

## Maysville/Mason County Solar Energy Systems Ordinance Draft

### **414 Solar Energy Systems (SES)**

#### **414.01 PURPOSE**

The purposes of this Section are to:

A. Assure that any development of industrial scale solar energy projects within Maysville and Mason County, Kentucky, is safe and effective; and

B. Provide a framework for development for solar energy resources which balances the benefits of renewable energy production with protection of agriculture, existing residential use and existing built environment.

#### **414.02 INTENT**

It is the intent of these Solar Energy Systems Regulations to provide a regulatory framework for the siting, construction and operation of industrial and non-industrial scale Solar Energy Systems, hereafter referred to as SES, within Maysville and Mason County consistent with the Comprehensive Plan for such jurisdiction and consistent with Section 100 (Mission Statement) and Section 202 (Purpose).

#### **414.03 APPLICABILITY**

The provisions of this Section are applicable to those districts which permit industrial scale SES within Mason County, Kentucky, and governs the siting of industrial scale SES and related substations, maintenance facilities and other accessory facilities, as defined, that are ancillary to industrial scale SES. Any reference to applicant, owner, operator or successor is intended to refer to an entity that is a responsible party in terms of being continually required to abide by the provisions of this Chapter and similarly is bound by any agreement entered into with the City of Maysville and/or Mason County.

#### **414.04 PROHIBITION**

No entity or applicant shall construct, operate, or locate an industrial scale SES within the City of Maysville or Mason County, Kentucky, without first having applied for and obtained a permit under this Section 414 and having fully complied with the provisions hereof.

#### **414.05 CONFLICT WITH OTHER REGULATIONS**

Nothing in this Chapter is intended to preempt other applicable state and federal laws or regulations, including compliance with all Federal Aviation Administration rules and regulations. Nor are they intended to interfere with, abrogate, or annul any other ordinance, rule, or regulation, statute or other provisions of law. In the event that any provision of these regulations imposes restrictions different from any other ordinance, rule, regulation, statute, or provision of

law, the provisions that are more restrictive or that imposes higher standards shall govern.

#### **414.06           DEFINITIONS**

***Agricultural District*** means a district created under the Commonwealth of Kentucky’s agricultural district program and administered by the Mason County Conservation District pursuant to KRS 262.850 in which Intermediate Scale SES and Large Scale SES are prohibited.

***Agricultural Solar Energy System (Ag SES)*** means a SES that is used to provide the energy needs of a farm consisting of at least five contiguous acres conducting an agricultural land use described in KRS 100.111. SES that qualify as merchant electric generating facilities as defined in and regulated by KRS 278.704 are not considered Ag SES.

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

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

***Planning Commission*** means the Mason County Joint Planning Commission, the local land use planning body for the City of Maysville and Mason County, Kentucky.

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

***Solar array*** means an individual row or section of solar panels.

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

***Integrated Solar Energy System*** means an SES where the solar materials are

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

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

***Ground Mounted Solar Energy System*** means an SES that is structurally mounted to the ground and does not qualify as an Integrated SES. Ground Mounted SESs are subcategorized as follows:

- ***Small Scale Ground Mounted Energy System (Small Scale SES)*** which is a Ground Mounted SES with a Footprint of less than 2,500 square feet
- ***Intermediate Scale Ground Mounted Energy System (Intermediate Scale SES)*** which is a Ground Mounted SES with a Footprint of between 2,501 square feet and ten (10) acres. Intermediate Scale SES are considered industrial scale SES in this ordinance.
- ***Large Scale Ground Mounted Solar Energy System (Large Scale SES)*** means a Ground Mounted SES with a Footprint of more than ten (10) acres. Large Scale SES are considered industrial scale SES in this ordinance.

***SES Structure*** is anything constructed or made for use with SES, and which requires a permanent location in or on the ground or attachment to something having a permanent location in or on the ground.

