

STATE OF ILLINOIS)
)SS
COUNTY OF DEKALB)

ORDINANCE 2022-21

**AN ORDINANCE AMENDING
THE SOLAR ENERGY SYSTEMS ORDINANCE
FOR DEKALB COUNTY CODE**

WHEREAS, Section 53-E-12.A of the DeKalb County Code contains regulations related to the establishment and operation solar energy systems within the unincorporated portions of DeKalb County; and

WHEREAS, a text amendment has been developed by Planning and Zoning Committee of the DeKalb County Board which would update the regulations governing solar energy systems within the unincorporated portions of DeKalb County; and

WHEREAS, the DeKalb County Community Development Department, under the direction of the Planning and Zoning Committee of the DeKalb County Board, has submitted an application containing the proposed amendments to Sections 53-E-12.A and 32-7-A.15; and

WHEREAS, following due and proper notice by publication in the Daily Chronicle not less than fifteen (15) nor more than thirty (30) days prior thereto, the DeKalb County Hearing Officer conducted two public hearings on September 15, 2021, at 2:00 pm and 6:00 pm, regarding the proposed Text Amendment; and

WHEREAS, based on the testimony given at the public hearings, the Hearing Officer has forwarded to the Planning and Zoning Committee findings and a recommendation that the amendments be approved, with several recommended changes for the County Board to consider, as set forth in the Findings of Fact and Recommendation of the DeKalb County Hearing Officer; and

WHEREAS, the Planning and Zoning Committee of the DeKalb County Board has reviewed the testimony and exhibits presented at the public hearing, and having considered the Findings and Recommendation of the Hearing Officer, and further recommendations from staff, determined that proposed text be further amended to incorporate several of these recommendations; and

WHEREAS, the Committee has forwarded a recommendation to the DeKalb County Board that the amended proposed text be adopted, as set forth below; and

WHEREAS, the DeKalb County Board has determined that it is in the best interests of the citizens of the County to amend the DeKalb County Zoning Ordinance in accordance with the amended proposed text;

NOW, THEREFORE, BE IT ORDAINED BY THE COUNTY BOARD OF DEKALB COUNTY, ILLINOIS, as follows:

SECTION ONE: The Findings of Fact and Recommendation of the DeKalb County Hearing Officer, Exhibit “A”, attached hereto, is hereby adopted as the findings of fact and conclusions of the DeKalb County Board; and

SECTION TWO: The DeKalb County Code, Section 53-E-12.A and 32-7-A.15 of the DeKalb County Code, is hereby amended as follows:

Amend Section 32-7-A.15 as add the following a new sub section a.:

- a. Solar Farms and Solar Gardens: The revised financial guarantee for Solar Farms and Solar Gardens shall be held for a period of not less than five (5) years to assure proper function and maintenance of the stormwater management project, in accordance with the requirements of this division, and to assure compliance with the Year 5 performance standards of the Landscape Monitoring and Maintenance Plan for the facility. After the five-year anniversary of the project approval and upon written confirmation from: the County Engineer that the project is functioning as intended and has been properly maintained; and, the DeKalb County Soil and Water Conservation District that the Year 5 performance standards have been met, the Community Development Director shall release the guarantee of construction.

Replace Section 53-E-12.A in its entirety with the following:

A. Solar Energy Systems (SES)

1. **Purpose:** The purpose of this Section is to provide regulations for the construction, installation, and operation Solar Energy Systems (SES) in unincorporated DeKalb County, while ensuring the health, safety, and welfare of the residents of DeKalb County by promoting the safe, effective, and efficient use of solar energy to reduce on-site consumption of fossil fuels or utility-supplied electrical energy. Also, to avoid adverse impact to important areas such as agricultural land, endangered species habitats, conservation land, and other sensitive lands. DeKalb County encourages the development of commercial or utility scale SES where such systems present few land use conflicts with current and future development patterns. This ordinance shall not be deemed to nullify any provision of local, state, or federal law. The contents of this Section shall apply to all solar energy installations in unincorporated DeKalb County.
2. **Definitions:** The following words, terms, and phrases, when uses in this Section, shall have the meanings ascribed to this Section except when the context clearly indicates a different meaning:

Active Solar Energy System: A solar energy system whose primary purpose is to harvest energy by transforming solar energy into another form of energy or transferring heat from a collector to another medium using mechanical, electrical, or chemical means.

Building-integrated Solar Energy Systems: An active solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include but are not limited to photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.

Grid-intertie Solar Energy System: A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.

Ground Mount: A solar energy system mounted on a rack or pole that rests on or is attached to the ground.

Off-grid Solar Energy System: A photovoltaic solar energy system in which the circuits energized by the solar energy system are not electrically connected in any way to electric circuits that are served by an electric utility company.

Passive Solar Energy System: A solar energy system that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.

Photovoltaic System: An active solar energy system that converts solar energy directly into electricity.

Renewable Energy Easement, Solar Energy Easement: An easement that limits the height or location, or both, of permissible development on the burdened land in terms of a structure or vegetation, or both, for the purpose of providing access for the benefited land to wind or sunlight passing over the burdened land.

Roof Mount: A solar energy system that is mounted on a rack that is fastened onto a building roof.

Solar Access: Unobstructed access to direct sunlight on a lot or building through the entire year, including access across adjacent parcel air rights, for the purpose of capturing direct sunlight to operate a solar energy system.

Solar Collector: An assembly, structure, and the associated equipment and housing, designed for gathering, concentrating, or absorbing direct and indirect solar energy for which the primary purpose is to convert or transform solar radiant energy into thermal, mechanical, chemical or electrical energy.

Solar Energy: Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

Solar Energy System (SES): All components required to become a complete assembly, or structure, that will convert solar energy into electricity for use.

Solar Energy System Addition: A private solar energy system which is structurally attached to a building or structure on the zoning lot on which said system is located. Said system shall be considered part of the building and shall comply with all provisions of this ordinance pertaining thereto.

SES Participating Property: A SES host property or any real property that is the subject of an agreement that provides for the payment of monetary compensation to the landowner from the SES owner (or affiliate) regardless of whether any part of a SES is constructed on the property.

Solar Energy System, Private: A collection of one (1) or more solar collectors designed for use by the occupant(s) of the zoning lot on which said system is located; excess power generation is limited to net metering or similar technology with regulations set by the local power utility, community, county, and state. Private solar energy system equipment shall conform to applicable industry standards, and applicants for building permits for private solar energy systems shall submit certificates from equipment manufacturers that the equipment is manufactured in compliance with industry standards.

Solar Facility: A solar energy system, along with all of the necessary equipment, structures, and substations needed to facilitate the transfer of the generated electricity offsite; and, all accessory structures and equipment used to maintain and secure said facility.

Solar Farm: A commercial solar facility that converts sunlight into electricity, for the primary purpose of wholesale sales of generated electricity. A solar farm is the principal land use for the parcel(s) on which it is located.

Solar Garden: A commercial solar facility, that provides retail electric power (or a financial proxy for retail power) to multiple households or businesses residing in or located off-site from the location of the solar facility. A solar garden is the principal land use for the parcel(s) on which it is located.

Solar Heat Exchanger: A component of a solar energy device that is used to transfer heat from one substance to another, either liquid or gas.

Solar Hot Air System: An active solar energy system (also referred to as Solar Air Heat or Solar Furnace) that includes a solar collector to provide direct supplemental space heating by heating and re-circulating conditioned building air.

Solar Hot Water System: A system (also referred to as Solar Thermal) that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.

Solar Mounting Devices: Racking, frames, or other devices that allow the mounting of a solar collector onto a roof surface or the ground.

Solar Plot: A commercial solar facility located on a parcel that is part of an existing or proposed subdivision or planned development, that provides retail electric power (or a financial proxy for retail power) to multiple households or businesses residing in or located off-site from the location of the solar facility. A solar plot may be either an accessory use, if located on a parcel containing a principal use, or the principal use of the parcel if stand alone.

