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## DEPARTMENT OF PLANNING, BUILDING & ZONING

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### MEMORANDUM

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To: Kendall County Planning, Building and Zoning Committee  
From: Matthew H. Asselmeier, AICP, CFM, Senior Planner  
Date: February 2, 2023  
Re: Solar and Wind Energy Regulations

In January 2023, the Illinois General Assembly approved and the Governor signed House Bill 4412 pertaining to commercial wind and solar energy systems. If the County wishes to have regulations governing commercial solar energy facilities and commercial wind energy facilities, the attached amendments to the Kendall County Zoning Ordinance would be required.

For reference, items in red are issues that would require changes and changes in bolded black are items that need to be discussed.

General proposed changes are as follows:

1. Various definitions related to solar and wind energy facilities will need to be amended, added, and deleted. Many terms are defined in State law and were referenced as such. The definitions of solar farm and solar gardens were removed. The definitions of solar energy system, private and wind energy system, small were adjust to reflect State law. Onsite consumption would include energy generated within a subdivision, planned development, or business park and consumed within the development.
2. Small wind energy systems would remain conditional uses in the A-1, R-1, R-2, RPD, Business, and Manufacturing Districts. Solar energy system, private would become permitted uses in all zoning districts.
3. Commercial solar energy facilities, test solar energy systems, commercial energy wind facilities and test wind towers would become special uses in the A-1, R-1, RPD Districts, and Manufacturing Districts.
4. Adding a statement that the regulations do not apply to commercial wind energy facilities within one point five (1.5) miles of a municipality, unless the County has an Intergovernmental Agreement with the municipality to provide zoning services to the municipality. Staff would like to add a requirement that solar and wind energy facilities within one point five (1.5) miles of a municipality must either annex to the municipality or enter into a pre-annexation agreement with the municipality using the Chatham annexation rules.
5. Add a requirement that the County Board shall make its decision on the application not more than thirty (30) days after the conclusion of the public hearing.
6. A determination will need to be made if the County wants to allow smaller setbacks than allowed under the law. As proposed, the setbacks would follow State law.
7. A determination will need to be made if the County will allow changes in setbacks, certain height requirements for solar, and fencing requirements if nonparticipating property owners consent to these requirements. As proposed, the change would be allowed to occur if documentation was provided at the time of application submittal.

8. A determination will need to be made if the County wants to allow sound limitations for wind towers less restrictive than the regulations set forth by the Illinois Pollution Control Board. As proposed, sound regulations would follow State law.
9. A determination will need to be made if agricultural impact mitigation agreements have to be submitted with the application.
10. The County's landscaping requirements will need to be adjusted to reflect the law.
11. Statements requiring compliance with EcoCat reports, Fish and Wildlife Service reports, and Illinois State Historic Preservation consultations be added to the Zoning Ordinance.
12. Statements regarding road use agreements will need to be adjusted to reflect the bill.
13. A determination will need to be made regarding enforcement of damaged drain systems.

Counties are required to amend their ordinances within one hundred twenty (120) days of the signing of the bill.

The new law is also attached.

If you have any questions regarding this memo, please let me know.

MHA

Enc.: Redlined Proposal  
New State Law

Section 3:02 (Definitions)

**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.

**COMMERCIAL SOLAR ENERGY FACILITY.** Shall have the same meaning as defined in 55 ILCS 5/5-12.

**COMMERCIAL WIND ENERGY FACILITY.** Shall have the same meaning as defined in 55 ILCS 5/5-12.

~~**GRID-INTERIE SOLAR ENERGY SYSTEM.** A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.~~

~~**GROUND MOUNT SOLAR ENERGY SYSTEM.** A solar energy system mounted on a rack or pole that rests on or is attached to the ground.~~

**FACILITY OWNER.** For the purposes of commercial solar energy facilities and commercial wind energy facilities, a facility owner shall have the same meaning defined in 55 ILCS 5/5-12.

**NONPARTICIPATING PROPERTY.** For the purposes of commercial solar energy facilities and commercial wind energy facilities, a nonparticipating property shall have the same meaning as defined in 55 ILCS 5/5-12.

**NONPARTICIPATING RESIDENCE.** For the purposes of commercial solar energy facilities and commercial wind energy facilities, a nonparticipating residence shall have the same meaning as defined in 55 ILCS 5/5-12.

**OCCUPIED COMMUNITY BUILDING.** For the purposes of commercial solar energy facilities and commercial wind energy facilities, an occupied community building shall have the same meaning as defined in 55 ILCS 5/5-12.

**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.

**PARTICIPATING PROPERTY.** For the purposes of commercial solar energy facilities and commercial wind energy facilities, a participating property shall have the same meaning as defined in 55 ILCS 5/5-12.

**PARTICIPATING RESIDENCE.** For the purposes of commercial solar energy facilities and commercial wind energy facilities, a participating residence shall have the same meaning as defined in 55 ILCS 5/5-12.

~~**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.~~

**PROTECTED LANDS.** For the purposes of commercial solar energy facilities and commercial wind energy facilities, protected lands shall have the same meaning as defined in 55 ILCS 5/5-12.

**ROOF MOUNT SOLAR ENERGY SYSTEM.** 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 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.~~

**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.~~

**SOLAR ENERGY SYSTEM, PRIVATE.** A collection of one (1) or more solar collectors designed for use by the occupant(s) of the zoning lot, **planned development, commercial and industrial park, or subdivision** on which or **in 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 FARM. A commercial 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 on which it is located.~~

~~SOLAR GARDEN. A commercial solar electric (photovoltaic) array, of no more than 20 acres in size, that provides retail electric power (or a financial proxy for retail power) to multiple households or businesses located off-site from the location of the solar energy system.~~

~~**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 STORAGE UNIT. A component of a solar energy device that is used to store solar generated electricity or heat for later use.**~~

**SUPPORTING FACILITIES. For the purposes of commercial solar energy facilities and commercial wind energy facilities, supporting facilities shall have the same meaning as defined in 55 ILCS 5/5-12.**

WIND ENERGY SYSTEM, SMALL A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity ~~of not more than 100 kW~~ **that does not meet the kilowatt capacity in total nameplate generating capacity as defined by 55 ILCS 5/5-12** and which is intended to primarily reduce onsite consumption of utility power. If all applicable regulations are met a small wind energy system may contain more than one wind energy conversion system. **This system may power properties in planned developments, commercial and industrial parks, or subdivisions on which or in which said system is located.**

~~**WIND FARM, COMMERCIAL A single wind driven machine or a collection of wind driven machines or turbines that convert wind energy into electrical power for the primary purpose of sale, resale or offsite use.**~~

**WIND TOWER. For the purposes of commercial solar energy facilities and commercial wind energy facilities, a wind tower shall have the same meaning as defined in 55 ILCS 5/5-12.**

#### Section 4:05.A. (Accessory Uses)

12. Small wind energy system (Permitted as Conditional Use only in the A-1, R-1, R-2, and all Business and Manufacturing Districts – may also be approved as part of a Residential Planned Development) subject to the conditions of Section 4:17.