#### **414.07 DISTRICT REGULATIONS**

A. **Location.** SES are permitted only in districts as specified in Code of Ordinances Section 406, Land Use Classification and Designation.

B. **Height.** Industrial scale SES or Operational Support Metrological Towers for Industrial scale SES are not specifically limited by this ordinance but are subject to those height limitations promulgated by Federal Aviation Administration. #####

#### **414.08 SETBACK REQUIREMENTS**

A. Minimum Setback Distances for Industrial SES Structures

Distance from a...	Minimum Setback Distance
Property line, measured from the nearest edge of an SES structure to the property line	#####
Residential dwellings, regularly occupied industrial or institutional buildings, public or semi-public institutions such as schools and churches and historical landmarks measured from the nearest edge of an SES structure to the nearest corner of the structure.	##### <sup>1</sup>
Public road right-of-way, measured from the nearest edge of an SES structure to the edge of the right-of-way	##### <sup>2</sup>
Other rights-of-way, such as railroads and public utility easements, measured from the nearest edge of an SES structure to the edge of the right-of-way and	#####
Public conservation lands, measured from the nearest edge of an SES structure to the nearest point of the public conservation land in question	#####
Community or Rural Residential Districts measured from the nearest edge of an SES structure to the Rural District line	#####
Incorporated limits of a municipality and County boundary, as measured from the nearest edge of an SES structure to the corporate limits or County boundary.	#####
Wetlands, as defined by the U.S. Army Corps of Engineers, measured from the nearest edge of an SES structure to the nearest point of the Wetland in question.	#####
Above-ground electric transmission or distribution line, measured from the nearest horizontal extension	#####
Cell towers, radio and television towers	#####

<sup>1</sup>This setback shall not apply to residential dwellings on lots with SES or those of participating landowners .

<sup>2</sup>The setback shall be measured from future public rights-of-way width if a planned public road improvement or expansion is known at the time of application.

#### B. Industrial Scale SES Ancillary Structure Setback

1. Industrial scale SES primary structures and ancillary structures, such as substations and maintenance and operation facilities, are considered principal structures and subject to principal structure setbacks unless otherwise specified herein or if specifically identified as an accessory structure in Code of Ordinances Section 408.2.

2. For all poles carrying overhead wiring connecting industrial scale SES to a substation for connection to a utility's electric transmission line, there are no setback requirements from property lines as long as the poles are located within a recorded easement for such purpose.

### **414.09 SAFETY DESIGN AND INSTALLATION STANDARDS**

#### A. Equipment Type

1. All solar panels shall be constructed of commercially available equipment.

2. Experimental or proto-type equipment still in testing which does not fully comply with industry standards, may be approved by the Board of Adjustment per the variance process established by this Ordinance.

#### B. Industry Standards and Other Regulations

All SES shall conform to applicable industry standards, as well as all local, state and federal regulations. An applicant shall submit certificate(s) of design compliance that solar panel manufacturers have obtained from Underwriters Laboratories, DNV-GL, or an equivalent third party.

#### C. Electrical components

1. Standards. All electrical components of all SES shall conform to applicable local, state and national codes, and any relevant national and international standards.

2. Collection Cables. All electrical collection cables between each solar array and/or ancillary structures shall be located underground wherever possible.

3. Transmission lines/Distribution lines. All transmission and/or distribution lines that are buried should be at a depth consistent with or greater than local utility and telecommunication underground lines standards.

D. Reflective surfaces.

1. All surfaces shall be matte or non-reflective. Solar panels shall be as non-reflective as possible and conform to any Federal Aviation Administration requirements for SES near airports.