Structure, Occupied: a structure currently and actively used as a permanent residence and/or place of employment.

3. Types

- a. **Private SES:** A single ground mount, roof mount or building integrated private solar energy system for residential/business use is permitted as an Accessory Use in ALL Zoning Districts where there is a principal structure, and shall be subject to the regulations for accessory uses.

- b. **Solar Plot:** Solar Plots are allowed in ALL Zoning Districts, and shall require a Special Use Permit whether the accessory or principal use of the property. Except as otherwise noted in this Section, solar plots must comply with all required standards for structures in the district in which the system is located.
 - 1). The requirement for a Special Use Permit may be waived for a solar plot that will be an accessory use, provided the solar plot's owner/lessee obtains, and records with the DeKalb County Recorder, signed and notarized affidavits, agreeing that the need for a Special Use Permit be waived, from all property owners adjoining the zoning lot on which the solar plot is to be located (as determined by DeKalb County Community Development Department).
 - 2). Rooftop Solar Plots are permitted in all zoning districts where buildings are permitted.
 - 3). Ground-mount solar plots must be no greater than five (5) acres in total size. Ground-mount solar developments covering more than five (5) acres shall be considered solar farms or solar gardens.
 - 4). An interconnection agreement must be completed with the electric utility in whose service territory the system is located.
- c. **Solar Farms and Solar Gardens:** Solar farms and solar gardens are ground-mounted SES that are the primary use on the lot(s) on which it is located. Both are allowed as Special Uses in the A-1 Zoning District, and shall require a Special Use Permit. Except as otherwise noted in this Section, they must comply with all required standards for structures in the district in which the system is located.
 - 1). **Ground Cover, Screening, and Buffer Areas.**
 - 1. In order to prevent erosion, manage run-off, and provide ecological benefit, the facility shall install and maintain a "low-profile" native prairie vegetation on the facility (including beneath and between the panels), using a mix appropriate for the region and soil conditions.
 - 2. Top soil shall not be removed during development, unless part of a remediation effort.
 - 3. DeKalb County has a Noxious Weed Ordinance which is to be followed.
 - 4. Due to potential county liability under the Illinois Endangered Species Protection Act (520 ILCS 10/11(b)) it is required that any vegetation planted be in compliance with all federal and state laws protecting endangered species. This will also include pollinators such as bees.
 - 5. A strip of turfgrass, the width of one commercial mower, or as otherwise required to allow for maneuvering emergency vehicles, may be maintained along the edge of the access road.
 - 6. Any part of the facility that is within one thousand (1,000) feet of an occupied structure not located on the subject property, shall be screened. Additional screening may also be required, if the County Board deems such is necessary.

- a. The requirement to provide screening for a particular occupied structure will be removed if the developer of the facility can obtain and record with the DeKalb County Recorder written, signed, and notarized statements from the owners of the property containing said structure waiving the required screening.
 - b. Required screening shall consist of native trees, shrubs, berms, or a combination thereof.
 - c. All screening must be installed prior to the commencement of construction of the facility.
 - d. All screening is to be maintained by the facility owner for the life of the project, with replacement plantings and/or berm maintenance conducted as necessary. Failure to do so will be a violation of the special use ordinance.
- 7. Prior to submittal of the Building Permit application, the developer shall submit a Landscape Monitoring and Maintenance Plan to the DeKalb County Soil and Water Conservation District for review and approval, to ensure the establishment and continued maintenance of the native prairie vegetation, all installed landscape screening, and all existing vegetation that provides required landscape screening.
 - a. All vegetation utilized as part of the facility shall meet the performance standards set forth in these regulations and shall be maintained to those standards throughout the life of the project.
- 2). **Foundations.** A qualified engineer shall certify that the foundation and design of the solar panels racking and support is within accepted professional standards, given local soil and climate conditions.
- 3). **Power and Communication Lines.** Power and communication lines running between banks of solar panels and to on-site electric substations or interconnections with buildings shall be buried underground, except at the interconnection point to the electrical grid. Exemptions may be granted by DeKalb County in instances where shallow bedrock, water courses, or other elements of the natural landscape interfere with the ability to bury lines, or distance makes undergrounding infeasible, at the discretion of the Director of Community Development. In addition, the Illinois Department of Agriculture (IDOA) has established standards and policies in the Agricultural Impact Mitigation Agreements (AIMA) regarding the construction or burial of electric transmission lines which should be agreed to and adhered to between the landowner and the developer.
- 4). **Setbacks:**
 - 1. All components, except the interconnection point, installed as part of the solar facility shall be setback at least one hundred (100) feet from a property line or right-of-way;

2. In addition, all components, except the interconnection point, installed as part of the solar facility shall be setback at least three hundred (300) feet from a property line or right-of-way of any property that is twelve (12) acres or less and has an occupied structure;
 3. In addition to meeting the one hundred (100) foot or three hundred (300) foot minimum setback noted above, all components, except the interconnection point, installed as part of the solar facility must also be setback at least one hundred (100) feet for every three (3) feet of height of the SES, when oriented at maximum tilt from the nearest outer wall of any occupied structure not located on the subject property
 - a. This setback from an occupied structure may be waived if the developer of the facility can obtain and record with the DeKalb County Recorder a written, signed, and notarized statement from the owner of the property containing the occupied structure agreeing to waive this setback. This waiver only affects the setback from an occupied structure. The minimum one hundred (100) foot setback from a property line or right-of-way is required regardless of whether this setback from an occupied structure is waved;
 4. A “spot” survey will be required, at time of installation, verifying that all elements of the facility meet the minimum setbacks approved by the Special Use ordinance. It will be the responsibility of the developer to relocate any component of the facility failing to meet these setbacks in a timely fashion. Failure to do so will constitute a violation of the ordinance.
 - 5). **Interconnection Point.** The interconnection point to the electrical grid shall be located no further than twenty (20) feet from a right-of-way or existing power line. Any poles used as part of the interconnection point shall be placed such that they run parallel to said right-of-way or existing power line. A variation from this standard may be granted by the DeKalb County Board, provided the applicant can adequately demonstrate the unique circumstances and particular hardships that would merit such a variation being granted.
 - 6). **AIMA:** A signed copy of the Agricultural Impact Mitigation Agreement shall be submitted prior to the issuance of any building permits.
 - 7). **Tile Investigation Report.** An SES developer must submit a Tile Investigation Report, as part of the Site Development Permit application, for the entire area of the SES, identifying all drain tiles located therein. The SES developer shall maintain and protect all drain tiles located within the project area, and shall repair or replace any drain tiles damaged as a consequence of the installation or removal of the SES
4. **Content of an SES Special Use Permit Application:** In addition to those requirements listed under Article 9: Special Use Permit Procedures, a Special Use Permit application shall also require the following:

- a. The application shall include two (2) printed copies and one electronic copy of the entire application (including: the application forms and any attachments or other submittals included therein).
- b. **Site Plan.** A detailed site plan for both existing and proposed conditions must be submitted, showing the location of all solar arrays, other structures, property lines, rights-of-way, service roads, floodplains, wetlands and other protected natural resources, topography, farm tile, electric equipment, fencing, and screening materials and all other characteristics requested by DeKalb County. The Site Plan must also identify all structures on non-participating properties within three hundred (300) feet of the property line, and their distance from them to the fencing around the SES.
- c. **Endangered Species and Wetlands.** An SES developer shall be required to initiate a natural resource review consultation with the Illinois Department of Natural Resources (IDNR) through the department's online, EcoCat program. Areas reviewed through this process will be endangered species and wetlands. The cost of the EcoCat consultation will be borne by the developer.
- d. **Legal Descriptions:** Two (2) legal descriptions shall be submitted: the first will be of the subject property(s) on which the facility will be located, which will be used for the public notice; and, the second will be of the specific leased/purchased area(s) to be occupied by the facility.
- e. **Landscape Plan:** A Preliminary Landscape Plan showing the proposed locations and dimensions of the plantings must be submitted as part of the Special Use Permit application. If the Special Use Permit is approved, a detailed Landscape Plan providing specific information about the native species that are proposed, where they will be located, and how they will be installed and established, shall be submitted to the DeKalb County Soil and Water Conservation District for review and approval. The Landscape Plan shall be revised as necessary to comply with any changes required by the DeKalb County Soil and Water Conservation District and County Board, and copies made available to the SWCD and Community Development Department. The Site Development shall also include a copy of the revised Landscaping Plan as part of that submission. The following information shall be provided in the proposed plan:
 - 1). Project name and geographic location;
 - 2). A site plan showing the location of each plant community proposed on-site (e.g.: different plant communities under panels, between panels, landscape screening, or other site areas);
 - 3). Lists of proposed native species to be installed, including scientific name, common name, and quantity;
 - 4). Separate species lists shall be provided for each plant community being proposed;
 - 5). A general description of the proposed site preparation and installation methods for the native species (e.g.: seed drill, hand broadcast, plant plugs, etc.).