13. ~~Solar panels~~ **Solar Energy System, Private subject to the conditions of Section 4:18.**

#### Section 4:17

##### 4:17 SMALL WIND ENERGY SYSTEMS

A. Total Height: There is no limitation on tower height, except as imposed by setback, clear one and FAA regulations.

B. Setback: The wind energy system shall be set back a distance equal to one hundred ten (110) percent of the hub height from all adjacent property lines. Additionally, no portion of the small wind energy system, including guy wire anchors, may extend closer than ten (10) feet to the property line.

C. Clear Zone: The wind energy system shall maintain a circular clear zone that has a radius which is equivalent to one hundred and ten (110) percent of the hub height. This clear zone shall be maintained free of any occupied structures on adjoining properties, tanks containing combustible/ flammable liquids, and above ground utility/electrical lines.

D. Noise: Wind energy systems shall not exceed sixty (60) dBA, as measured at the closest property line. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms.

E. Tower Security: Any climbing apparatus must be located at least twelve (12) feet above the ground, and the tower must be designed to prevent climbing within the first twelve (12) feet.

F. Lighting: Wind energy systems shall not be artificially lighted with accent lighting. For the protection of the flight patterns of aircraft and the protection of heliports, airports and landing strips, wind energy systems must be lighted in accordance to the regulations and guidelines of the Federal Aviation Administration (FAA) regulations or appropriate authorities.

G. Signs/Advertising: No tower should have any sign, writing, or picture that may be construed as advertising.

H. Visual Effects and Safety. All reasonable visual and safety concerns of adjacent property owners must be resolved before Construction/Use Permit will be issued. When an applicant intends to submit a Construction/Use Permit Application to the PBZ Department, he/she must also submit a copy of the completed conditional use application form to each adjacent neighbor at least 15 days prior to the issuance of a conditional use permit. If there are negative comments from neighbors, staff will attempt to resolve these negative neighbor comments with the applicant. If staff is unsuccessful in resolving concerns of the neighbors with the applicant, staff will schedule and provide notice of a public hearing before the Kendall County Planning Commission to review and make a determination on the pending application and unresolved issues. At this public hearing the Kendall County Planning Commission will take testimony from staff, the neighbors and the applicant, and then will make a determination, based on the evidence presented, to approve, conditionally approve or deny the application. Any decision by staff or the Planning Commission may be appealed to the County Board.

I. Multiple wind energy systems: Multiple wind energy systems are allowed on a single parcel as long as the owner/operator complies with all noncommercial wind farm regulations contained in these regulations. Units shall be installed in compliance with minimum setback and clear zone requirements, as defined by these regulations. The minimum distance between wind energy systems shall be equivalent to one hundred ten (110) percent of the hub height.

J. Approved Wind Turbines: At the time of application, the applicant must present a certification from the manufacturer that the system's turbine and other components equal or exceed the standards of one of the following national certification programs such as the: California Energy Commission, National Electrical Code (NEC), American National Standards Institute (ANSI), Underwriters Laboratories (UL), or any other small wind certification program recognized by the American Wind Energy Association.

K. Onsite Electrical Use: On the Construction/Use Permit Application, the applicant must certify that the proposed system will be used primarily to reduce onsite consumption of electricity.

L. Compliance with the National Electrical Code: Construction/Use Permit applications for small wind energy systems shall be accompanied by a line drawing of the electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the National Electrical Code. This information is frequently supplied by the manufacturer.

M. Removal of Defective or Abandoned Wind Energy Systems: Any wind energy system found to be unsafe by an authorized county official shall be repaired by the owner to meet federal, state and local safety standards or removed within six months. If any wind energy system is not operated for a continuous period of twelve (12) months, the county will notify the landowner by registered mail and provide forty-five (45) days for a response. In such a response, the landowner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the county deems the timetable for corrective action as unreasonable, they must notify the landowner and such landowner shall remove the turbine within one hundred twenty (120) days of receipt of notice from the county.

#### Section 4:18

#### **Solar Panels-Solar Energy System, Private**

A. Roof Mounted for On-Site Energy Consumption. Solar panels located on the roof of an existing structure shall be permitted in all districts. Roof mounted solar energy systems shall not extend beyond the exterior perimeter of the building on which the system is mounted. Roof mounted solar energy systems shall not exceed the maximum allowed height in any zoning district. Roof mounted or building integrated private solar energy systems for residential or business use shall be considered an accessory use in all zoning districts where there is a principal structure and shall meet the regulations of the Kendall County Zoning Ordinance. Roof mounted solar panels used as accessory to agricultural uses and which the energy generated from the solar panels is consumed on-site shall be exempt from building permits. The use of roof mounted solar panels for on-site energy consumption shall comply will all applicable federal, state, and local laws and the rules of the local electrical utility.