E. SES Warnings and Notices.

The following notices shall be clearly visible on industrial scale SES facilities:

1. "No Trespassing" signs shall be attached to any perimeter fence.
2. "Danger" signs shall be posted at the height of five (5) feet on SES accessory structures.
3. A sign shall be posted on SES structures showing an emergency telephone number.
4. The manual electrical and/or shutdown disconnect switch(es) shall be clearly labeled.
5. Sign or signs shall be posted on the pad-mounted transformer and the substation(s) warning of high voltage.
6. Private roads providing access to Industrial scale SES shall have posted an Emergency-911 address private road sign.

G. Materials Handling, Storage and Disposal

1. Solid wastes. All solid wastes whether generated from supplies, equipment, parts, packaging, operation or maintenance of the SES, including old parts and equipment related to the construction, operation and/or maintenance of the SES shall be removed from the site promptly and disposed of in accordance with all federal, state, and local laws.
2. Hazardous Materials. All hazardous materials or waste related to the construction, operation and/or maintenance of any SES shall be handled, stored, transported and disposed of in accordance with all applicable local, state and federal laws.

**414.09 OTHER APPLICABLE STANDARDS**

A. Sewer and Water

All facilities or structures that are part of the industrial scale SES project shall comply

with the existing septic and well regulations as required by the Mason County, Kentucky Health Department and/or the State of Kentucky Department of Public Health.

#### B. Noise and Vibration

1. No SES or ancillary structure shall be located so as to create a decibel level greater than 30 dBA at the property line of the parcel in which the turbine is located and also less than 50 dB(C) at the property lines of the parcel in which the turbine is located.
2. The application shall include a pre-construction sound study that establishes the ambient sound conditions in the proposed project area and surrounding the project area with a perimeter of one mile. The sound study shall be performed by a certified independent acoustical engineer. The sound study must provide a description of the testing, sampling and process methodology used in determining the ambient measurement. The firm with which the engineer is associated shall be a member of the National Council of Acoustical Consultants (NCAC) with a specialty in environmental noise, and the independent acoustical engineer shall be a Member, Board Certified of the Institute of Noise Control Engineering of the USA.
3. Within twelve months after the date when the project is fully operational the operator shall conduct a two phased post-construction sound study conducted by an independent accredited sound engineer chosen by the Planning Commission and paid for by the applicant/owner. Post-construction sound level measurements shall be taken both with all solar arrays running and with all solar arrays off. The post-construction measurements shall be reported to the Planning Commission and made available for public review.
4. If sound measurements from the post-construction analysis show levels above what is permitted by the ordinance, the operator shall take all necessary steps to remediate the problem.

#### C. Utility Interconnection

The SES, if interconnected to a utility system, shall meet the requirements for interconnection and operate as prescribed by the applicable regulations and/or tariffs of the electrical utility or any other regulatory body with jurisdiction, as amended from time to time.

#### D. Signage

All signs pertaining to an industrial scale SES project must comply with Section 411, Sign Regulations, unless otherwise specified as follows:

1. No sign shall exceed sixteen (16) square feet in surface area except development signs.

2. No sign shall exceed eight (8) feet in height.
3. The manufacturer's or owner's company name and/or logo may be placed upon the compartment containing the electrical equipment in accordance with customary practice.
4. An identification sign relating to the SES Project development shall be located on each side of the total SES Project area. There shall be no less than four (4) and no more than six (6) signs. Development signs must be sized and placed in compliance with Section 320.411 and must include seven (7) day per week contact information to reach a responsible representative of the operator with authority to resolve problems associated with development of a SES Project.
5. No other advertising signs or logos shall be placed or painted on any structure or facility with the exception of an identifying sign at the operation and maintenance facility.

#### E. Feeder lines

Feeder lines (lines at distribution levels) installed as part of any SES shall not be considered an essential service. To wit, all communications and feeder lines installed as part of any SES shall be buried underground wherever possible.

#### F. Other appurtenances

No appurtenances other than those associated with the SES construction, operations, maintenance, decommissioning/removal, and permit requirements shall be connected to any SES structure except with express, written permission by the Board of Adjustment.