5. Design and Installation Requirements:

a. Setback Requirements

- 1). Set back requirements for all SES shall meet the structure minimum set back requirements when the SES is oriented at any & all positions.
- 2). No SES shall be allowed in the front yard of any residentially used or zoned property.
- 3). Roof mounted SES shall not extend beyond the exterior perimeter of the building on which the system is mounted.

b. Height Requirements

- 1). Building or roof mounted SES shall not exceed the maximum allowed height for the Zoning District in which the building is located.
- 2). Ground or pole mounted SES shall not exceed a maximum height of twelve (12) feet, when oriented at maximum tilt.

c. Stormwater and NPDES.

Solar gardens and solar farms are subject to DeKalb County's Stormwater Management regulations, erosion and sediment control provisions and NPDES permit requirements.

d. Aviation Protection.

For SES located within 500 feet of an airport or within approach zones of an airport, the applicant must complete and provide the results of the Solar Glare Hazard Analysis Tool (SGHAT) for the Airport Traffic Control Tower cab and final approach paths, consistent with the Interim Policy, FAA Review of Solar Energy Projects on Federally Obligated Airports, or most recent version adopted by the FAA.

e. Standards and Codes:

All solar gardens and solar farms shall be in compliance with all applicable local, state and federal regulatory codes, including, but not limited to: the State of Illinois Plumbing Code; The State of Illinois Electric Code; The State of Illinois Energy Code; the State of Illinois Uniform Building Code, as amended; the National Electric Code, as amended; and, all DeKalb County Health Department requirements.

f.

In all undeveloped areas, the Solar Energy developer will be required to complete a consultation with both the Illinois Historic Preservation Agency (IHPA) and the Illinois Department of Natural Resources (IDNR) through the Department's online EcoCat Program. The cost of this consultation shall be at the developer's expense. The final certificate from EcoCat shall be provided to the DeKalb County Community Development Department. before a permit or Special Use Permit will be issued.

g. Fencing.

No fencing is required however if installed on the property the fencing shall have a maximum height of eight (8) feet, and shall be a primarily woven wire or agricultural style fencing. The fence shall contain appropriate warning signage that is posted such that is clearly visible on the site.

h. Lighting.

Any lighting for SES shall be installed for security and safety purposes only. Except for lightening that is required by the FCC or FAA, all lighting shall be shielded so that no glare extends substantially beyond the boundaries of the facility.

- i. Reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties.
- j. **Approved SES Components.** Electric SES components must have a UL listing, or approved equivalent, and must be designed with anti-reflective properties. Solar hot water systems must have an SRCC rating.
- k. **Utility Notification:** All grid-intertie SES shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.
- l. **Design Standards:** Active SES shall be designed to conform to the DeKalb County Comprehensive Plan and to blend into the architecture of the building or may be required to be screened from routine view from public right-of-ways other than alleys. Screening may be required to the extent it does not affect the operation of the system. The color of the solar collector is not required to be consistent with other roofing materials
 - 1). *Building Integrated Photovoltaic Systems.* Building integrated photovoltaic SES shall be allowed regardless of whether the system is visible from the public right-of-way, provided the building component in which the system is integrated meets all required setback, land use or performance standards for the district in which the building is located.
 - 2). *SES with Mounting Devices.* SES using roof mounting devices or ground-mount SES shall not be restricted if the system is not visible from the closest edge of any public right-of-way or immediately adjacent to a residential structure.
 - 3). *Reflectors.* All SES using a reflector to enhance solar production shall minimize glare from the reflector affecting adjacent or nearby properties. Measures to minimize glare include selective placement of the system, screening on the north side of the solar array, modifying the orientation of the system, reducing use of the reflector system, or other remedies that limit glare.
- m. **Coverage:** Roof or building mounted solar energy systems, excluding building-integrated systems, shall allow for adequate roof access for fire-fighting purposes to the south-facing or flat roof upon which the panels are mounted. Ground-mount private solar energy systems shall be exempt from impervious surface calculations if the soil under the collector is not compacted and maintained in vegetation. Foundations, gravel, or compacted soils are considered impervious.
- n. **Plan Approval Required:** All solar energy systems shall require administrative plan approval by the DeKalb County Building official via the review of the application for a building permit
 - 1). **Plan Applications.** Plan applications for solar energy systems shall be accompanied by horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mount system, including the property lines.
 - 1. **Pitched Roof Mounted Solar Energy Systems.** For all roof-mounted systems other than a flat roof the elevation must show the highest finished

slope of the solar collector and the slope of the finished roof surface on which it is mounted.

2. Flat Roof Mounted Solar Energy Systems. For flat roof applications a drawing shall be submitted showing the distance to the roof edge and any parapets on the building and shall identify the height of the building on the street frontage side, the shortest distance of the system from the street frontage edge of the building, and the highest finished height of the solar collector above the finished surface of the roof.

1). Plan Approvals. Applications that meet the design requirements of this ordinance, and do not require an administrative variance, shall be granted administrative approval by the Director of Community Development and shall not require Planning and Zoning Committee review. Plan approval does not indicate compliance with Building Code or Electric Code.

o. All pile driving activity during the project may only occur between the hours of 7:00 am and 5:00 pm.

p. Road Use Agreements shall be established with all appropriate road authorities prior to the issuance of a building permit.

6. Operation and Maintenance

a. Upon request from the DeKalb County Community Development Department, an owner of a commercial SES must provide documentation, within thirty (30) days, that the SES is still in use. If it is not, the owner of the System will have 180 days, after notification from the Community Development Department, to remove the SES from the property.

b. Upon request from the DeKalb County Community Development Department, the owner or operator of a Solar Farm or a Solar Garden must submit, within 14 days, a current operation and maintenance report to the Department.

c. All active SES shall meet approval of county building code officials, consistent with the State of Illinois Building Code and solar thermal systems shall comply with HVAC-related requirements of the Energy Code. Any county adopted building codes will apply and take precedence where applicable

7. Decommissioning or Abandonment of the SES and Site Reclamation Plan

Requirements: At the time of the Special Use application, the County and the applicant, owner, and/or operator must formulate a decommissioning and site reclamation plan to ensure that the SES project is properly decommissioned. The decommissioning and site reclamation plan shall be binding upon all successors of title to the land. A signed decommissioning and site reclamation plan must be submitted to the Community Development Director prior to the granting of the Special Use Permit. The applicant or subsequent project operator shall ensure that the SES facilities are properly decommissioned within six (6) months of the end of the project life or the facility abandonment. The applicant or subsequent project operator's obligations shall include removal of all equipment and physical materials (concrete, rebar, etc., but excluding fill), negotiable by the landowner with a minimum equal to the amount set

in the signed AIMA agreement, and the restoration of the area as near as practicable to the same condition prior to construction.

a. **A decommissioning and site reclamation plan shall be prepared by an independent Illinois Certified Professional Engineer and shall include:**