B. Freestanding for On-Site Energy Consumption. Solar panels located on the ground or attached to a framework located on the ground shall be classified as accessory structures in all zoning districts provided that the system is no larger than necessary to provide one hundred twenty percent (120%) of the electrical and/or thermal requirements of the structure, **planned development, commercial and industrial park, or subdivision** to which it is accessory as determined by a contractor licensed to install photovoltaic and thermal solar energy systems. **Freestanding solar energy systems, private may be the first structure constructed on lots zoned residential, business, or manufacturing.** Freestanding solar panels shall be permitted if they comply with the standards listed in the Kendall County Zoning Ordinance. Ground or pole mounted solar energy systems shall not exceed the maximum height, when oriented at maximum tilt, for the zoning district in which it is located. Freestanding solar panels used as accessory to agricultural uses and which the energy generated from the solar panels is consumed on-site shall be exempt from building permits. The use of freestanding solar panels for on-site energy consumption shall comply will all applicable federal, state, and local laws and the rules of the local electrical utility.

~~C. Solar Gardens. Solar gardens shall be allowed in all zoning districts and shall require a special use permit whether accessory or principal use of the property subject to the following requirements:~~

- ~~1. Unless otherwise noted in the Kendall County Zoning Ordinance, solar gardens must comply with all required standards for structures in the district in which the system is located.~~
- ~~2. Rooftop community systems are permitted in all zoning districts where buildings are permitted.~~
- ~~3. Ground-mount community solar energy gardens must be less than or equal to twenty (20) acres in total size. Ground-mount solar developments covering more than twenty (20) acres shall be considered solar farms.~~
- ~~4. Solar gardens are subject to Kendall County's Stormwater Management Ordinance and NPDES permit requirements.~~
- ~~5. An interconnection agreement must be completed with the electric utility in whose service territory the system is located.~~
- ~~6. Ground-mount systems must comply with all required standards for structures in the district in which the system is located. All solar gardens shall also be in compliance with all applicable local, state and federal regulatory codes, including the National Electric Code, as amended. Also, Health Department requirements for wells and septic systems must be met.~~

~~D. Solar Farms. Ground-mount solar energy systems that are the primary use on the lot, designed for providing energy to off-site uses or export to the wholesale market are permitted under the following standards:~~

- ~~1. Unless otherwise noted in the Kendall County Zoning Ordinance, solar farms must comply with all required standards for structures in the district in which the system is located.~~
- ~~2. Solar farms are subject to Kendall County's Stormwater Management Ordinance and NPDES permit requirements.~~
- ~~3. 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 Kendall County Soil and Water Conservation District and paid for by the developer. Applicable noxious weed ordinances shall 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 or vegetation 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.~~
- ~~4. 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.~~
- ~~5. All solar farms shall be in compliance with all applicable local, state and federal regulatory codes and the National Electric Code, as amended.~~



~~6. Power and communication lines running between banks of solar panels and to nearby electric substations or interconnections with buildings shall be buried underground. Exemptions may be granted by Kendall 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 Kendall County Planning, Building and Zoning Department. 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.~~

~~7. 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 Kendall County. The site plan should also show all zoning districts and overlay districts.~~

~~E. C.~~ Setback Requirements. Unless otherwise stated in the Kendall County Zoning Ordinance, the setback requirements for all solar energy systems shall meet the structure minimum setback requirements when the solar energy system is oriented at any and all positions. No solar energy system shall be located in any front yard of any residentially zoned or used property.

~~F. D.~~ Design Standards. Active solar energy systems shall be designed to conform to the County's Land Resource Management Plan and to blend into the architecture of the building or may be required to be screened from the routine view from public rights-of-way 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 solar energy systems 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. Solar energy systems using roof mounting devices or ground-mount solar energy systems 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. All solar energy systems 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.

4. Damaged field drain tile shall be repaired or rerouted on a timetable approved by the Kendall County Planning, Building and Zoning Department.

~~G. E.~~ Coverage. Roof or building mounted solar energy systems, excluding building-integrated systems, shall allow for adequate roof access for firefighting 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.

**H. F. Plan Approval Required.** All solar energy systems shall require administrative plan approval by the Kendall County Building Official via the review of the application for a building permit.

1. 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.
2. 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.
3. For flat roof applications, a drawing shall be submitted showing the distance to the roof edge and any parapets on the building 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.
4. Applications that meet the design requirements of the Kendall County Zoning Ordinance and do not require an administrative variance shall be granted administrative approval by the Zoning Administrator and not require Planning, Building and Zoning Committee review. Plan approval does not indicate compliance with Building or Electrical Codes.

**H. G. Approved Solar Components.** Electric solar energy system components must have a UL listing approved equivalent and solar hot water systems must have an SRCC rating.

**H. H. Compliance with Building Code.** All active solar energy systems shall meet approval of County building officials; solar thermal systems shall comply with HVAC-related requirements of the Illinois State Energy Code. All County adopted building codes will apply and take precedence where applicable.

**H. I. Utility Notification.** All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

**H. J. Building Permit Requirements and Fees.** All solar energy systems will be required to have a Kendall County Building Permit before any work can be started. A written plan and a plat/drawing for the proposed solar energy system shall be provided with the Building Permit Application. The plat/drawing must show the location of the system on the building or on the property, (for a ground-mount system show arrangement of panels), with all property lines and set back footages indicated. Fees for processing the applications for building permits shall be established by the County Board. Any solar energy system that construction has started before a Building Permit has been applied and paid for will be charged double the permit fee. The above fees do not apply to solar energy systems used to generate energy for on-site consumption of energy for agricultural purposes.

**~~M. Liability Insurance and Indemnification.~~**

**~~1. 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 Three Million Dollars (\$3 Million) per occurrence and Five Million Dollars (\$5 Million) in the aggregate. Such insurance may be provided~~**

~~pursuant to a plan of selfinsurance, by a party with a net worth of Twenty Million Dollars (\$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.~~

~~2. 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.~~

~~N.~~ **K. Decommissioning Plan.**

1. Upon the request of the Kendall County Planning, Building and Zoning Department, an owner of a solar energy system must provide documentation, within thirty (30) days, that the solar energy system is still in use. If the solar energy system is not in use, the owner of the system shall have 180 days, after notification from the Kendall County Planning, Building and Zoning Department, to remove the solar energy system from the property.

~~2. A decommissioning plan shall be required at the time of applying for all solar farms and solar gardens to ensure that the facilities are properly removed after their useful life.~~

~~3.~~ **2.** Decommission of solar panels must occur in the event they are not in use for ninety (90) consecutive days.