### 414.10 **OPERATION AND MAINTENANCE**

#### A. Physical Modifications

In general, any physical modification to any SES that alters major electrical components shall require re-certification. Like-kind replacements shall not require re-certification. Therefore, prior to making any physical modification, the owner or operator shall confer with the Planning and Zoning Administrator/Building Inspector for the City of Maysville to determine whether the physical modification requires re-certification.

#### B. Communications Interference

Prior to construction, a communications study to determine whether the proposed industrial scale SES will have any adverse impacts on any public or public serving utility microwave transmissions shall be completed. If necessary, the applicant or successor shall mitigate interference with electromagnetic communications, such as radio, telephone, microwaves, or television signals caused by any SES. In addition, the applicant or successor shall comply with the following:



1. Post-Construction. If, after construction of the SES, the owner or operator receives a written complaint that can be substantiated through an independent review related to interference with the broadcast of residential television, telecommunication, communication or microwave transmissions that existed prior to construction of the SES, the owner or operator shall take reasonable steps to mitigate said interference. Interference with private telecommunications systems such as GPS shall be between the company and the complainant.
2. Failure to Remedy a Complaint. If an agreement to remedy a known interference is not reached within sixty (60) days, appropriate action will be taken. If further negotiations and/or mitigation measures to reduce or eliminate the interference do not remedy the problem it may result in requiring the SES to become inactive. This Section does not apply to interference with private telecommunications systems. See Complaint Procedure in subsection D below.

#### C. Declaration of Public Nuisance

Any utility scale SES declared to be a hazard to public safety (unsafe) by the City of Maysville by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, damage or abandonment is hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal in accordance with the approved Decommissioning Plan.

#### D. Complaint Procedure

1. All complaints regarding utility scale SES operation shall be logged by the Operator. At minimum the log shall describe the name and address of the complainant, contact information of the complainant, when the complaint is received, a detailed description of the nature of the complaint, action taken to resolve the complaint and the date the complaint is resolved. If any complaint is considered by the operator to not be the responsibility of the operator a reason shall be provided to the complainant and so noted on the log. The log must be sent to the Planning and Zoning Administrator and the Operator at a frequency no less than once per month. Upon receipt of a formal complaint regarding noise, the SES operator shall be responsible for conducting a specific focused sound study to ascertain facts associated with a specific study to address the concern of the complainant and shall be financially responsible for the study. The acoustical engineering firm that conducts the complaint generated sound study must be different than that of the firm that conducted the pre- and post-construction studies and must also be similarly accredited.
2. If after sixty (60) days there is no resolution of a registered complaint the complainant may provide notice to the Planning and Zoning Administrator accompanied by a fee of \$150.00 that they intend to enter into binding arbitration of the unresolved complaint. Failure by the operator to perform an action specified by the arbitrator will be considered a violation of the zoning ordinance and subject to the applicable enforcement penalties and remedies. Upon receipt of

a request for arbitration the Planning and Zoning Administrator will arrange for a time and place to meet with the arbitrator. Upon approval of a SES project the Operator shall continually fund a non-reverting fund (for arbitration only), which will contain no less than \$5,000 dollars at any time, for the life of the SES project. Notification of the balance of the fund to the Operator shall be the responsibility of the Planning and Zoning Administrator, in a manner he or she sees fit. If upon notification that the fund is deficient, the Operator shall have sixty (60) days to bring the fund back to the prescribed minimum amount. If the payment is not satisfied within the sixty (60) days, the SES project will be deemed in violation of the permit. The arbitrator shall be a member of the Kentucky Bar Association, be on the Roster of Court-Approved Mediators in the State of Kentucky and not be a citizen of Mason County, Kentucky. The Planning and Zoning Administrator may appear and present evidence on behalf of a complainant if requested to do so.