- 1) Provisions describing the triggering events for decommissioning the project;
- 2) A description of the methodology and cost to remove all above ground and below ground facilities of the approved Special Use Permit;
- 3) Provisions for the removal of all above ground and below ground facilities of the approved Special Use Permit;
- 4) Methodology and cost to restore all areas used for construction, operation, and access to a condition equivalent to the land prior to the SES construction;
- 5) A work schedule and a permit list necessary to accomplish the required work;
- 6) Methodology to identify and manage any hazardous or special materials;
- 7) Proof that the necessary amount and form of financial security has been received by the County in the form of an escrow account that names DeKalb County as the Beneficiary. The amount of security shall be equal to the positive difference between the total cost of all decommissioning and restoration work and the net salvage value of all removed SES equipment or materials, plus a twenty-percent contingency. To determine that amount, the SES owner and the DeKalb County Board shall:
 - a) Obtain bid specifications provided by a professional structural engineer;
 - b) Request estimates from construction/demolition companies capable of completing the decommissioning of the SES project; the DeKalb County Engineer, and an independent engineer of the County's choosing, the Director of Community Development will review all estimates and make a recommendation to the DeKalb County Board for an acceptable estimate. DeKalb County reserves the right to pursue other estimates;
 - c) Certification of the selected estimate by a professional structural engineer. All costs to secure the estimates will be funded by the SES owner.
- 8) A provision that the terms of the decommissioning plan shall be binding upon the SES owner or operator and any of their successors, assigns, or heirs;
- 9) Confirmation by affidavit that the obligation to decommission the SES facilities is included in the lease agreement for every parcel included in the Special Use application. A list of all landowners should be kept current and affidavits shall be secured from future SES owners and landowners stating their financial understanding;
- 10) A provision that allows the County to have legal right to transfer applicable SES material to salvage firms;
- 11) Identification of and procedures for DeKalb County to access the financial assurances; and
- 12) A provision that DeKalb County shall have access to the site, pursuant to reasonable notice to affect or complete decommissioning. A portion of the escrow account will be required to be held for one year past the decommissioning to settle any potential disputes.

- b. **Provisions triggering the decommissioning of any portion of the SES project due to abandonment:**
 - 1) Inactive construction for six (6) consecutive months or if there is a delay in obtaining electrical certification for six (6) consecutive months, unless a signed document is provided by the utility company claiming responsibility for the delay.
 - 2) If no electricity is generated for ninety (90) consecutive days after electricity is initially generated, unless proof is provided that new parts have been ordered and will be received within six (6) months. The DeKalb County Community Development Director or his/her designee shall have access to records in order to determine the electric generation of the facility.
 - 3) The company dissolves or chooses to walk away from the project.
 - 4) The principal company dissolves or chooses to walk into disrepair, is in threat of collapsing or any other health and safety issue.
- c. **Provisions for the removal of structures, debris, and cabling; both above and below the soil surface:**
 - 1) Items required to be removed include, but are not limited to: panels; inverters; foundation pads; electrical collection systems and transporters; underground cables; fencing; access roads; conduit; and culverts. A landowner must sign an agreement if they wish for the access roads or culverts to remain.
- d. **Provisions for the restoration of soil and vegetation:**
 - 1) All affected areas shall be inspected, thoroughly cleaned, and all construction related debris shall be removed.
 - 2) Items required to be restored include but are not limited to: windbreaks; waterways; site grading; drainage tile systems; and, topsoil to former productive levels.
 - a) The below-surface excavation area shall be filled with clean sub-grade material of similar quality to that in the immediate surrounding area.
 - b) All sub-grade material will be compacted to a density similar to surrounding grade material.
 - c) All unexcavated areas compacted by equipment used in decommissioning shall be de-compacted in a manner that adequately restores the topsoil and sub-grade material to the proper density consistent and comparable with the surrounding area.
 - d) Where possible, the topsoil shall be replaced to its original depth and surface contours.
 - e) Any topsoil deficiency and trench settling shall be mitigated with imported topsoil that is consistent with the quality of the effective site.
 - 3) Disturbed areas shall be reseeded to promote re-vegetation of the area to a condition reasonably similar to the original condition. A reasonable amount of wear and tear is acceptable.
 - 4) Restoration measurements shall include: leveling, terracing, mulching, and other necessary steps to prevent soil erosion; to ensure establishment of suitable grasses and forbs; and to control noxious weeds and pests.
 - 5) Items required to be repaired after decommissioning include but are not limited to: roads; bridges; and culverts.

- 6) An independent drainage engineer shall be present to ensure drainage tiles, waterways, culverts, etc. are repaired as work progresses.
 - 7) A soil erosion control plan shall be approved by the County Engineer and the DeKalb County Soil and Water Conservation District.
 - 8) All stormwater management, floodplain, and other surface water codes and ordinances shall be followed.
- e. **Estimating the Costs of Decommissioning:**
- 1) Costs shall include but not be limited to engineering fees, legal fees, accounting fees, insurance costs, decommissioning and site restoration.
 - 2) When factoring the SES salvage value into decommissioning costs, the authorized salvage value may be deducted from decommissioning costs if the following standards are met:
 - a) The net salvage value shall be based on the average salvage price of the past five (5) consecutive years, this includes any devaluation costs.
 - b) The maximum allowable credit for the salvage value of any SES shall be no more than the estimated decommissioning costs of removal of the above ground portions of that individual SES or up to seventy percent (70%) of the total estimated decommissioning costs, whichever is greater.
 - 3) Adjustments to the financial assurance amount that reflect changes in the decommissioning costs and salvage values shall be resubmitted every five (5) years and shall be adjusted for inflation and other factors. The escrow account shall be adjusted accordingly within six (6) months of receiving the updated information as determined by an Illinois professional engineer. Failure to provide financial assurance as outlined herein shall be considered a cessation of operation.
 - 4) When determining salvage values – demolition costs, transportation costs, and road permits shall be a consideration.
 - 5) If salvage value items are removed prior to decommissioning, then the escrow account must be credited.
- f. **Financial Assurance:**
- 1) The County shall have access to the decommissioning fund secured by the escrow account in a bank of the County's choosing if:
 - a) The SES operator fails to address a health and safety issue in a timely manner; or
 - b) The SES operator fails to decommission the SES project in accordance with the decommissioning and site reclamation plan.
 - 2) The applicant and/or SES owner shall grant perfected security in the escrow account by use of a control agreement establishing the County as an owner of record pursuant to the Secured Transit Article of the Uniform Commercial Code, 810 ILCS 9/101 et seq.
 - 3) The escrow agent shall release the decommissioning funds when the SES owner or operator has demonstrated and DeKalb County concurs that decommissioning has been satisfactorily completed, or upon written approval of the County to implement the decommissioning plan. Ten percent of the fund shall be retained one (1) year past the decommissioning date to settle any outstanding concerns.

- 4) Any interest accrued on the escrow account that is over and above the total value as determined by the Illinois professional structural engineer shall go to the SES owner.
 - 5) The applicant shall identify procedures for DeKalb County to assess the financial assurances, particularly if it is determined that there is a health and/or safety issue with the SES and the principal company fails to adequately respond as determined by the County Board.
 - 6) The County shall be listed as a debtor but shall not be responsible for any claims against the SES owner and/or operator.
 - 7) The applicant shall agree that the sale, assignment in fact or at law, or other transfer of the applicant's financial interest in the SES shall in no way effect or change the applicant's obligation to continue to comply with the terms, covenants, and obligations of this agreement and agrees to assume all reclamation liability and responsibility, until the new owner fulfills the obligations identified in this code.
 - 8) DeKalb County and its authorized representatives have the right of entry onto the SES premises for the purpose of inspecting the methods of reclamation or for performing actual reclamation if necessary.
- g. Remedies:**
- 1) The applicant's, owner's, or operator's failure to materially comply with any of the above provisions shall constitute a default under this ordinance.
 - 2) Prior to implementation of the existing County procedures for the resolution of such default(s), the appropriate county body shall first provide written notice to the owner and operator, setting forth the alleged default(s). Such written notice shall provide the owner and operator a reasonable time period, not to exceed sixty (60) days, for good faith negotiations to resolve the alleged default(s).
 - 3) If the County determines in its discretion, that the parties cannot resolve the alleged default(s) within the good faith negotiation period, the existing county ordinance provisions addressing the resolution of such default(s) shall govern.
- h. Future Operators:** Future operators, successors, assignees, or heirs shall agree in writing to accept and to conform to all provisions of the Special Use Permit. Prior notice to the County of the intent to sell or transfer ownership shall be done in a timely manner. Such agreement shall be filed with and accepted by the County before the transfer to a new operator, successor, assignees, or heirs shall be effective.