~~4. The owner or operator will have six (6) months to complete the decommissioning plan after operation of a solar farm or solar garden ceases.~~

~~5. 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.~~

~~6. The Kendall County Board shall 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.~~

~~7. 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.~~

~~O.~~ **L. Other Requirements.**

~~1. Upon request from the Kendall County Planning, Building and Zoning Department, the owner or operator of a solar farm or a solar garden must submit, within fourteen (14) calendar days, a current operation and maintenance report to the Department.~~

~~2. 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 Kendall County Planning, Building and Zoning Department before a permit or special use permit will be issued.~~

~~3.~~ 1. No fencing is required; however, if installed on the property the fencing shall have a maximum height of eight (8) feet. The fence shall contain appropriate warning signage that is posted such that is clearly visible on the site.

~~4. Any lighting for solar farms or solar gardens shall be installed for security and safety purposes only. Except for lighting 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.~~

~~5.~~ 2. Reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties.

~~6.~~ 3. Electric solar energy system components must have a UL listing and must be designed with anti-reflective coating(s).

~~7.~~ 4. Solar energy systems must be in compliance with all State of Illinois Plumbing and Energy Codes.

~~8.~~ 5. For solar energy systems located within five hundred feet (500') 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.

**N. Applicability. The regulations in this Section apply only to solar energy system, private and do not apply to commercial solar energy facilities.**

Section 7:01.D (A-1 Special Uses)

**Add Commercial Solar Energy Facility and Test Solar Energy Systems to the appropriate place alphabetically in the list of special uses subject to the following:**

- a. **All commercial solar energy facilities located within one point five (1.5) miles of a municipality shall either annex to the municipality or obtain an annexation agreement with the municipality requiring the municipality's regulations to flow through the property.**
- b. **The setbacks for commercial solar energy facilities shall be measured from the nearest edge of any component of the facility as follows:**

Occupied Community Buildings Dwellings on Nonparticipating Properties	One hundred fifty feet (150') from the nearest point on the outside wall of the structure
Boundary Lines of Participating Properties	None
Boundary Lines of Nonparticipating Properties	Fifty feet (50') to the nearest point on the property line of the nonparticipating property
Public Road Rights-Of-Way	Fifty feet (50') from the nearest edge

The above setbacks do not exempt or excuse compliance with electric facility clearances approved or required by the National Electrical Code, the National Electrical Safety Code, Illinois Commerce Commission, Federal Energy Regulatory Commission, and their designees or successors.

- c. A commercial solar energy facility's perimeter shall be enclosed by fencing having a height of at least six feet (6') and no more than twenty-five feet (25').
- d. No component of a solar panel as part of a commercial solar energy facility shall have a height of more than twenty feet (20') above ground when the solar energy facility's arrays are at full tilt.
- e. The above setback, fencing, and component height requirements may be waived subject to written consent of the owner of each affected nonparticipating structure. **This written consent shall be submitted at the time of application submittal.**
- f. Sound limitations for components in commercial solar energy facilities shall follow the sound limitations established by the Illinois Pollution Control Board.
- g. The County shall not require standards for construction, decommissioning, or deconstruction of a commercial solar energy system or related financial assurances to be more restrictive than agricultural impact mitigation agreement set in State law. The amount of any decommissioning payment shall be limited to the cost identified in the decommissioning or deconstruction plan, as required by the agricultural impact mitigation agreement, minus the salvage value of the project. **A copy of the agricultural impact mitigation agreement shall be submitted with the application materials.**
- h. A vegetative screening shall be placed around the commercial solar energy facility.
- i. Commercial solar energy facility applicants shall provide the results and recommendations from consultations with the Illinois Department of Natural Resources that obtained through the Ecological Compliance Assessment Tool (EcoCat) or a comparable successor tool. The commercial solar energy facility applicant shall adhere to the recommendations provided through this consultation.
- j. Commercial solar energy facility applicants shall provide the results of the United States Fish and Wildlife Service's Information for Planning and Consulting environmental review or a comparable successor toll that is consistent with the U.S. Fish and Wildlife Service's Land-Based Wind Energy Guidelines and any applicable United States Fish and Wildlife Service solar wildlife guidelines that have been subject to public review.

- k. A facility owner shall demonstrate avoidance of protected lands as identified by the Illinois Department of Natural Resources and the Illinois Nature Preserve Commission or consider the recommendations of the Illinois Department of Natural Resources for setbacks from protected lands, including areas identified by the Illinois Nature Preserve Commission.
- l. A facility owner shall provide evidence at the time of application submittal of consultation with the Illinois State Historic Preservation Office to assess potential impacts on State-registered historic sites under applicable State law.
- m. A commercial solar energy facility owner shall plant, establish, and maintain for the life of the facility vegetative ground cover consistent with State law and the guidelines of the Illinois Department of Natural Resources' vegetative management plans. The vegetation management plan shall be required at the time of application submittal.
- n. The facility owner shall enter into a road use agreement with the jurisdiction having control over the applicable roads. The road use agreement shall follow applicable law. The facility owner shall supply the Kendall County Planning, Building and Zoning Department with a copy of the road use agreement. This provision shall be waived if the jurisdiction having control over the applicable roads does not wish to enter into an agreement.
- o. The facility owner shall repair or pay for the repair of all damage to the drainage system caused by the construction of the commercial solar energy system within a reasonable time after construction of the commercial solar energy facility is complete. The specific time shall be set in the special use permit.

