equipment still in testing shall be subject to the approval of the Plan Commission during the Development Plan approval process.
22. **Fencing**
- a. Any substation shall be completely enclosed with perimeter fencing and locked gates that comply with state and federal regulations.
  - b. A SES facility shall be surrounded by perimeter fencing with the appropriate accommodations for the protection of wildlife. The perimeter fence style shall be "game style," with no barbed wire, unless otherwise required by the National Electrical Safety Code, or applicable fencing state or federal regulations.

- c. The minimum height requirement for perimeter fencing shall be eight (8) feet. The Plan Commission has the right to negotiate the minimum height and style during the review of a development plan.

23. **Animal Crossing**

A SES owner is required to accommodate animal crossings through the use of animal runs deemed adequate by the Plan Commission.

24. **Emergency Contact Signage**

A standard metal road sign shall include the owner's name, facility's name, emergency contact phone number and the physical site address and shall be posted at the entrance to the facility in addition to all ingress/egress roads to the SES facility in a conspicuous location. The sign shall be posted just outside of the public road right-of-way. Warning signs shall comply with applicable laws.

25. **Safety Provisions**

- a. The Project Site Team with local emergency responders shall develop an Emergency Response Plan, which shall include (i) emergency contact information, including mobile telephone numbers, for the operator of the SES and, if applicable, the utility company that is purchasing the electricity generated by the SES, (ii) information regarding the presence of any explosive, toxic, hazardous or highly flammable materials that, if exposed to fire or ignited, would be reasonably likely to pose a threat to emergency response persons or surrounding persons or property, (iii) a plan for dealing with a fire in any part of the SES. The plan shall be updated not less than once per year, and a copy shall be provided to the Chief of the Fire Departments that may respond to an emergency at the SES along with the Director of Huntington County Emergency Management.
- b. During construction or immediately after Project commissioning, a representative of the operator of the SES system shall conduct training and drills with local emergency responders. The SES owner/operator shall be responsible for all costs associated with the training of local emergency responders.

26. **Traffic Management Plan**

- a. An applicant for an SES shall provide a traffic management plan to the Plan Commission that demonstrates:
  - i) The design and location of the proposed street and highway access points minimizing safety hazards and congestion;
  - ii) The capacity of adjacent streets and highways is sufficient to safely and efficiently accept traffic that will be generated in the development of the SES facility; and
  - iii) The entrances, streets, and internal traffic circulation facilities in the Development Plan are compatible with existing and planned streets and adjacent developments and property owners.

**27. Appearance**

- a. A SES facility, including all accessory buildings, shall, to the extent possible, use materials and colors that will blend them into the surrounding environment.
- b. No lighting shall be installed or operated on the Project Site other than as needed for safety and operational purposes, including: (1) emergency responses; (2) within the substation or switchyard parcel footprint; (3) inspection and/or repair purposes; (4) internal lighting and external down-lighting of the O&M building; (5) security; and (6) as otherwise required by applicable state and federal law.

**28. Waste Management**

- a. All solid waste whether generated from supplies, equipment, parts, packaging, operation, or maintenance of the facility (including old parts and equipment) shall be removed from the site in a timely manner consistent with industry standards.
- b. All hazardous waste generated by the operation and maintenance of the facility, including but not limited to, lubricating materials, cleaning materials, or such shall be handled in a manner consistent with all local, state, and federal rules and regulations and shall not be allowed to seep into the ground or come in contact with any open water.

**29. Visual Buffer**

- a. A SES facility shall be separated by a landscape buffer from non-participating, pre-existing residences. The landscape buffer shall be installed on the SES facility, not on a non-participating property.
- b. The Development Plan will determine the required height and species of plantings used for a landscape buffer. The use of native and pollinator-friendly plant species is required. Landscape Plan and Vegetation Management Plan shall be submitted as part of the Development Plan Application. The use of mounding in conjunction with landscaping is strongly encouraged.
- c. Ground Cover and Buffer Areas
  - i) Ground around and under solar panels and in project site buffer areas shall be planted, established, and maintained for the life of the solar project in perennial vegetated ground cover. To the extent practicable, perennial vegetation ground cover shall be based on a diverse seed mix of naturalized and non-invasive species consistent with guidance specific to the local area provided by the Soil and Water Conservation District Office or the Indiana Native Plant Society.
  - ii) The owner/operator of the SES system shall prepare and implement a control plan for noxious species, as listed by the Indiana Invasive Species Council, without harming perennial vegetation.
  - iii) No insecticide use is permitted on the site. This provision does not apply to insecticide use in on-site buildings, in and around electrical boxes, spot control of noxious weeds, or as otherwise may be deemed necessary to

protect public health and safety.