8. Liability Insurance and Indemnification

- a. For Solar Farms and Solar Gardens, commencing with the issuance of building permits, the Applicant, Owner, or Operator shall maintain a current general liability policy covering bodily injury and property damage with limits of at least \$3 million per occurrence and \$5 million in the aggregate. Such insurance may be provided pursuant to a plan of self- insurance, by a party with a net worth of \$20 million or more. The County shall be named as an individual insured on the policy to the extent the county is entitled to indemnification.

- b. For Private / Individual SES(s), commencing with the issuance of building permits, the Applicant or Owner shall maintain a current liability policy covering bodily injuries and any damage that may occur, on their home owner's policy or other applicable policy as approved by the Director of Community Development.
- c. Any SES(s), Applicant, Owner, or Operator, whether individual or commercial, shall defend, indemnify, and hold harmless the County and its officials, employees, and agents (collectively and individually, the "Indemnified Parties") from and against any and all claims, demands, losses, suits, causes of actions, damages, injuries, costs, expenses, and liabilities whatsoever, including reasonable attorney's fees, except to the extent arising in whole or part out of negligence or intentional acts of such Indemnified Parties (such liabilities together known as "liability") arising out of Applicant, Owner, or Operators selection, construction, operation, and removal of the SES(S) and affiliated equipment including, without limitation, liability for property damage or personal injury (including death), whether said liability is premised on contract or on tort (including without limitation strict liability or negligence). This general indemnification shall not be construed as limited or qualifying the county's other indemnification rights available under the law.

9. Landscape Monitoring and Maintenance Plan

- a. The Landscape Monitoring and Maintenance Plan (LMMP) shall provide an explanation of how the ecological quality of the site will be achieved and maintained throughout the life of the facility. At a minimum, the Year 5 performance standards described below should continue to be met. Basic elements of the LMMP shall address the following activities:
 - 1). *Mowing*: A discussion of the mowing strategy(s) and frequency(s) that will be used. For instance, annual mowing should be properly timed and kept to a minimum to avoid disturbance of wildlife and native vegetation but frequent enough to prevent the establishment of weeds/trees/shrubs that may be introduced by seed over time. Annual mowing is recommended once a year, after October 15, since most native plants have flowered and gone to seed by this time, and before April 15, which is the typical start of prime nesting season for birds. If invasive or weedy species need to be targeted outside of this time frame, the use of high mowing (mower blade over 12" high) or properly timed use of brush cutter/weed ship can be implemented to target specific species and prevent the formation of weed seed without harming native plants. To prevent smothering of native plants, the cut material should be chopped into small enough parts or cut material should be collected, removed, and properly disposed of.
 - 2). *Chemical Control*: Chemical pesticides/herbicides shall be applied selectively (e.g.: spot application rather than routine broadcast spraying) unless part of an approved adaptive management strategy to address problem areas (e.g.: areas with a dominance of invasive plant species that do not respond well to mechanical control measures). Pesticide/herbicide applications are to be performed by a licensed professional applicator in strict compliance with all warning labels and applicable codes, standards, and best management practices.

- 3). *Fertilizer Use*: Fertilizers shall not be used in areas planted with native vegetation.
 - 4). *Erosion Control*: No area on the vegetated portion of the site greater than one (1) square meter shall be devoid of vegetation, as measured by aerial coverage. The site shall have no rills or gullies greater than four (4) inches wide by four (4) inches deep.
 - 5). *Supplemental Seeding/Revegetation*: Remedial actions may be needed as site conditions warrant. Such actions may include reseeding or planting live plugs of native plant species. Installation of supplemental plugs and/or seed should be consistent with the approved seed mix and appropriate for the habitat conditions, or approved by SWCD.
 - 6). *Tree/Shrub Replacement*: At least 80% of the trees/shrubs identified in the permitted plans must remain alive and healthy throughout the life of the facility. The LMMP shall include a discussion of how trees/shrubs will be monitored and replaced.
 - 7). *Adaptive Management*: To maintain the ecological quality of the site, the applicant must be prepared to adapt management practices if site conditions change. For instance, an outbreak of an invasive species may require more intensive management and reseeding to restore habitat. The earlier a problem is identified and adaptive strategies are implemented, the less corrective action is typically required. The LMMP shall include a brief discussion of how adaptive management strategies would be established and implemented.
- b. **Inspections**: The DeKalb County Community Development Department and SWCD reserve the right to request access to the site to conduct visual inspections and assess the condition of the native planting areas.
- c. **Annual Monitoring and Maintenance Reports**: A brief monitoring and Maintenance Report shall be submitted to SWCD annually for the first five (5) years or until compliance approval is provided by SWCD. See the compliance approval subsection below for information on performance standards associated with compliance approval. The reports shall be submitted to SWCD by December 31st of each year. The Monitoring and Maintenance Report shall be prepared by an ecologist and shall include, at a minimum:
- 1). Project name and geographic location;
 - 2). Map location and description of each plant community present on-site;
 - 3). Description of the general condition of each plant community including any issues or deficiencies from the performance standards;
 - 4). List of all species observed in each plant community, including scientific and common names, based on a minimum of two (2) meander searches conducted by an ecologist during the growing season (one (1) meander search in the spring and one (1) in the summer);
 - 5). List of five (5) most dominant species present in each community, estimated based on visual observation during the meander searches, including scientific and common names;
 - 6). Discussion of maintenance activities implemented during the current year being reported on;

- 7). Summary of maintenance activities planned for the coming year, including any “adaptive management” strategies proposed to address issues or to correct deficiencies from the performance standards; and
 - 8). Color photos representing each plant community and their general condition including any issues observed or deficiencies in performance standards.
- d. **Performance Standards**
- 1). **Upon Completion of Construction:** A temporary cover crop shall be planted to aid in the establishment of the native species and prevent erosion. Cover crop may include species such as Oats (*Avena sativa*). NOTE: Perennial Rye (*Lolium perenne*) and Barnyard Grass (*Echinochloa crusgalli*), which are identified as cover crop on some regional species lists, shall not be used.
 - 2). **Within three (3) Months of Seeding:** At least 70% o the project site (excluding access road(s) and equipment pad(s)), as measured by aerial coverage, shall be vegetated or otherwise stabilized against erosion. The cover crop may be used to accomplish this requirement.
 - 3). **Year 1:** By the end of the first full growing season, planted areas shall have 90% vegetation cover. The cover crop may be used to accomplish this requirement. Any planted trees/shrubs that are dead or trees/shrubs with 50% or more dead branches shall be replaced.
 - 4). **Year 2:** By the end of the second growing season, at least 50% of the vegetation present shall be native, non-invasive species. No area on the vegetated portion of the site greater than one (1) square meter shall be devoid of vegetation, as measured by aerial coverage. Any planted trees/shrubs that are dead or trees/shrubs with 50% or more dead branches shall be replaced. None of the 3 most dominant species within the planted communities shall be non-native or invasive species, including, but not limited to: ...
 - 5). **Year 3:** By the end of the third growing season at least 60% of the vegetation present shall be native, non-invasive species. No non-native or invasive species shall be among the three (3) most dominant species. No area on the vegetated portion of the site greater than one (1) square meter shall be devoid of vegetation, as measured by aerial coverage. Any planted trees/shrubs that are dead or trees/shrubs with 50% or more dead branches shall be replaced.
 - 6). **Year 4:** By the end of the fourth growing season at least 70% of the vegetation present shall be native, non-invasive species. No non-native or invasive species shall be among the three (3) most dominant species. No area on the vegetated portion of the site greater than one (1) square meter shall be devoid of vegetation, as measured by aerial coverage. Any planted trees/shrubs that are dead or trees/shrubs with 50% or more dead branches shall be replaced.
 - 7). **Year 5:** By the end of the fifth growing season at least 75% of the vegetation present shall be native, non-invasive species. No non-native or invasive species shall be among the three (3) most dominant species. No area on the vegetated portion of the site greater than one (1) square meter shall be devoid of vegetation, as measured by aerial coverage. A minimum of 80% of all trees/shrubs identified in the approved plans must be alive and healthy.
 - 8). **Compliance Approval:** After Year 5 performance standards have been achieved, the applicant can submit a written request for compliance approval

from SWCD. SWCD staff will visit the site to evaluate if performance has been met. If performance standards are confirmed to have been met, SWCD will provide written confirmation to the Community Development Director. Once compliance approval has been obtained, the applicant is responsible for implementing the long-term portion of the maintenance plan and maintaining the Year 5 performance standards throughout the life of the facility.