#### **414.11 DECOMMISSIONING PLAN**

Prior to filing an application for a permit under this Ordinance, the appropriate Executive authority with jurisdiction and the applicant or successor shall formulate a decommissioning plan outlining the responsibility for and anticipated means and cost of removing a utility scale SES at the end of their serviceable life or upon becoming a discontinued or abandoned use in order to ensure that the SES is properly decommissioned.

##### **A. Content of Decommissioning Plan**

1. Assurance. Written assurance that the SES will be properly decommissioned upon the expiration of the project life or in the event that the SES Project is abandoned.
2. Cost Estimates. The applicant or successor shall provide a contractor cost estimate for demolition and removal of the SES. The cost estimates shall be made by a competent party: such as a professional engineer, a contractor capable of decommissioning or a person with suitable expertise or experience with decommissioning industrial scale SES.
3. Financial Assurance. Prior to commencement of construction the applicant or its successor, as defined, will provide to the Executive of the appropriate jurisdiction a financial assurance for the cost of decommissioning SES facilities and related improvements to be constructed under the permit. The financial assurance shall be in the form of a performance bond, surety bond, letter of credit or other security instrument mutually acceptable to the Executive and the Applicant or Applicant's Successor.
4. Abandonment by the Applicant or Successor. Written assurance that in the event of abandonment by the applicant or successor, the applicant or successor will provide an affidavit to the Executive of the appropriate jurisdiction representing that all easements and/or property leases for SES facilities shall contain terms

that provide financial assurances, including access to the salvage value of the equipment, for the property owners to ensure that SES facilities are properly decommissioned within one (1) year of expiration or earlier of termination of the SES Project.

#### B. Discontinuation and Abandonment

All industrial scale SES shall be considered a discontinued use after one (1) year without energy production, unless a plan is developed and submitted to the Planning and Zoning Administrator outlining the steps and schedule for returning the SES to service. The Planning Commission may, at its discretion after one year of discontinued production, initiate an action to recommend to the Executive authority that it act to exercise the financial assurance to effect a decommissioning.

1. Removal. An applicant or successor's obligations shall include removal of all physical material pertaining to the project improvements to no less than a depth of four (4) feet below ground level within three hundred sixty-five (365) days of the discontinuation or abandonment of the SES or SES Project, and restoration of the project area to as near as practicable to a condition similar to its previous use immediately before construction of such improvements. Below ground level is understood to be from the existing grade. Covering with fill material does not constitute removal. Removal obligations shall be completed by the applicant or successor or by the City at the former's expense.
2. Written notices. Prior to implementation of procedures to effect the financial guarantee the appropriate Executive authority shall provide notice to the owner/operator according to the terms of the required Decommissioning Agreement. The owner of the project must provide notice to the appropriate Executive authority of its intention to change ownership, abandon, decommission or suspend operations of a utility scale SES project.
3. Costs incurred by the City or County. If the City or County removes a SES structure and appurtenant facilities, it may sell the salvage to defray the costs of removal. By acceptance of a building permit, the applicant or operator grants a license to the appropriate Executive authority to enter the property to remove SES structures and appurtenant facilities pursuant to the terms of an approved decommissioning plan.

#### **414.12 LIABILITY INSURANCE**

The owner or operator of any industrial scale SES shall maintain a current general liability policy covering bodily injury and property damage and shall be required to name the City of Maysville or Mason County as an additional insured with dollar amount limits not less than \$2,000,000 per occurrence, \$5,000,000 in the aggregate, and a deductible which is reasonably available and which is mutually suitable to the applicant or successor and the City or County.

