

## 5.12 Sustainable Energy Systems

### 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 used 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, ~~whether by photovoltaics (PV), concentrating solar thermal devices (CST), or other conversion technology,~~ 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 ~~electric (photovoltaic) array, of no more than 20 acres in size 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. ~~energy system. A county solar garden may be either an accessory use, when a part of an existing or a proposed subdivision or a special use if it is a stand-alone garden.~~ 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.

Solar Storage Unit: ~~A component of a solar energy device that is used to store solar generated electricity or heat for later use.~~

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 ~~gardens~~ 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 ~~garden~~ 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~~ ~~Gardens~~ are permitted in all zoning districts where buildings are permitted.
  - 3). Ground-mount solar ~~plots~~ ~~gardens~~ must be ~~less no greater~~ than five (5) ~~twenty (20)~~ acres in total size. Ground-mount solar developments covering more than five (5) ~~twenty (20)~~ 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, ~~designed for providing energy to off-site uses or export to the wholesale market.~~ ~~Solar farms~~ 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, ~~solar farms~~ ~~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.** ~~Top soils shall not be removed during development, unless part of a remediation effort. Soils shall be planted to and maintained in perennial vegetation to prevent erosion, manage run off and build soil. A plan must be approved by the Soil Water Conservation District and paid for by the developer. DeKalb County has a Noxious Weed Ordinance which is to be followed. Due to potential county liability under the Illinois Endangered Species Protection Act (520 ILCS 10/11(b) it is required that any crops planted be in compliance with all federal and state laws protecting endangered species. This will also include pollinators such as bees. A report showing demonstration of plan compliance shall be submitted annually, and paid for by the developer.~~
    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



- ~~b.~~ **Site Plan.** A detailed site plan for both existing and proposed conditions must be submitted, showing 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 should also show all zoning districts, and overlay districts.~~
  - 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. Tile Investigation Report.** An SES developer must submit a Tile Investigation Report 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.
  - f. Landscape Plan:** 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 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.
    - 4). ~~The solar array and all components of the solar collector system in a Solar Farm shall be kept at least one hundred (100) feet from a property line or right of way. However, this requirement may be waived, provided the solar farm's owner/lessee obtains, and records with the DeKalb County Recorder, signed and notarized affidavits, agreeing that the required minimum setback be waived, from all property owners and affected road authorities adjoining the zoning lot on which the solar farm is to be located (as determined by DeKalb County Community Development Department). However, in no instance shall any part of a solar farm, be located within fifty (50) feet of any of the aforementioned items.~~
  - b. Height Requirements**
    - 1). Building or roof mounted SES shall not exceed the maximum allowed height ~~in any~~ for the Zoning District ~~in which the building is located, as stated in Section 5.02 of this Article.~~
    - 2). Ground or pole mounted SES shall not exceed the maximum height, when oriented at maximum tilt, for the zoning district in which it is located.
  - 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 ~~Zoning Dept~~ **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 require 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 Zoning 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 plan shall be required to be submitted when applying for all Solar Farms and Solar Gardens, to ensure that facilities are properly removed after their useful life.~~
- ~~1).~~
- ~~b. Decommissioning of solar panels must occur in the event they are not in use for 90 consecutive days.~~
- ~~c. The owner or operator will have 6 months to complete the decommissioning plan after operation of a Solar Farm or Solar Garden stops being operational.~~

- ~~d. The decommissioning plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation and a plan ensuring financial resources will be available to fully decommission the site.~~
- ~~e. The DeKalb County Board may require the posting of a bond, letter of credit or the establishment of an escrow account to ensure the proper decommissioning. *The posting of a bond may be required prior to the issuance of a building permit for the facility.*~~
- ~~f. In the event that the State of Illinois enacts a law with regards to the decommissioning of a Solar Farm, the strictest requirements shall prevail.~~
- ~~g. Every five (5) years, for the life of the facility, the petitioner shall submit an updated estimate for the review and approval of the County Engineer, and the financial guarantee updated, as needed, to address any changes.~~

**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 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.
  - 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 31<sup>st</sup> 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% of 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.

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## Batteries

Amend Section 52-12 to add Section C: Battery Storage Systems

### C. Battery Storage Systems

1. **Purpose:** The purpose of this Section is to provide regulations for the construction, installation, and operation Battery Energy Storage Systems (BESS) in unincorporated DeKalb County, while ensuring the health, safety, and welfare of the residents of DeKalb County. 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 BESS installations in unincorporated DeKalb County.
2. **Definitions:** The following words, terms, and phrases, when use in this Section, shall have the meanings ascribed to this Section except when the context clearly indicates a different meaning.
  - Battery Energy Storage Management System: An electronic system that protects energy storage systems from operating outside of their safe parameters and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.
  - Battery Energy Storage System (BESS): One or more devices, assembled together, capable of receiving electrical energy from the grid or other electrical resource and storing it for later injection back to the grid.
  - BESS Commissioning: A systematic process that provides documented confirmation that a BESS functions according to the intended design criteria and complies with applicable code requirements.