- iv) Plant material shall not have been treated with systemic insecticides, particularly neonicotinoids.
  - v) A SES owner/operator that chooses to propose to install, establish, and maintain pollinator-friendly vegetative cover shall demonstrate the quality of their habitat by using guides such as Purdue University 2020 Indiana Solar Site Pollinator Habitat Planning Scorecard, or other third party solar-pollinator scorecards designed for Midwestern eco-systems, soils, and habitat.
  - vi) Clearing of natural vegetation for the installation of a SES shall be limited to that which is necessary for the construction, operation and maintenance of the system and as otherwise prescribed by applicable laws, regulations, and ordinances.
  - vii) All trees to be removed to accommodate the installation of a solar energy system shall be accompanied by a plan demonstrating the need to remove the trees. Any applicant shall locate a solar energy system so that tree removal is not required to the extent practical.
  - viii) No trees or other landscaping otherwise required by the Ordinance or attached as a condition of approval of any plan, application, or permit may be removed for the installation or operation of a SES.
  - ix) The SES owner/operator shall maintain all parts of the project, the buffer, including but not limited to the maintenance of vegetation, landscape, obnoxious weeds and any other requirements as deemed adequate by the Plan Commission.
- d. The SES owner/operator regarding the landscaping and mounding, shall substantially screen panels and racks from surrounding properties and shall submit a landscaping plan to the Plan Commission that shows numbers, types of species of individual plants, size at planting for the approval of the Plan Commission.
  - e. All Buffers requiring landscaping/screening shall have 100% opacity year-round.

### 30. **Electric Wires**

- a. All electric collection systems shall be located underground, except for transformers, inverters, substations, and controls.
- b. A collection system that is located in a public right-of-way or county drainage easement will require County Drainage Board approval. Crossings will be marked by warning signage for visibility.
- c. The transmission system associated with a SES facility shall be located above ground.
- d. All electrical components of a SES facility shall conform to applicable local, state and federal electrical code requirements.

**31. Operations and Maintenance**

- a. SES owner and/or operator shall repair, maintain, and replace the SES and related solar equipment in a manner consistent with industry standards as needed to keep the SES in good repair and operating condition.
- b. The SES applicant shall submit a plan for the operation and maintenance of the SES, which shall include measures for maintaining safe access to the installation, storm water controls, as well as general procedures for operation and maintenance of the installation.
- c. All equipment shall be kept in a state of good repair and subject to inspection. If equipment is found in a condition that is not acceptable to the Zoning Administrator or the Plan Commission, the SES owner/operator shall have thirty (30) days after receipt of a deficiency notice to remedy the situation with new equipment and submit a repair plan to the Plan Commission containing what equipment is being replaced upon. Upon completion, the SES owner/operator shall notify the Plan Commission of new equipment which may be inspected at the SES owner/operator's cost. If a SES owner/operator fails to remedy the situation, the Zoning Administrator and the Plan Commission has the power to determine a monetary fine for everyday the equipment is not replaced by the thirty (30) day window.
- d. Physical Modifications: Any physical modification to any SES or a part thereof which materially alters the mechanical load, mechanical load path, or major electrical components shall require re-certification by all appropriate regulatory authorities. Like-kind replacements shall not require re-certification, unless required by a regulatory authority. Prior to making any material physical modification, other than a like-kind modification, the owner or operator of such SES shall confer with the Plan Commission and County Commissioners as to whether or not the proposed physical modification requires new Development Plan approval of such SES.

**32. Rapid Disconnect**

PV systems mounted to the roof or within a building shall be supplied with a rapid disconnect to ensure a safe condition for firefighters.

**33. Drainage Infrastructure**

- a. All damages including, but not limited to, waterways, drainage ditches, field tiles, and/or any other infrastructures caused by the construction or maintenance of the SES facility, must be completely repaired to original or better condition, and so as not to impede the flow of water. All repairs must be completed in a reasonable amount of time as agreed upon between the county and the applicant, owner and/or operator.
- b. SES shall comply with Indiana Code requirements regarding legal drains except as otherwise approved by the County Drainage Board and any other necessary bodies.
- c. SES design shall avoid usage of any fencing or gates that would encumber

access to County drainage infrastructure.