## **414.13 APPLICATION PROCEDURES**

A. Permits and variances for industrial scale SES shall be applied for and reviewed under the procedures established by this Ordinance and shall include the following information:

1. Contact information of project applicant including the name(s), address(es), and phone number(s) of the applicant(s), as well as a description of the applicant's business structure and overall role in the proposed project.
2. Contact information of current project owner the name(s), address(es), and phone number(s) of the owner(s), as well as a description of the owner's business structure and overall role in the proposed project, and including documentation of land ownership or legal control of the property on which the SES is proposed to be located. The Planning and Zoning Administrator shall be informed of any changes in ownership.
3. Contact information of project operator. The name(s), address(es) and phone number(s) of the operator(s) if other than the owner. If the owner assigns a different operator at any time, they are obligated to notify the Planning and Zoning Administrator.
4. Legal description-The legal description, address, and general location of the project.
5. A General SES Project Description, including to the extent possible, information on solar panels to be used, including:
  - a. Number of solar panels/arrays;
  - b. Manufacturer of solar panels with brochure depiction;
  - c. Name plate generating capacity;
  - d. Solar panel/array heights;
  - h. The means of interconnecting with the electrical grid;
  - i. If the applicant has a purchase power agreement (PPA) name the entity;  
and
  - j. All related accessory structures.
6. Site Layout Plan. A site layout plan, drawn at an appropriate scale, showing distances pertaining to all applicable setback requirements. The site layout plan must be certified by a registered land surveyor, and depict:

- a. Property lines, including identification of adjoining properties, with a notation indicating participating and non-participating landowners;
  - b. SES access roads;
  - c. Substations(s), and operational support meteorological tower(s) location;
  - d. Operation and maintenance building location (building to be permitted separately);
  - e. Electrical cabling;
  - f. Ancillary equipment;
  - g. Occupied structures within one quarter one mile of all proposed SES project areas
  - i. Distances from SES arrays to each setback requirement;
  - j. Location of all existing and planned public roads which abut, or traverse the proposed site;
  - k. The location of all above-ground utility lines within a distance of one mile of any proposed SES structure;
  - l. The location of any historic or heritage sites as within the SES Project Area;
  - m. The location of any wetlands based upon a delineation plan prepared in accordance with the applicable U.S. Army Corps of Engineers requirements and guidelines; and
  - n. A topographical map of the project area and a one-mile perimeter with contours of not more than five (5) foot intervals.
7. Sound Study. A sound study that identifies all known occupied structures within ##### of every proposed SES project area, including a description of the potential sonic impacts of any SES arrays or structures and on adjacent properties as per standards indicated in Section 414.09 C.
  8. Communications Study. A communications study required by Section 414.10 B.;
  9. Light Reflection Study. A light reflection modeling study that identifies all known occupied structures and the effect of any SES array on those structures as per Section 414.08(M).

10. Engineering Certification. For all SES, the manufacturer's engineer or another qualified registered professional engineer shall certify, as part of the building permit application, that the foundations and designs of SES structures are within accepted professional standards, given local soil and climate conditions. An engineering analysis of SES structures showing compliance with the applicable regulations and certified by a licensed professional engineer shall also be submitted. The analysis shall be accompanied by standard drawings of all SES structures. The engineering certification may be completed following submission of an improvement location permit application on condition of being required no later than thirty (30) days prior to initiation of construction.
11. Utility Notification. Evidence that the pertinent electric utility company has granted approval for interconnection.
12. Statement of Federal Aviation Administration compliance. A statement of compliance with all applicable Federal Aviation rules and regulations, including any necessary approvals for installations within proximity to an airport.
13. Statement of Kentucky Airport Zoning Commission compliance. A statement of compliance with all applicable Kentucky Airport Zoning Commission rules and regulations and any necessary approvals for installations within proximity to an airport.
14. Compliance with Fish and Wildlife Requirements. Proof of correspondence and cooperation with wildlife agencies for the purposes of preventing harm to endangered or protected wildlife species and migratory birds and in compliance with the Endangered Species Act and the Migratory Bird Treaty Act. Applicants shall provide documentation that they are in communication and cooperation with the U.S. Fish and Wildlife Service and the Kentucky Department of Natural Resources.
15. Compliance with National Electrical Code. A line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code. This information is typically supplied by the manufacturer.
16. Good neighbor Notice. An affidavit of service along with supporting documentation that indicates notification was given to all property owners (as per current records of the Mason County, PVA) in and within ##### of the proposed footprint of the SES project no less than 30 days prior to the date of official approval sought by or on behalf of the applicant involving any City or County agency or body. The Notice shall contain at minimum:
  - a. A map showing the general layout of the project.
  - b. An opportunity to meet with the petitioner or contact information whereby

questions may be asked by the public.

c. A list of steps that will required to accomplish the project.