**BESS Dedicated-Use Building:** A building or structure that is built for the primary intention of housing BESS equipment, is classified as Group F-1 occupancy, as defined in the International Building Code, and complies with the following:

- 1: The building's only use is battery energy storage, energy generation, and other electrical grid-related operations.
- 2: No other occupancy types are permitted in the building.
- 3: Occupants in the rooms and areas containing BESS are limited to personnel that operate, maintain, service, test, and repair the BESS and other energy systems.

**BESS Participating Property:** A BESS 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 BESS owner (or affiliate) regardless of whether any part of a BESS is constructed on the property.

**BESS, Tier 1:** Tier 1 BESS have an aggregate energy capacity less than or equal to 600kWh and, if in a room or enclosed area, consist of only a single energy storage system technology.

**BESS, Tier 2:** Tier 2 BESS have an aggregate energy capacity greater than 600kWh or are comprised of more than one storage battery technology in a room or enclosed area.

### 3. **Types of BESS:**

a. **Tier 1 BESS:** A Tier 1 BESS shall be permitted as an accessory use in all zoning districts and shall be subject to the regulations for accessory uses.

- 1). Tier 1 BESS incorporated into the primary structure or building shall be considered an addition/alteration said structure, and subject to all regulations governing said structure.
- 2). Intermodal storage containers may not serve as the dedicated-use building for Tier 1 BESS in a residential district.

b. **Tier 2 BESS:** A Tier 2 BESS is allowed as a Special Use in the A-1 and MC Zoning Districts, and shall require a Special Use Permit. Except as otherwise noted in this Section, a Tier 2 BESS must comply with all standards for structures un the district in which the system is located.

#### 1). **Ground Cover, Screening, and Buffer Areas:**

1. Areas within ten (10) feet on each side of the BESS shall be cleared of combustible vegetation and other combustible growth.
2. Any part of the BESS that is within five hundred (500) feet of a property line or right-of-way, or within one thousand five hundred (1,500) feet of an occupied structure, shall be screened. Additional screening may also be required, if the County Board deems such is necessary.
3. Required screening shall consist of native trees, shrubs, berms, or a combination thereof.
4. All screening must be installed prior to the commencement of construction of the BESS.
5. All screening shall be maintained by the BESS owner for the life of the facility, with replacement plantings and/or berm maintenance conducted as necessary. Failure to do so will be a violation of the special use ordinance.

2). **Power and Communication Lines.** Power and communication lines running to and from the BESS 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.

#### 3). **Setbacks:**

1. All components of the BESS shall be setback at least two hundred (200) feet from a property line or right-of-way.
2. All components, except the interconnection point, installed as part of the BESS shall be setback at least five (500) hundred feet from the nearest outer wall of an occupied structure not located on the subject property. However, 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 said structure waiving this setback, the minimum setback from said structure shall be reduced to two hundred (200) feet.

3. If the BESS is to be installed in conjunction to a new solar farm or solar garden, the BESS shall be sited so as to be located within the interior of said facility, with the banks of solar panels lying between the BESS and the edges of the facility.
  - 4). **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
  - 5). **AIMA.** A signed copy of the Agricultural Impact Mitigation Agreement shall be submitted prior to the issuance of any building permits.
4. **Content of a BESS 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 ~~three (3)~~ 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 location of the BESS, 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.
  - c. **Endangered Species and Wetlands.** A BESS 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 BESS.
  - e. **Tile Investigation Report.** A BESS developer must submit a Tile Investigation Report for the entire area of the BESS, identifying all drain tiles located therein. The BESS 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 BESS.
  - f. **Landscape Plan:** A detailed Landscape Plan providing specific information about the native species that are proposed for the screening, 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.
  - g. **Fire Safety Compliance Plan.** Such plan shall document and verify that the system and its associated controls and safety systems are in compliance with Code.
  - h. **Emergency Operations Plan.** A copy of the approved Emergency Operations Plan shall be given to the system owner, the local fire department, and local fire code official. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials, and emergency responders. The emergency operations plan shall include the following information:
    - 1). Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.
    - 2). Procedures for inspection and testing of associated alarms, interlocks, and controls.
    - 3). Procedures to be followed in response to notifications from the BESS Management System, when provided, that could signify potentially dangerous conditions, including shutting down equipment, summoning service and repair personnel, and providing agreed upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.
    - 4). Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include

sounding the alarm, notifying the fire department, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.