Add Commercial Wind Energy Facility and Test Wind Towers to the appropriate place alphabetically in the list of special uses subject to the following:

- a. The following conditions apply to all commercial wind energy facilities located outside the one point five (1.5) mile zoning jurisdiction of municipalities and within the one point five (1.5) mile zoning jurisdictions of municipalities under intergovernmental agreements with the County for zoning services. All commercial wind energy facilities located within one point five (1.5) miles of a municipality shall either annex to the municipality or obtain an annexation agreement with the municipality requiring the municipality's regulations to flow through the property, unless not required to do by applicable law.
- b. The setbacks for wind towers as measured from the center of the base of the wind tower shall be as follows:

Occupied Community Buildings  
Nonparticipating Residences

Two point one (2.1) times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure

<b>Participating Residences</b>	<b>One point one (1.1) times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure</b>
<b>Boundary Lines of Participating Properties</b>	<b>None</b>
<b>Boundary Lines of Nonparticipating Properties</b>	<b>One point one (1.1) times the maximum blade tip height of the wind tower to the nearest point on the property line of the nonparticipating property</b>
<b>Public Road Rights-Of-Way</b>	<b>One point one (1.1) times the maximum blade tip height of the wind tower to the center point of the public road right-of-way</b>
<b>Overhead Communication and Electric Transmission and Distribution Facilities (Not Including Overhead Utility Service Lines to Individual Homes or Outbuildings)</b>	<b>One point one (1.1) times the maximum blade tip height of the wind tower to the nearest edge of the property line, easement, or right-of-way containing the overhead line</b>
<b>Overhead Utility Service Lines to Individual Houses or Outbuildings</b>	<b>None</b>
<b>Fish and Wildlife Areas and Illinois Nature Preserve Commission Protected Lands</b>	<b>Two point one (2.1) times the maximum blade tip height of the wind tower to the nearest point on the property line of the fish and wildlife or protected land</b>

The above setbacks do not exempt or excuse compliance with electric facility clearances approved or required by the National Electrical Code, the National Electrical Safety Code, Illinois Commerce Commission, Federal Energy Regulatory Commission, and their designees or successors.

A wind tower of a commercial wind energy facility shall be sited so that industry standard computer modeling indicates that any occupied community building or nonparticipating residence will not experience more than thirty (30) hours per year of shadow flicker under planned operating conditions.

The above setback may be waived subject to written consent of the owner of each affected nonparticipating structure. This written consent shall be submitted at the time of application submittal.

- c. Sound limitations for wind towers in commercial win energy facilities shall follow the sound limitations established by the Illinois Pollution Control Board.
- d. The County shall not require standards for construction, decommissioning, or deconstruction of a commercial wind energy system or related financial assurances to be more restrictive than agricultural impact mitigation agreement set in State law. The amount of any decommissioning

payment shall be limited to the cost identified in the decommissioning or deconstruction plan, as required by the agricultural impact mitigation agreement, minus the salvage value of the project. A copy of the agricultural impact mitigation agreement shall be submitted with the application materials.

- e. A vegetative screening shall be placed around the commercial wind energy facility.
- f. The commercial wind energy facility shall follow applicable federal regulations pertaining to blade tip height maximums.
- g. Commercial wind energy systems applicants shall provide the results and recommendations from consultations with the Illinois Department of Natural Resources that obtained through the Ecological Compliance Assessment Tool (EcoCat) or a comparable successor tool. The commercial wind energy system applicant shall adhere to the recommendations provided through this consultation.
- h. Commercial wind energy systems applicants shall provide the results of the United States Fish and Wildlife Service's Information for Planning and Consulting environmental review or a comparable successor toll that is consistent with the U.S. Fish and Wildlife Service's Land-Based Wind Energy Guidelines and any applicable United States Fish and Wildlife Service solar wildlife guidelines that have been subject to public review.
- i. A facility owner shall demonstrate avoidance of protected lands as identified by the Illinois Department of Natural Resources and the Illinois Nature Preserve Commission or consider the recommendations of the Illinois Department of Natural Resources for setbacks from protected lands, including areas identified by the Illinois Nature Preserve Commission.
- j. A facility owner shall provide evidence at the time of application submittal of consultation with the Illinois State Historic Preservation Office to assess potential impacts on State-registered historic sites under applicable State law.
- k. The facility owner shall enter into a road use agreement with the jurisdiction having control over the applicable roads. The road use agreement shall follow applicable law. The facility owner shall supply the Kendall County Planning, Building and Zoning Department with a copy of the road use agreement. This provision shall be waived if the jurisdiction having control over the applicable roads does not wish to enter into an agreement.
- l. The facility owner shall repair or pay for the repair of all damage to the drainage system caused by the construction of the commercial wind energy system within a reasonable time after construction of the commercial wind energy facility is complete. The specific time shall be set in the special use permit.

~~52. Solar Gardens subject to the provisions of Section 4:18.D.~~

~~53. Solar Farms subject to the provisions of Section 4:18.C.~~



**57. Wind Farms, Commercial, subject to the following:**

**a. Location Guidelines**—The following guidelines shall be considered in evaluating the appropriateness of proposed locations for Wind Farms and the proposed project components. The purpose of these guidelines is to assist decision-makers in uniformly analyzing the site-specific impacts of each proposed project and thereby arrive at consistent and balanced decisions.

i. **Natural and Biological Resources**—Wind Farms should not be located in areas that have a large potential for biological conflicts. Wind Farms should not be located in large impact areas such as wilderness study areas, areas of critical environmental concern, county and state parks, historic trails, and special management areas. Wind Farms should not significantly impact important wildlife habitat.

ii. **Visual Impacts**—Wind Farms should avoid those visual corridors that are designated by the County as essential view sheds or scenic areas. Essential view sheds or scenic areas are those areas designated in the County's LRMP or in other locations determined by the County Board after analyzing the applicant's wind farm visual simulations and considering public hearing comments. A Wind Farm project should maintain visual unity among clusters of turbines. To promote visual uniformity, the rotors, nacelles and towers of all turbines in an array should appear similar. To avoid visual clutter, intra-project power lines having a voltage of 34,500 volts or less, should be buried unless the applicant can sufficiently demonstrate that burying the lines will violate other guidelines/standards, violate applicable law, render the project economically infeasible or be hidden from public view. To avoid cluttering the skyline, transformers and other electric equipment should be hidden from view or otherwise constructed in harmony with the surrounding landscape.

iii. **Soil Erosion & Water Quality**—Wind Farms should avoid erosion. Disturbance and construction on erodible slopes should be minimized. The number of improved roads and construction staging areas should be kept to a minimum. The grading width of roads should be minimized. One-lane roadways with turnouts are recommended. The number and size of staging areas and crane pad sites should be minimized.

iv. **Historical, Cultural & Archeological Resources**—Wind Farms should avoid sites with known sensitive historical, cultural or archeological resources.

v. **Public Safety**—Wind Farms shall be developed in a manner that utilizes sound engineering practices and considers public safety regarding the potential hazards to adjacent properties, public roadways, communities, aviation, etc. that may be created.