17. Any other item reasonably requested by the Building Inspector.

#### **414.14 PRE-CONSTRUCTION REQUIREMENTS**

Prior to the issuance of any building permit, the following shall be required and materials submitted and reviewed by the Building Inspector, who shall certify that the submissions are in compliance with all applicable regulations:

A. Federal Aviation Administration permits application and approval, if applicable.

B. Decommissioning plan as described in Section 414.11.

C. Economic Development Agreement, Drainage, and Road Use and Maintenance Agreements required before issuance of an improvement location permit.

1. An Economic Development Agreement approved by the appropriate Executive authority shall be developed. The Executive authority may include other stakeholders in the negotiations at its discretion. The Economic Development Agreement, is sometimes referred to as a PILOT Agreement.
2. A Road Use and Services Maintenance Agreement approved by the appropriate Executive authority that addresses, at minimum, the following:
  - a. A compilation of routes that will be used for construction and maintenance purposes, approved by the Director of Public Works;
  - b. A documented baseline survey to determine existing road conditions prior to construction. The survey shall include photographs, or video, or a combination thereof, and a written agreement to document the condition of the public facility;
  - c. A surety bond or similar instrument approved by the County Attorney, in an amount sufficient to ensure that future repairs to public roads are completed to the satisfaction of the unit of local government. The cost of bonding is to be paid by the applicant. This requirement may be addressed in conjunction with the Economic Development Agreement;
  - d. A plan to address transportation routes and conditions during construction. If the route includes a public road, it shall be approved by the appropriate highway official(s) and school transportation departments;
  - e. A plan to avoid damage and to address repair to damaged roads;

- f. A requirement that newly constructed SES access roads will not impede the flow of water; and
- g. Provisions to address crop, field tile, waterway and other infrastructure damage.

D. An Erosion Control/Storm Water Plan compliant with any storm water quality management plan adopted by the State or local applicable jurisdiction.

E. A Utility Plan drawn to the same scale as the site layout plan illustrating the location of all underground utility lines associated with the total SES Project. This may be incorporated into the site plan.

F. A Dust Control Plan detailing reasonable measures to be employed to control dust during construction of an industrial scale SES Project. This may be incorporated into the Road Use and Services Maintenance Agreement.

#### **414.15 POST-CONSTRUCTION REQUIREMENTS**

A. Post-construction, the applicant or successor shall comply with the following provisions:

1. Road Repairs. Any road damage caused by the construction of project equipment, the installation of the same, or the removal of the same, shall be repaired as per the Road Use and Services Maintenance Agreement.
2. As-Built Plans Requirement. Whereupon completion of all development, the exact measurements of the location of utilities and structures erected during the development are necessary for public record and shall therefore be recorded. The applicant or successor shall submit a copy of the final construction plans (as-built plans), as amended, to the Building Inspector with the exact measurements shown thereon. The Building Inspector, after being satisfied that the measurements are substantially the same as indicated on the originally approved final plan(s), shall approve, date and sign said Construction Plans for the project, which the applicant or successor shall then record.
3. Post Construction Sound Study. Within twelve months after the date when the project is fully operational the operator shall conduct a two phased post-construction sound study conducted by an independent accredited sound engineer chosen by the Planning Commission and paid for by the applicant/owner. Post-construction sound level measurements shall be taken both with all SES systems running and with all SES systems off. The post-construction measurements shall be reported to the Planning Commission and made available for public review.
4. Change in Ownership. It is the responsibility of the owner or operator listed in



the application to inform the Planning and Zoning Administrator of all changes in ownership and operation during the life of the project, including the sale or transfer of ownership or change in operator.