- d. SES shall submit a Drainage Maintenance Plan, a map of proposed public drainage crossing locations, and proposed schematic drawing of the crossing.
- e. All underground project crossings shall maintain at least five-foot (5) clearance between the public ditch/tile and the cable casing.

34. **Other Appurtenances**

No appurtenances other than those associated with the SES construction operations, maintenance, repair, replacement, rehabilitation, decommissioning, restoration, removal, and permit requirements shall be connected to the SES area except after notice of hearing and the hearing before the Plan Commission pursuant to the applicable Article(s) of this Ordinance.

35. **Liability Insurance**

The owner or operator of the SES facility in addition to general contractors and subcontractors of the SES facility shall maintain a current general liability policy covering bodily injury and property damage and name Huntington County as an additional insured with limits of at least two million dollars per occurrence and five million dollars in aggregate with a deductible of no more than five thousand dollars. The owner or operator shall, upon the request of the Plan Commission or the Zoning Administrator, provide evidence of such insurance.

36. **Development Plan Review**

- a. Development Plans shall be reviewed by the Plan Commission in accordance with the Plan Commission Rules of Procedure and this Section 2.3(J). To the extent a conflict exists between the Plan Commission Rules of Procedure and the provisions of this Section 2.3(J), the most restrictive or most demanding provision shall apply.
- b. The Plan Commission shall establish a meeting date, time, and place for the Plan Commission to review the Development Plan.
- c. An applicant shall no later than Thirty (30) days before the Public Hearing; (I) notify all property owners via mail within a quarter-mile radius of the proposed project site of the date, time, location and subject matter of the Public Hearing, (II) post conspicuous signs along the perimeter road(s) of the proposed project site, not to exceed a maximum of five (5) signs total with minimum dimensions of Two (2) ft by Three (3) ft, which signs shall include in a manner that can reasonably be read by passing vehicles, "PUBLIC HEARING NOTICE FOR RENEWABLE ENERGY" along with the telephone number of the Community Development office for Huntington County, Indiana.
- d. If the Plan Commission determines that the following criteria are met: (1) the SES development is compatible with surrounding land uses; (2) the SES development

does not create a public nuisance or threat; (3) the SES development will bring economic value to the community; (4) the SES development plan creates conditions favorable to health, safety, convenience, and the harmonious development of the community; and (5) the SES development does will not interfere with the use and value of surrounding real estate; then the Plan Commission shall consider approval of the development as long as the development requirements in this ordinance are met.

**37. Development Plan Approval**

- a. The Plan Commission may seek technical advice from relevant stakeholders and professionals, including but not limited to, Emergency Management, County Surveyor, Purdue Extension office, licensed professional engineers and land surveyors, and attorneys. The cost, if any, of such persons shall be deemed part of the application fee for Development Plan Approval and due within 30 days of delivery.
- b. The Zoning Administrator shall convene a pre-permitting meeting with SES facility developers with the aim of providing feedback and revisions prior to application submission.
- c. The following supporting information must be provided before the Plan Commission may consider approval of a Development Plan:
  - i) Road Usage/Repair Agreement approved by the County Commissioners that includes the following:
    - 1. A financial guarantee in the form of a bond shall be required for all transportation infrastructure utilized, ensuring full restoration of affected roads and drainage systems according to county regulations. The bond value shall be set through the agreement with County Commissioners.
    - 2. A road access study shall be conducted to establish the construction traffic flow, with boundary survey results submitted alongside the Development Plan.
    - 3. The County Highway Superintendent shall review and approve detailed maps showing the extent of roads within the project's limits.
    - 4. An independent engineering firm shall produce a comparative video report detailing road conditions before and after the project, to be submitted to County authorities no later than two months following its completion.
    - 5. Repair compensation values will adhere to standard industry rates and will be confirmed by County personnel during the Road Use Agreement (RUA) assessment.
    - 6. The necessary bonding for road usage shall be secured before construction commences and subsequent to the granting of Improvement Location Permits (ILPs).
  - ii) Decommissioning – Restoration Agreement approved by the County

Commissioners that includes the following:

1. An outline of the anticipated means, costs and method of payment of all costs in carrying out such Decommissioning-Restoration Plan and Agreement at the end of the SES life or the life of any part of a SES, upon becoming an abandoned use, or being declared a public nuisance as provided by this Article.
2. A requirement that the SES owner or project operator shall give written notice of intent to abandon use of an SES facility 60 days prior to the discontinuation of electrical production to the County Commissioners and Plan Commission.
3. A requirement that the SES owner or project operator shall restore the land substantially to the same condition as prior to construction.
4. A requirement that the SES owner or project operator shall clear the site of all constructed features and modifications post-operation, including but not limited to solar panels, racks, inverters, piles, foundations, transformers, fencing, roads, utility poles, lines, and connections.
5. A requirement that the SES owner or project operator shall complete the decommissioning process within a 24-month timeframe.
6. Prior to issuance of a permit to begin construction of an SES, the applicant must provide to the County a performance guarantee in the form of a (i) bond; (ii) irrevocable letter of credit and agreement, or (iii) cash to be held in escrow by the County Treasurer or a bank, in the amount of 125% of the estimated decommission and restoration cost. A licensed engineer shall determine estimates.
7. A financial guarantee for decommissioning is required to be in place no later than the commencement of construction of the SES.
8. The project developer or operator is responsible for covering all expenses related to the estimation, acquisition, and maintenance of the decommissioning financial assurance and performance guaranty.
9. Security must be initially posted for a five-year term and must be subject to renewal every five years.
10. Unless otherwise agreed to by all parties, every three (3) years a new engineer's estimate of probable cost of Decommissioning and Restoration, shall be submitted to the County Commissioners for approval, and the bond, cash deposit or letter of credit shall be adjusted upward or downward as necessary. A new estimate will be submitted to the County Commissioners prior to the sale of any portion of

the SES and the Performance Guarantee adjusted appropriately and made part of the sales agreement.

11. Written Notices: Prior to implementation of any procedures or remedy for the resolution of any SES owner's and/or operator's failure to decommission the SES pursuant to the Decommissioning-Restoration Plan and/or this Article, the Plan Commission or County Commissioners shall first provide written notice to the owner and/or operator, setting forth the alleged default(s). Such written notice shall provide the owner and/or operator a reasonable time period not to exceed sixty (60) days, except upon such longer time that the County Commissioners may approve, to resolve the default(s). In the event the negotiations fail to resolve the default issue(s), either party may pursue all remedies available by the terms of the Ordinance and/or Decommissioning-Restoration Plan.

- iii) Soil Identification Study
- iv) Glare – Professional Study demonstrating that the glare requirements are met.
- v) Emergency Response Plan
- vi) Operations and Maintenance Plan
- vii) Drainage Maintenance Plan
- viii) Traffic Management Plan
- ix) Storm Water Control Calculations
- x) Visual Buffer including landscaping plan(detailed plans)
- xi) Erosion Control Plan
- xii) Site Plan (setbacks, layout and safety requirements)
- xiii) Panel Placement to avoid glare at non-participating, pre-existing residences and roadways
- xiv) Fencing (with appropriate accommodations for wildlife)
- xv) Ground cover plantings
- xvi) Vegetation Management Plan (such as mowing or livestock grazing)
- xvii) Contact Information (owner/operator agrees to notify Department of County Development if ownership changes or operator information changes)
- xviii) Payment of filing fees

**38. Additional Plans and Drawings**

a. Solar Easements

If necessary, an SES owner and/or operator may obtain any solar easements necessary to guarantee unobstructed solar access by

separate civil agreement(s) with adjacent property owner(s). Copies of such easements shall be submitted as part of the application process with proof of recording in the Huntington County Recorder's Office.

b. **As-Built Plans Requirement**

Upon completion of all development, the exact measurements of the location of utilities, structures and components erected during the development are necessary for public record and shall be recorded. The applicant, owner, and/or operator shall submit a copy of the final as built survey to the Plan Commission with the locations of the SES facilities shown thereon. The Plan Commission, after being satisfied that the locations of the SES facilities are substantially similar to the locations on the originally approved final plan(s) or as the same were from time to time amended, shall approve, date and sign said as-built survey for the SES, which the applicant, owner, and/or operator shall then record and provide the County Commissioners a copy of said recorded Plans.