**b. Performance Standards**—The following standards are to be achieved by each Wind Farm project without exception. Because they are standards, they are requirements of any Wind Farm project. The final decision on whether or not a particular standard is achieved by a Wind Farm project shall be made by the County Board after considering the recommendations of all advisory bodies.

i. **Noise Management**—The noise level caused by the operation of the project, measured at five (5) feet above ground level at the property line coincident with or outside the project boundary, shall not exceed 65 decibels (A-weighted) and shall not exceed 50 decibels (A-weighted) if it is

determined that a pure tone noise is generated by the project. The level, however, may be exceeded during short-term events such as utility outages and/or severe windstorms.

ii. ~~Wind Farm Design: Wind Farms that are not designed in “accordance with proven good engineering practices” or not purchased from a national manufacturer with a proven track record shall be prohibited. Wind Farms designed with the following characteristics shall be deemed in “accordance with proven good engineering practices”:~~

~~1. at least 3 blades.~~

~~2. upwind rotor.~~

~~3. no furling, where “furling” means that the wind turbine is designed to limit its power output in high winds by changing the rotor’s plane of rotation to a plane that is not perpendicular to the prevailing wind direction.~~

~~4. tapered and twisted blades.~~

~~5. a well-designed braking system.~~

iii. ~~Visual Impacts—To provide visual order to a Wind Farm project, all individual turbines shall have the same number of rotor blades and all rotor blades shall spin in the same direction (i.e., clockwise or counter-clockwise) in relation to the wind. To promote visual uniformity, all turbines at a similar ground elevation shall have the same height from blade tip to the ground. Except during construction, reconstruction or removal, outdoor storage is not permitted within the project boundary except at locations that are screened from view. To avoid cluttering the skyline, inverters and pendant power cables shall be located inside the wind turbine tower, nacelle or structure. No telecommunications dishes, antennas, cellular telephone repeaters or other similar devices shall be attached to wind turbine towers. Aircraft obstruction markings of the turbines by use of alternating red and white bands shall be prohibited. No Billboards, logos and advertising signs of any kind shall be located on the turbines.~~

iv. ~~Soil Erosion & Water Quality—Construction and maintenance shall be done in strict accordance with the erosion and sediment control plan submitted with the Building Permit so as to minimize soil erosion and damage to existing vegetation. If vegetation is damaged during construction, in areas not occupied by the Wind Farms and related facilities and roads, it shall be restored after construction is complete. Disturbed areas shall be reseeded to the landowner’s or manager’s requirements. Dust control on the project site is required.~~

v. ~~Setback—Individual wind turbines shall be set back from all property lines coincident with or outside of the project boundary a distance equal to 1.1 times the turbine hub height. Individual wind turbines shall be set back from all public roads a distance equal to at least 1.1 times the turbine hub height.~~

vi. ~~Lighting—Individual wind turbine heights and markings shall comply with Federal Aviation Administration (FAA) regulations. Approval from the FAA stating that the turbines will not pose a hazard to aviation must be obtained prior to final recommendation by the Kendall County Regional Plan Commission. If lighting of turbines, or other structures, is required, “daytime white- nighttime red” shall be the only type of lighting allowed unless prohibited by law. All required~~

~~lighting effects shall be in synchronization with each turbine located on the same or contiguous zoning lot and under the same ownership of a single wind energy system organization. All turbines and towers shall be a shade of white in color. (Amended 2/16/2010)~~

~~c. Roads—All routes on either County or Township roads that will be used for the construction and maintenance purposes shall be identified on the site plan. All routes for either ingress or egress need to be shown. The routing shall be subject to the approval of the Kendall County Highway Engineer in coordination with the Township Road Commissioner(s). The developer shall provide and complete a pre-construction baseline survey to determine existing road conditions for assessing potential future damage due to development related traffic. The developer shall provide a road repair plan to improve any and all damage, installation or replacement of roads that might be required by the developer. The developer shall provide a letter of credit or a surety bond in amount and form approved by the highway official(s).~~

~~d. Fees—All applications for a Commercial Wind Farm shall be accompanied by a fee for a Commercial Wind Farm Special use in accordance with fee structure as established by the County Board and as amended from time to time. The County Board may, at its discretion, retain the services of attorneys and professional consultants to assist the Board and County staff in the amendment and zoning process. The application fee shall serve as an initial deposit from which any costs and expenses incurred by the county as a result of the application for amendment and the hearing process set forth herein shall be deducted. Such costs shall include, but not be limited to, the fees and costs of: County employees or staff review time, attorney's fees, expert witnesses, scientific testing, records or other investigations, data searches, notices, court reporters, transcription costs, consultants, the ZBA, and other expenses incurred by the County in reviewing the application, the public hearing, and decision, or any issues raised at any time during any hearings up to and including the County Board decision. If the actual costs incurred by the County in conducting its review and recommendation of the requested map amendment exceed the amount of the application fee deposit, the applicant shall be billed and shall be required to pay any and all additional costs incurred by the County in the completion of their review and recommendation of the special use. Costs in excess of the application fee deposit are required to be paid in full by the applicant prior to scheduling the matter for action by the County Board.~~

~~e. Removal of Defective Wind Energy Systems: Any wind energy system found to be unsafe by an authorized county official shall be repaired by the owner to meet federal, state and local safety standards or removed within sixty (60) days. If any wind energy system is not operated for a continuous period of 12 months, the county will notify the landowner by registered mail and provide 45 days for a response. In such a response, the landowner shall set forth reasons for the operational difficulty and provide a reasonable timetable for corrective action. If the county deems the timetable for corrective action as unreasonable, they must notify the operator and such operator shall remove the turbine within 120 days of receipt of notice from the county.~~

~~f. Decommissioning Plan: A Commercial Wind Farm shall submit a decommissioning plan to ensure it is properly decommissioned upon the end of the project life or facility abandonment. Facility abandonment shall include the ceasing of operations for a period of not less than one (1) year. Decommissioning shall include: removal of all structures (including transmission equipment and fencing) and debris to a depth of four (4) feet, restoration of the soil, and restoration of vegetation~~