- 9). **Post Compliance Approval Reporting:** At each 5-year interval after compliance approval, a brief monitoring report shall be submitted to SWCD for review and acceptance. Failure to submit this report will be a violation of the Special Use Ordinance. The format of the report shall follow the format of the Annual Monitoring and Maintenance Report. If the report shows that the site does not meet or exceed the Year 5 performance standards, additional maintenance shall be performed during subsequent years to achieve the Year 5 standards. Monitoring reports shall be submitted annually until such standard is achieved, at which point the 5-year reporting period shall be resumed.

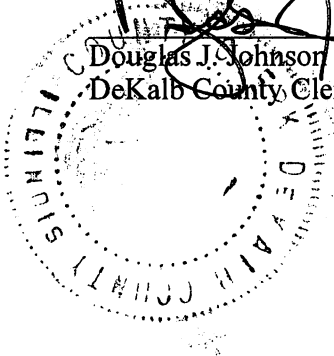
SECTION THREE: This Ordinance shall be in full force and effect upon its adoption by the County Board of DeKalb County, Illinois.

PASSED BY THE COUNTY BOARD THIS 19TH DAY OF OCTOBER 2022, A.D.


John Frieders, Chairman
DeKalb County Board

ATTEST:


Douglas J. Johnson
DeKalb County Clerk



Solar Text Amendment - Report and Recommendations
Petition DC-22-15

Date of Hearing: September 15, 2022
Time(s): 2:00 p.m. and 6:00 p.m.

Location: DeKalb County Legislative Center, Gathertorium, Sycamore, IL

I. Text Amendment Proposal

The County has submitted a proposal to amend and update the solar energy systems ordinance and further to establish battery energy storage regulations. The proposed text amendment provides for the following, generally, in addition to other changes:

- A. Changes to Definitions
- B. Additions to Ground Cover requirements
- C. Codification of Set-Back requirements and provisions for landowner waivers
- D. Extensive Decommissioning changes with increased requirements
- E. Landscape maintenance and monitoring provisions
- F. New Section 52-12 C - Battery Storage Systems regulation and operation

Prior to and during the hearing, the following was received into the record:

1. Public Notice, duly published within the time required by law;
2. Draft Copy of the proposed text amendment, and Staff comments relating thereto, including a red-line version of proposed changes to the existing ordinance;
3. Correspondence from members of the public concerning the elements of the draft ordinance, as well as general comments in favor and/or opposed to the proposed language in the draft text, and third-party source materials referenced in some of the public comments provided by speakers at the hearing.

After admonishing those present to swear and affirm that the information they will be providing will be, to the best of their information and belief, the truth, the hearings commenced at their scheduled times pursuant to the public notice.

II. County Introduction and Brief History

Director Hiland described the many months of discussions by stakeholders and interested members of the public who attended the various committee meetings on this important matter. He described the current proposed text language as a product of those discussions, the learned experiences of prior solar projects that underwent the public hearing process, and an examination of common conditions for approval as well as continued public concerns.

III. Public Comments

2:00 p.m. Hearing:

Michael Haines, Kingston Township: stated that he has had solar on his barn for private use, and has 113 acres, 40 acres of which abuts a solar array. He stated that the solar array is not displeasing aesthetically or otherwise, and he is in support of solar farming. He stated he would oppose any amendment change that would make it more difficult to develop solar. In his view, both solar and agriculture “borrow” the land to make money, but solar generation allows the land to rest and renew for a period of time while industrial agriculture tends to leave the land in such shape that it requires outside inputs and chemicals to continue to allow it to be useful.

Courtney Gallaher from NIU, presented a letter in support: She stated that other NIU representatives were present at hearing as well and that it is important to act on climate change. She stated that NIU is very committed to transitioning to green energy sources and she and others at NIU have concerns that the ordinance will have economic disincentives to allowing producers to produce solar and actually discourage solar development. She stated they are very concerned that the ordinance limits development and places the county at an economic disadvantage as compared to other counties in solar development. She requested that the County pause voting until a more comprehensive economic and impact study can be done.

Marie Rita Nelson, President League of Women Voters, DeKalb Township: presented a supporting petition that urges leaders to support development of solar energy development, and cited solar’s many benefits. She stated the petition has gathered over 1100 verified signatures not to support any one solar company, but rather solar development and green energy production in the County.

Nancy Proesel - Kishwaukee District 350.org – She stated that the County needs to be really careful about not restricting where the solar panels can be, and she cited the 300 ft set-back in particular. She stated that we need to be able to get local solar power where needed and the County needs to have more people able to develop solar.

Christy Slavenas, Genoa Township: citizen who appreciates what the County board has done in being sustainable in the county. She stated she has been a teacher for 36 years and uses science time to allow students to explore different ways of producing energy. In her opinion, she stated, the young people are concerned, but also very excited about making a better future for our world and preserving the soil in DeKalb County. She stated that our county has very good soil but that development and agriculture will reduce that quality, whereas solar panels are good and they provide rest time for the soil.

Linda Timm, DeKalb Township: Ms. Timm submitted written comments as part of the record, and also read them verbatim into the record.- see submission. She stated that she can't support it as it is written today, for the reasons stated in her written submission.

Louise Lanan, Mayfield Township: She stated that she does not support the ordinance as written. She noted that the ordinance is very improved but not what she could support at present. She stated that she lives on Johnson Road and it has been proposed that there will be 15ft panels on 3 sides of her home and she would very much like to not have to look at those as they will be an eyesore.

Kevin Adelman, Leeward Energy, DeKalb County: Stated that he has worked in solar development for over 10 years and that the County and Director Hiland have worked hard in revising the ordinance. He stated that he still has some concerns that he believes need additional changes. For example, he noted that the prior ordinance allowed for letters of credit to suffice, but that the proposed draft will require cash, prior to knowing if the project is approved and that adds additional burdens to developers and the County to monitor, but in reality, doesn't really add to the additional security intended. He stated that the opponents to solar production are the "same few dozen people", and that in his opinion there are thousands of others who support solar.

Marie Rita Nelson, on her individual behalf - She stated that letters of credit are common in the trade and a cash bond requirement will kill a big project if required, in her opinion.

6:00 P.M. Hearing:

Brad Belanger, South Grove Township: Mr. Belanger stated that he wants clarification / guidance in the ordinance, as to what is the intent, and by way of example noted the following:

1. Set-back requirements in the draft use different reference points, i.e., property line or outer wall;
2. Site-plan portion needs clarification as to when to be submitted, and public input;
3. The draft ordinance mentions standards and codes, but doesn't identify which professional standard or code for reference;
4. The draft ordinance needs further information as to landscaping requirements as to expense, and the need for intergovernmental agreements;
5. With respect to the new section relating to Batteries, he had a number of concerns.
 - A. The draft mentions a BES Special Use Permit - but does not identify if it is a separate special use permit application and process;
 - B. Fire Safety Compliance Plan reference - to what code or codes is the draft ordinance referring, and there needs to be clarification/coordination as to the various potential responding agencies to a fire hazard situation.
6. Provided a copy of the NFPA 855 Standard for the Installation of Stationary Energy Storage Systems, containing highlighted material with concerns as to standards. Does not support the ordinance as drafted - listed the 8 areas of concerns.
7. Provided a copy of a report documenting the injury of four firefighters who were injured in a battery energy storage system explosion in Arizona.