39. **Construction**

a. **Pre-Construction Requirements for an SES**

- i) Avoidance and Mitigation of Damages to Public Infrastructure
- ii) In addition to complying with the approved Road Use and Maintenance Agreement, an applicant, owner, and/or operator proposing to use any county road(s), for the purposes of transporting any component of an SES, substation and/or any other equipment for the construction, operation or maintenance of an SES shall comply with the following pre-construction requirements.

b. **Pre-Construction Survey**

- i) The applicant, owner and/or operator shall conduct a pre-construction baseline survey in coordination with, and acceptable to, the Huntington County Commissioners and permit authority and such survey shall be a part of the Road Use and Maintenance Agreement to determine existing road conditions for assessing current needed improvements and potential future damage. The survey shall include, but not be limited to, photographs, and/or video, or a combination thereof, and a written agreement to document the condition of the public facility as the same exists on the date of the baseline survey.

c. **Construction Requirements**

- i) During construction, the applicant shall demonstrate and document to the satisfaction of the Highway Superintendent, County Surveyor, Plan Commission, and the County Commissioners, that the following requirements are being met:
- ii) Dust Control: All reasonable dust control measures required by the County Commissioners during construction of the SES are being

followed together with any additional steps or adjustments for dust control which may from time to time be required by the County Commissioners.

- iii) Drainage: Reasonable storm water best management practices as required by the approved Drainage Plan/Agreement.
  - iv) Noise: Near a residence or public use noise shall be kept to a minimum during the hours of 7:00 a.m. to 7:00 p.m. Eastern Standard Time.
- d. Post-Construction Requirement
- i) Road Repairs: Any road damage caused by the transport of any matter or material utilized in any way regarding the SES, in the construction of the SES, the installation of the same, and/or the removal and decommissioning of the same, shall be repaired to the satisfaction of the County Commissioners (as per the Road Use and Maintenance Agreement).
  - ii) The County Highway Superintendent may choose to require either remediation of road(s) upon completion of the SES or said Engineer is authorized to collect fees for oversized load permits. Further, a surety bond or letter of credit in an amount to be determined by the County Commissioners may be required by the County to ensure that future repairs are completed to the satisfaction of the County Commissioners.
  - iii) The Engineer shall be hired by the County Commissioners and the cost of such bond or letter of credit shall be paid by the SES owner and said bond shall remain in full force and affect until the decommissioning and restoration is fully completed as prescribed by this Zoning Ordinance and the Decommissioning-Restoration Plan and Agreement. The cost of the Engineer shall be promptly reimbursed by the SES developer upon delivery of an invoice by a Huntington County official.

**40. Variance Request Process**

- a. Anyone who wishes to file a variance request for the development standards within this ordinance, must do so by filing a Variance Application Submission with Huntington County BZA and shall follow the requirements and procedures of Chapter 4, Section 4.2 (D) of Huntington County UDO.
- b. In addition to the requirements in Chapter 4, Section 4.2 (D)(e)(ii) of Huntington County UDO, the BZA shall find that the additional standards have been met:
  - i) The approval will not be injurious to the vegetation and wildlife of the proposed location and the adjoining property; and
  - ii) The approval will not be injurious to any livestock on the proposed location or any livestock on an adjoining property or within one thousand (1,000) feet of proposed location property line.
- c. The Huntington County BZA upon notification of a Variance Application

Submission, shall notify the members of the Board of Commissioners of Huntington County of the application submission. Any member of the Board of Commissioners of Huntington County shall have the right, upon receiving notification, to file any time at or before the first public hearing before the BZA a written request for an automatic continuance of the BZA's public hearing. Upon receipt of such a request, the BZA shall continue the public hearing on the requested variance(s) to the following month's regularly scheduled BZA public hearing.

41. **Conditions of Approval**

The Plan Commission may impose conditions on the approval of a development plan if the conditions are reasonably necessary to satisfy the development requirements specified in this ordinance for approval of the development plan.

42. **Amendments and Changes to the Development Plan**

Any material changes of location of the SES fenced boundary and any material change in the location of SES facilities outside of the SES fenced boundary shall be furnished to the Plan Commission and County Commissioners. It shall be the duty and responsibility of the applicant, owner and/or operator to obtain any variance required by such change and to comply with any other requirement necessitated by such change. Any variance required by this Section shall be obtained prior to construction or implementation of such change.

43. **Administration**

a. **Schedule of Fees, Charges and Expenses**

b. **Written Commitments:** In addition to any other commitments (as defined in Indiana Code 36-7-4-1015) that are required as a condition of approval of any permit for a SES, the owner of the property on which the SES is to be constructed shall execute and record in the Office of the Recorder of Huntington County, Indiana, a set of commitments that includes all required plans.

c. One copy of the application form and ten (10) copies of each required plan in this ordinance shall be submitted at the time the application is filed.