## Notes/Comments

- This proposed SES ordinance was created using our Wind Energy Conversion Systems (“WECS”) ordinance, along with some model ordinances and my original SES ordinance draft. This is a rough first draft, and I do mean *rough*. There is likely some language I overlooked that needed to be changed in the conversion from the WECS ordinance. Also, there is some unconnected/unused language and definitions, because I haven’t yet finished mixing in language from the original draft ordinance that I think is useful. Furthermore, the formatting needs work, but I’m not worried too much about that; the content is what matters. I figure there will be discussion on this before a workable ordinance will be proposed for a public hearing, so there is time to fix everything and add everything we think is important.
- The SES ordinance will create the corresponding entry into the Industrial/Manufacturing land use charts:

Industrial / Manufacturing	R-1	R-2	R-3	R-4	TH-1	B-1	B-2	B-3	D-1	P-1	A-1	A-2	I-1	I-2	MH	C	RR-1	RR-2	I-3
Solar Energy System																			
Integrated	P	P	P	P	P	P	P	P	P*	P	P	P	P	P	P	P	P	P	P
Rooftop	P	P	P	P	P	P	P	P	P*	P	P	P	P	P	P	P	P	P	P
Small Scale	C	C	C	C	X	C	C	C	X	C	C	C	P	P	C	C	C	C	P
Intermediate Scale	X	X	X	X	X	X	X	X	X	X	X	C	P	P	X	X	X	X	P
Large Scale	X	X	X	X	X	X	X	X	X	X	X	C	P	P	X	X	X	X	P

The above chart is taken from the original SES draft ordinance I created. Part of the work for this proposal will be deciding 1) what types of SES are possible in which zoning classifications, and 2) if they will be permitted or conditional uses. I have mixed feelings about designating SES as conditional uses; we can discuss that when we discuss this ordinance draft at the meeting. I have not edited this table since 2020.

- I’m in the process of coming up with an adequate screening/buffering section for the draft. I think our visit to the Hillcrest site will inform that work, and I don’t think that the normal screening regulations in the zoning ordinance will be adequate. I do have some questions based on some other examples of SES ordinances I have seen:
  - Should there be a distance after which no screening is required? For example, if any SES structures are X or more feet from a dwelling or a street, for example, will no screening be required?
  - Should existing foliage and trees be used to satisfy screening requirements, assuming they meet the standards of the screening/buffering? (I think they

certainly should).

- Do you have any suggestions or ideas of what you think would be adequate for screening SES, possibly based on observations of the Hillcrest site? Would you like to make screening/buffering requirements prescriptive, partially prescriptive with guidelines for some discretion by developers, or would you like it to be completely up to the developer how they screen/buffer, as long as they come up with a screening/buffering plan that screens/buffers SES to be approved when they apply for a permit?
- Setbacks are the main vehicle for control of SES locally, so how they are defined and considered are very important. I maintained the same chart for setbacks in the WECS ordinance, but since SES differ in operation and composition compared to WECS – very low height compared to wind turbines, very little movement, no significant dangers during normal operation and situations – I’m uncertain that the setbacks need to be defined as they were in the WECS ordinance. If you have any additional setbacks you’d like to see, if you want to change the definitions, or if you think that some of the setback chart listings should be removed, please let me know.
- I’ve tagged many of the mentions of the FAA and proximity to airports, because I don’t think SES will need such regulations, since no large/tall turbines or towers should be involved.
- I have also tagged some language about experimental equipment. I’m not a fan of having SES use experimental equipment here, and I’m fine with removing the language and/or explicitly banning the use of prototype or experimental equipment/technology.