~~within six (6) months of the end of the project life or facility abandonment. At the time of decommissioning, an Alta Survey shall be submitted to the County. The decommissioning plan shall state how the facility will be decommissioned, a professional engineer's estimated cost of decommissioning, the financial resources to be used to accomplish decommissioning, and the escrow agent with which the resources shall be deposited. The decommissioning plan shall also include an agreement between the applicant and the County which states:~~

~~i. The financial resources for decommissioning which shall be in the form of a surety bond, or shall be deposited in an escrow account with an escrow agent acceptable to the County,~~

~~ii. If the Applicant chooses an escrow agreement:~~

~~i. A written escrow agreement will be prepared, establishing upon what conditions the funds will be disbursed; and~~

~~ii. The County shall have access to the escrow account funds for the express purpose of completing decommissioning if decommissioning is not completed by the applicant within sixty (60) days of the end of the project life or facility abandonment.~~

~~iii. The County is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.~~

~~iv. The County is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the County's right to seek reimbursement from applicant or applicant's successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real estate owned by the applicant or applicant's successor, or in which they have an interest, for the amount of excess, and to take all steps allowed to enforce said lien.~~

~~Financial provisions shall not be so onerous as to make Commercial Wind Farm projects unfeasible.~~

~~Renumber the list of special uses in the A-1 accordingly.~~

~~Section 8:02.C (Special Uses in the R-1, R-2, and R-3)~~

~~18. Solar Gardens subject to the provisions of Section 4:00 of the Kendall County Zoning Ordinance.~~

~~Section 8:03.H.1 (Special Uses in the RPD-1, RPD-2, and RPD-3)~~

~~o. Solar Gardens subject to the provisions of Section 4:00 of the Kendall County Zoning Ordinance.~~

~~Section 8:08.B (Special Uses in R-4, R-5, R-6, and R-7)~~

~~9. Solar Gardens — See Section 4:00~~

~~Section 9:01.C (Special Uses in B-1)~~

~~13. Solar Gardens~~

~~Section 9:02.C (Special Uses in B-2)~~

~~24. Solar Gardens~~

Section 9:03.C (Special Uses in B-3)

~~29. Solar Gardens~~

Section 9:04.C (Special Uses in B-4)

~~18. Solar Gardens~~

Section 9:05.E (Special Uses in B-5)

~~7. Solar Gardens shall be a special use in the B-5 Business Planned Development District.~~

Section 9:06.C (Special Uses in B-6)

~~17. Solar Gardens~~

Section 10:01.C. (Special Uses in M-1 and M-2)

~~30. Wind Farms, Commercial, subject to the conditions in Section 7:01.D (Amended 9/15/20).~~

Section 10:03.C (Special Uses in M-3)

~~5. Solar Gardens~~

Section 13:08.E. (Decisions on Special Use Permits)

- ~~4. In cases involving special use permit applications or applications for major amendments to existing special use permits for commercial solar energy facilities and commercial wind energy facilities, the County Board shall make its decision not more than thirty (30) days after the conclusion of the public hearing.~~

Appendix 9 (Table of Uses)

**Add Commercial Solar Energy Facility and Test Solar Energy Systems as a special use to A-1, R-1, RPD-1, RPD-2, RPD-3, M-1, M-2, and M-3**

**Add Commercial Wind Energy Facility and Test Wind Towers as a special use to A-1, R-1, RPD-1, RPD-2, RPD-3, M-1, M-2, and M-3**

**Add Solar Energy System, Private as permitted uses in all zoning districts.**

**Delete Solar Farms and Solar Gardens**

General

**Citation Corrections caused by the amendments.**

(55 ILCS 5/5-12020)

Sec. 5-12020. Commercial wind energy facilities and commercial solar energy facilities.

(a) As used in this Section:

"Commercial solar energy facility" means a "commercial solar energy system" as defined in Section 10-720 of the Property Tax Code. "Commercial solar energy facility" does not mean a utility-scale solar energy facility being constructed at a site that was eligible to participate in a procurement event conducted by the Illinois Power Agency pursuant to subsection (c-5) of Section 1-75 of the Illinois Power Agency Act.

"Commercial wind energy facility" means a wind energy conversion facility of equal or greater than 500 kilowatts in total nameplate generating capacity. "Commercial wind energy facility" includes a wind energy conversion facility seeking an extension of a permit to construct granted by a county or municipality before the effective date of this amendatory Act of the 102nd General Assembly.

"Facility owner" means (i) a person with a direct ownership interest in a commercial wind energy facility or a commercial solar energy facility, or both, regardless of whether the person is involved in acquiring the necessary rights, permits, and approvals or otherwise planning for the construction and operation of the facility, and (ii) at the time the facility is being developed, a person who is acting as a developer of the facility by acquiring the necessary rights, permits, and approvals or by planning for the construction and operation of the facility, regardless of whether the person will own or operate the facility.

"Nonparticipating property" means real property that is not a participating property.

"Nonparticipating residence" means a residence that is located on nonparticipating property and that is existing and occupied on the date that an application for a permit to develop the commercial wind energy facility or the commercial solar energy facility is filed with the county.

"Occupied community building" means any one or more of the following buildings that is existing and occupied on the date that the application for a permit to develop the commercial wind energy facility or the commercial solar energy facility is filed with the county: a school, place of worship, day care facility, public library, or community center.

"Participating property" means real property that is the subject of a written agreement between a facility owner and the owner of the real property that provides the facility owner an easement, option, lease, or license to use the real property for the purpose of constructing a commercial wind energy facility, a commercial solar energy facility, or supporting facilities. "Participating property" also includes real property that is owned by a facility owner for the purpose of constructing a commercial wind energy facility, a commercial solar energy facility, or supporting facilities.

"Participating residence" means a residence that is located on participating property and that is existing and occupied on the date that an application for a permit to develop the commercial wind energy facility or the commercial

solar energy facility is filed with the county.

"Protected lands" means real property that is:

(1) subject to a permanent conservation right consistent with the Real Property Conservation Rights Act; or

(2) registered or designated as a nature preserve, buffer, or land and water reserve under the Illinois Natural Areas Preservation Act.