- 5). Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.
  - 6). Procedures for dealing with BESS equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged battery energy storage system equipment from the facility.
  - 7). Other procedures as determined necessary by the County to provide for the safety of occupants, neighboring properties, and emergency responders.
  - 8). Procedures and schedules for conducting drills of these procedures and for training local first responders on the contents of the plan and appropriate response procedures.
- i. **Emergency Operations Training.** The developer shall be responsible for training and preparing the local fire departments, local fire code officials, and emergency responders to implement the Emergency Operations Plan. The developer shall be responsible for bearing the costs of the training, and for providing the necessary equipment needed to implement the Emergency Operations Plan. This training must be substantially completed and the equipment provided for use prior to the facility coming online

## 5. Design and Installation Requirements:

### a. Setback Requirements

- 1). No BESS shall be allowed in the front yard of any residentially used or zoned property.

### b. Height Requirements

- 1). A BESS shall not exceed the maximum height for the zoning district in which it is located.

### c. Stormwater and NPDES.

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

### d. Standards and Codes:

All BESS 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.

### e.

In all undeveloped areas, the BESS 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.

### f. Fencing.

Tier 2 BESS, including all mechanical equipment, shall be enclosed in fencing, with a maximum height of eight (8) feet with a self-locking gate, 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.

- 1). The warning signage shall include the type of technology associated with the BESS, any special hazards associated, the type of suppression system installed in the area of the BESS, and 24-hour emergency contact information, including reach-back phone number.

### g. Lighting.

Any lighting for BESS shall be installed for security and safety purposes only. All lighting shall be shielded so that no glare extends substantially beyond the boundaries of the facility.

### h. Approved BESS Components.

Electric BESS components must have a UL listing, or approved equivalent.

### i. Noise.

The one (1) hour average noise generated by from the BESS, components, and associated ancillary equipment shall not exceed a noise level of sixty (60) dBA as measured at the outside wall of any non-participating occupied building. Applicants may submit equipment and component manufacturers noise ratings to demonstrate compliance. The applicant may be required to provide Operating Sound Pressure Level measurements from a reasonable number of sampled locations at the perimeter of the BESS to demonstrate compliance with the standard.

### j. Utility Notification:

All grid-intertie BESS shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

- k. **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 BESS shall be accompanied by horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the property, including the property lines.
    - 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.
  - l. 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 BESS must provide documentation, within thirty (30) days, that the BESS is still in use. If it is not, the owner of the System will have 180 days, after notification from the Zoning Department, to remove the BESS from the property.
  - b. Upon request from the DeKalb County Community Development Department, the owner or operator of a BESS must submit, within 14 days, a current operation and maintenance report to the Department.
  - c. All active BESS shall meet approval of county building code officials, consistent with the State of Illinois Building Code. Any county adopted building codes will apply and take precedence where applicable
- 7. Decommissioning or Abandonment of the BESS 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 BESS 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 BESS 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 BESS 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 BESS equipment or materials, plus a twenty-percent contingency. To determine that amount, the BESS 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 BESS 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 BESS owner.
- 8) A provision that the terms of the decommissioning plan shall be binding upon the BESS owner or operator and any of their successors, assigns, or heirs;
  - 9) Confirmation by affidavit that the obligation to decommission the BESS 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 BESS owners and landowners stating their financial understanding;
  - 10) A provision that allows the County to have legal right to transfer applicable BESS 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 BESS 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) The company dissolves or chooses to walk away from the project.
  - 3) 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 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 BESS 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 BESS shall be no more than the estimated decommissioning costs of removal of the above ground portions of that individual BESS 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 BESS operator fails to address a health and safety issue in a timely manner; or
    - b) The BESS operator fails to decommission the BESS project in accordance with the decommissioning and site reclamation plan.
  - 2) The applicant and/or BESS 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 BESS 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 BESS 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 BESS 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 BESS 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 BESS 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.
  - 8) DeKalb County and its authorized representatives have the right of entry onto the BESS 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 BESS, 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 BESS, 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 BESS, 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 BESS 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.

15. Following written approval of the finished grading by the County Engineer, the applicant shall submit a revised financial guarantee in the amount of ten percent (10%) of the original guarantee, upon the receipt of which the Community Development Director shall release the original guarantee. The Community Development Director shall hold the revised financial guarantee for a period of not less than two (2) years to assure proper function and maintenance of the stormwater management project, in accordance with the requirements of this division. After the two-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, the Community Development Director shall release the guarantee of construction
  - 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.