Mr. Belanger noted he is a firefighter, and was speaking on his own behalf and not that of his organization, but that he has concerns with how quickly temperatures escalate when a battery energy storage system fails and catches fire, and the potential for serious injury, and the need for specified standards, training, and coordination with overlapping agencies. He detailed a timeline for the incident described in his submission and how quickly it escalated.

John Lageman, Mayfield Township: Mr. Lageman made a general request that non-county resident statements be stricken. Thereafter, Mr. Lageman detailed what he believes are the faults with the proposed draft ordinance changes. He provided a lengthy written submission, which detailed his concerns, but in general stated the following:

1. The draft ordinance still appears to permit "daisy-chaining" of several separate but contiguous projects;
2. The screening that should be required should block 100% of the view of the solar farm from anywhere on the non-participating landowner's property;

3. The building permit stage should be open to public comment, as with the application for special use process;
4. Fire and safety issues with the battery energy storage system draft language;
5. The current solar ordinance draft is too industry-friendly, and not protective enough of the rights of non-participating landowners.

He then summarized his position on the various aspects of the draft ordinance as follows:

6. The County has a luxury in that lots of people are involved in various areas of concerns that touch on these matters, such as firefighters, professionals engaged in natural resources, and others;

7. This public hearing is a product of deficiencies in the prior ordinance and does not address the concerns of citizens raised over the last 4 years and he believes board members want it passed before they leave office;

8. The ordinance, in his opinion, does not establish useful metrics, or require environmental monitoring to evaluate water quality, or adequately protect life and property;

9. The ordinance does not address the photovoltaic heat effect which, he stated, can result in 38 degrees higher than ambient temperature, or the issue of potentially harmful stray voltage;

10. The ordinance should have scalable setbacks, and he agrees with the 100:3 setback general rule discussed by others. This will allow for larger setbacks to correlate as the size of the solar panels increase;

11. Need to reinstate solar garden definition;

12. Comprehensive Unified Plan and Future Land Use Plan establishes intents and goals for the County and the ordinance, in his opinion, as drafted, does not coordinate or comply with those published plans.

13. He summarized that he believes this process is all about money but decisions need to be made using logic and rational thought, he stated.

In his opinion, the ordinance is unacceptable, and the expense and impact to non-participating landowners is unacceptable, he stated.

John Lyon, Mayfield Township: he stated that he finds fault with the proposed changes and expressed his concerns in a detailed written submission received into the record. His written submission correlates to the redlined version that came out of the County committee.

In brief summary, his concerns were as follows:

1. The solar garden, 20-acre definition was removed and leaves an interpretation open to “daisy-chaining” of various adjacent projects;
2. The vegetation/screening provisions state only 80% coverage, leaving 20% open;
3. There are no defined penalties for non-compliance with certain important provisions;
4. He has numerous fire and safety concerns.

He stated that his family does not support the ordinance as it is drafted today and he believes it is too supportive of the solar industry. He further stated that the required screening should be 100% blockage of view and that the building permit process should be subject to public input and comment as well. He stated that he will photocopy and send in his red-lined version and provide a copy to county staff

Katherine Andraski, Kingston Township: She stated that she opposed the solar ordinance as proposed, and believes that industrial solar is a bad idea. She was in favor of scalable setbacks in a 100:3 ratio, and that non-participating landowners would like 100% blockage regarding screening. She stated that solar installations negatively affect property values and that to properly evaluate one needs to evaluate housing density around the solar installation. She noted that Kevin Adelman of Leeward proposed 500-foot property line setbacks (not merely 500 ft from a structure) in a Pueblo Colorado project which was ultimately rejected by that municipality and DeKalb should demand no less. She stated that solar energy providers should provide all appropriate state certifications regarding the use of hazardous chemicals. She stated that more care and consideration should be given to the Kishwaukee watershed and that real thought should be given to a project’s proximity to water sources. She also had concerns regarding “stray voltage” issues. In her opinion, she stated, battery storage should be a separate, stand-alone ordinance, and not part of the solar ordinance to properly address and regulate that subject.

She stated that her primary concerns involved decommissioning, leakage, damage to water sources, “daisy-chaining” of solar gardens, battery storage, internet line-of-site for internet connectivity, permit extensions, nomenclature, enforcement and approval mechanisms.

Meryl Bomina, DeKalb Township: She stated that it is really important that we welcome solar installations and community solar, and that we retain appropriate setbacks. She noted that other forms of energy production - coal, oil, and others - result in large areas of land that are ruined and difficult or impossible to restore. She stated that solar panels do not cause long-term damage and the land improves over the project life, especially with proper vegetation requirements, as compared to other energy extraction methods. She stated that fossil fuels require transportation, the use of chemicals, and release carbon into the atmosphere causing global earth temperatures to warm. She stated that the resulting extreme weather events cause great damage and great government expense to restore.

Cordelia Parham, DeKalb, life-long resident: She expressed her support and wanted to thank the County for consideration of solar farms in DeKalb. She stated that we need to embrace and make solar feasible, and should not be throwing up barriers to the production of solar energy as we are in a state of rapid climate change. She stated we need to look at the big picture and the benefits of solar outweigh the negatives. She stated that solar panels are compatible with dairy farms and goats to graze the land and that solar panels are not antithetical to agriculture.

She noted that there is a lobby named "ALEC" which provides planted information to the media to discourage solar farms because there is more money in fossil fuels. She stated we need to ignore the propaganda and look at the facts. She is very supportive of reasonable policies that do not inhibit solar production (i.e., reasonable setbacks that do not become a barrier, in her opinion).

Tim Hakes, Mayfield Township: He provided a written submission and does not support the current solar ordinance as presented today. He stated that the recommendations from prior hearings are not being honored in his opinion. He also stated his support for a 100:3 scalable setback standard, and to use property lines for setting the setbacks, as is done for all other projects. He believes that solar projects do affect home property values and will reduce tax revenue to the County. He had concerns about fires with battery storage systems, and discussed comparisons with car batteries that burn with extreme heat. He stated that the fossil needed to produce solar panels are such that it will not equal out the energy created by the panels in his opinion. He stated that the panels used in solar production use materials made from China and that China uses forced labor and persecuted Muslim minorities for their production. He wants panel sources certified that they did not come from China. He also had concerns about disposal issues with expired or non-functioning panels. He believes that nuclear energy is a more viable alternative.

Beth Evans, South Grove Township: She stated that she is not going to repeat other statements because she agreed with many of the points made at hearing. She stated that she loves rural DeKalb County and does not want to see DeKalb go the way of Compton, Illinois with the wind farms down there. She stated that foreigners coming into the country from who knows where are involved and she thinks it's a big scam for corporations to make a lot of money and in the end, taxpayers will bear the burden.

Rhonda Henke, Mayfield Township - She stated that she does not support the draft ordinance as written. She stated that fire safety and training need to be provided by the applicants so that no one gets harmed or suffers loss of life. She stated that all battery storage language should be stricken and made into a separate ordinance as it is too big a concern to be lumped into this ordinance. She stated that she is in favor of scalable setbacks as mentioned before, in the 100:3

ratio, to protect non-participating homeowners and allow them to enjoy their property to the best of their ability and to enjoy their property views and recreational activities.

IV. Public Written Submissions:

1. Anita Zurbrugg - email correspondence with attached petition and signatures in support of solar energy development in DeKalb County.
2. Rhonda Henke - Article detailing a CNBC report discussing the rate of unacceptable dangerous incidents involving rooftop solar installations.
3. Brad Belanger - Written summations of his comments at hearing, including the need for NFPA 855 firefighting standards in the ordinance; copy of the battery fire that injured firefighters that he referenced in his public comments; a copy of the NFPA 855 Standards publication; a copy of the proposed ordinance with his highlighted areas of concern.
4. Tim and Elena Hakes - written submission outlining concerns involving setbacks, property values, panel disposal, and battery storage.
5. Meryl Domina from the League of Women Voters - written submission in favor of solar energy development;
6. Katherine Andaski - written submission opposing the current draft of the solar ordinance for the reasons she stated on the record, including loss of cropland, decreased farm production and the loss of jobs, reduction in property values, the "daisy-chaining" of multiple projects, and the number of acres already approved in the County for solar production.
7. John Lyon - written submission with detailed paragraph by paragraph requested language changes or concerns correlating to the presently drafted ordinance under consideration, with particular emphasis on lack of safety standards, lack of protection for non-participating landowners, setbacks, lack of public input after the special use application and hearing process, and other concerns.
8. Nancy Proesel - written submission as a member of DeKalb County 350, detailing her support of solar energy production in the County.
9. Mary Rita Nelson- President of League of Women Voters of DeKalb County - a copy of a petition with attached signatures in support of solar energy production in DeKalb County.
10. Jonathan Lageman - written submission and supplemental addition detailing his concerns with the present ordinance that he stated in the public comment portion of the hearing, with citations to several sources outlined in his submission, concerning metals production and pricing, the DeKalb County's Comprehensive Plan document, the City of DeKalb Comprehensive Plan document, Daily Chronicle article, Wisconsin Public Radio report concerning stray voltage, storm damage to a constructed solar facility in Jasper County, Metroplanning article on the increased number and intensity of storms, an article on the photovoltaic heat effect, an article on property values impacted by solar development, a county-by-county comparison of setback requirements.

11. Kevin Adelman on behalf of Leeward Energy - written submission detailing proposed changes/modifications to the draft ordinance, many involving the increased costs to be incurred by a prospective developer prior to the developer even being issued a building permit.
12. Linda Timm - written submission detailing concerns, including the need to use the property line for setback determination, need for environmental monitoring, safety issues with the battery storage proposal, and property value impacts.
13. Courtney Gallaher - written submission on behalf of NIU in her capacity as Director of Campus Sustainability, describing support for solar energy production as good and beneficial land use, clean energy, and important and secure revenue for landowners.
14. Christie Hardt, of B & C Kennels - written submission detailing her concerns about solar production, construction noise, proximity to her land, impact on her operations, and environmental concerns.
15. Catherine Harned - written submission in support of reasonable solar production including reasonable but not prohibitive setbacks, and noting that much of the corn produced is for ethanol and not food consumption, and solar's ability to preserve farmland for future use.

V. Discussion and Recommendations

Both hearing times were well-attended and there was much participation from the public in both public comment and the written submissions. There is a lot of support for solar energy production in general, based on the comments, as well as very vocal concerns by many citizens as to how and under what circumstances that production should occur going forward.

With respect to the ordinance draft itself, several areas received much public input and discussion.

A. Setbacks

The primary areas of public concern appear to be the setback issue with regards to two important components - first, the demarcation starting point for the setbacks, and second, whether the setbacks can or should vary based on the panel height of any solar panels for an approved project. There was much discussion about the need for consistency with other County regulations, and to therefore use the property line as the setback point. However, unlike a single, fixed building or other form of construction, in which the setback line is a minimum standard from a fixed property line or roadway so as not to encroach on a neighbor, the purposes for a solar setback demarcation are multiple. The setback serves as a minimum distance for the project edge and thus vegetation screening and fencing, similar to a building setback, but also serves to protect the visual line of sight from occupied structures of non-participating landowners. To serve both purposes, the different demarcations appear to be rationally based.

For example, a neighboring property's residential structure may be a quarter-mile or more away from the property line, or it may be very close to the property line adjacent to a proposed solar production project. Using the residential structure as the setback line for panels, and the property line setback as a minimum for physical production structures such as fencing or other production structures appears rationally based to serve both purposes and intended protections for non-participating landowners, while providing reasonable production and land-use capabilities for a proposed solar production project developer.

With respect to scalability, there was significant discussion and, at least in the public comments, significant support for a ratio of setback needed versus the 3ft incremental height of various solar panels. Many members of the public were rightly concerned about the increase in size of various panels that have come before this hearing officer and the County. Panel heights, at their highest point of axis, are approaching or exceeding 14 ft, while many of the earlier County-approved projects had panel heights of approximately 7-9 feet at their highest axis point. It seems rational to have some standard that may account for perhaps an even greater future increase in panel height that may become commonplace.

B. Developer Requirements

1. Decommissioning Plan and Costs

There was much discussion as to the requirement for a cash escrow for decommissioning, rather than some form of verified commercial paper such as a letter of credit or other financial assurance. The prior ordinance permitted a letter of credit, as does the sample State model ordinance. Letters of credit and/or other financial assurance papers from accredited institutions and entities are commonplace and secure, though not sometimes not well-understood by the general public. Cash escrow is something everyone understands. However, for large-scale developments, especially, it is uncommon and may greatly discourage future solar development.

With respect to a decommissioning timeline, the ordinance provides for a six-month timeframe, while the State model provides for 12 months.

2. Drain Tile Surveys

There was discussion as to the need to protect and preserve drain tiles, as well as the process to ensure that protection in the development of a solar energy project. Everyone recognizes that need, and landowners depend on and hold each other accountable for this important matter. The language in the draft ordinance is again more prohibitive, rather than protective. The

substantial cost should only be required as part of the later building permit process after approval of a project.

C. Public Input in Site Permit and Building Permit Process

There was substantial discussion as to the lack of the public's ability to participate in the final approvals and development stages of solar production projects. The public rightly notes that under the current ordinance, some of the applications are "bare-bones" and providing only the amount of information necessary to fulfill the minimum disclosure requirements of the present ordinance. While the draft ordinance, if passed in substantially the same form, will increase the disclosure of more detailed plans, there remain very few avenues for public input in the final processes for the site development permit and building permit.

While that is ordinarily the norm for ordinary building permits, i.e., pole barns or attached garages, there are substantial details yet to be determined in a solar energy project after initial approval of a special use application by the County under the current and even the proposed solar ordinance. Some public notification or ability of the public to comment on a published site permit or building permit application may be needed as the impacts of an energy production facility on adjacent landowners may be substantial.

D. Battery Energy Storage Systems

1. Safety Concerns

There was much public discussion on this topic as well. There is a high level of safety concern by many members of the public if Battery Energy Storage Systems become part of the larger-scale solar projects anticipated in the future. There exists a dangerous failure/safety issue as has been demonstrated. Though these occurrences appear rare, they are possible and potentially quite injurious, and need to be addressed. A code reference in the draft ordinance to a particular and relevant published safety code and some mechanism to review, approve, and enforce that safety code, appears rational and reasonable.

2. Need for a Separate BESS Ordinance

There was also much discussion on the need for a separate Battery Energy Storage System Ordinance. While many of the requirements overlap, such as provisions regarding setbacks and the placement of underground lines and connection points, there is much that surely is stand-alone

and necessary. The BESS section of the draft ordinance outlining the requirements for a special use application for a BESS is complicated, and substantial.

VI. Summary

The draft ordinance submitted by the County is reflective of the accumulated learned experiences of previously approved projects, and the substantial public input that has taken place at the committee level, board meetings, and prior public hearings on previous solar special use applications. The County's work to address many of the public's expressed concerns, as well as to ensure compliance by solar energy producers with the County's Comprehensive Plan has been substantial, while attempting to also not unduly burden the production of this needed energy resource.

Accordingly, subject to such revision as the committee may see fit after further comment, and consideration of the concerns and comments submitted at public hearing, I recommend approval of the draft ordinance.

Respectfully submitted,



Dale J. Clark
Hearing Officer