"Supporting facilities" means the transmission lines, substations, access roads, meteorological towers, storage containers, and equipment associated with the generation and storage of electricity by the commercial wind energy facility or commercial solar energy facility.

"Wind tower" includes the wind turbine tower, nacelle, and blades.

(b) Notwithstanding any other provision of law or whether the county has formed a zoning commission and adopted formal zoning under Section 5-12007, a county may establish standards for commercial wind energy facilities, commercial solar energy facilities, or both. The standards may include all of the requirements specified in this Section but may not include requirements for commercial wind energy facilities or commercial solar energy facilities that are more restrictive than specified in this Section. A county may also regulate the siting of commercial wind energy facilities with standards that are not more restrictive than the requirements specified in this Section in unincorporated areas of the county that are outside the zoning jurisdiction of a municipality and that are outside the 1.5-mile radius surrounding the zoning jurisdiction of a municipality.

(c) If a county has elected to establish standards under subsection (b), before the county grants siting approval or a special use permit for a commercial wind energy facility or a commercial solar energy facility, or modification of an approved siting or special use permit, the county board of the county in which the facility is to be sited or the zoning board of appeals for the county shall hold at least one public hearing. The public hearing shall be conducted in accordance with the Open Meetings Act and shall be held not more than 45 days after the filing of the application for the facility. The county shall allow interested parties to a special use permit an opportunity to present evidence and to cross-examine witnesses at the hearing, but the county may impose reasonable restrictions on the public hearing, including reasonable time limitations on the presentation of evidence and the cross-examination of witnesses. The county shall also allow public comment at the public hearing in accordance with the Open Meetings Act. The county shall make its siting and permitting decisions not more than 30 days after the conclusion of the public hearing. Notice of the hearing shall be published in a newspaper of general circulation in the county. A facility owner must enter into an agricultural impact mitigation agreement with the Department of Agriculture prior to the date of the required public hearing. A commercial wind energy facility owner seeking an extension of a permit granted by a county prior to July 24, 2015 (the effective date of Public Act 99-132) must enter into an agricultural impact mitigation

agreement with the Department of Agriculture prior to a decision by the county to grant the permit extension. Counties may allow test wind towers or test solar energy systems to be sited without formal approval by the county board.

(d) A county with an existing zoning ordinance in conflict with this Section shall amend that zoning ordinance to be in compliance with this Section within 120 days after the effective date of this amendatory Act of the 102nd General Assembly.

(e) A county may require:

(1) a wind tower of a commercial wind energy facility to be sited as follows, with setback distances measured from the center of the base of the wind tower:

Setback Description	Setback Distance
Occupied Community Buildings	2.1 times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure
Participating Residences	1.1 times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure
Nonparticipating Residences	2.1 times the maximum blade tip height of the wind tower to the nearest point on the outside wall of the structure
Boundary Lines of Participating Property	None
Boundary Lines of Nonparticipating Property	1.1 times the maximum blade tip height of the wind tower to the nearest point on the property line of the nonparticipating property
Public Road Rights-of-Way	1.1 times the maximum blade tip height of the wind tower to the center point of the public road right-of-way
Overhead Communication and Electric Transmission and Distribution Facilities (Not Including Overhead Utility Service Lines to Individual Houses or Outbuildings)	1.1 times the maximum blade tip height of the wind tower to the nearest edge of the property line, easement, or right of way containing the overhead line
Overhead Utility Service	None



Lines to Individual  
Houses or Outbuildings

Fish and Wildlife Areas and Illinois Nature Preserve Commission Protected Lands 2.1 times the maximum blade tip height of the wind tower to the nearest point on the property line of the fish and wildlife area or protected land

This Section does not exempt or excuse compliance with electric facility clearances approved or required by the National Electrical Code, The National Electrical Safety Code, Illinois Commerce Commission, Federal Energy Regulatory Commission, and their designees or successors.

(2) a wind tower of a commercial wind energy facility to be sited so that industry standard computer modeling indicates that any occupied community building or nonparticipating residence will not experience more than 30 hours per year of shadow flicker under planned operating conditions;

(3) a commercial solar energy facility to be sited as follows, with setback distances measured from the nearest edge of any component of the facility:

Setback Description	Setback Distance
Occupied Community Buildings and Dwellings on Nonparticipating Properties	150 feet from the nearest point on the outside wall of the structure
Boundary Lines of Participating Property	None
Public Road Rights-of-Way	50 feet from the nearest edge
Boundary Lines of Nonparticipating Property	50 feet to the nearest point on the property line of the nonparticipating property

(4) a commercial solar energy facility to be sited so that the facility's perimeter is enclosed by fencing having a height of at least 6 feet and no more than 25 feet; and

(5) a commercial solar energy facility to be sited so that no component of a solar panel has a height of more than 20 feet above ground when the solar energy facility's arrays are at full tilt.

The requirements set forth in this subsection (e) may be waived subject to the written consent of the owner of each affected nonparticipating property.

(f) A county may not set a sound limitation for wind towers in commercial wind energy facilities or any components in commercial solar energy facility that is more restrictive than the sound limitations established by the Illinois Pollution Control Board under 35 Ill. Adm. Code Parts 900, 901, and 910.

(g) A county may not place any restriction on the installation or use of a commercial wind energy facility or a commercial solar energy facility unless it adopts an ordinance that complies with this Section. A county may not establish siting standards for supporting facilities that preclude development of commercial wind energy facilities or commercial solar energy facilities.

A request for siting approval or a special use permit for a commercial wind energy facility or a commercial solar energy facility, or modification of an approved siting or special use permit, shall be approved if the request is in compliance with the standards and conditions imposed in this Act, the zoning ordinance adopted consistent with this Code, and the conditions imposed under State and federal statutes and regulations.

(h) A county may not adopt zoning regulations that disallow, permanently or temporarily, commercial wind energy facilities or commercial solar energy facilities from being developed or operated in any district zoned to allow agricultural or industrial uses.

(i) A county may not require permit application fees for a commercial wind energy facility or commercial solar energy facility that are unreasonable. All application fees imposed by the county shall be consistent with fees for projects in the county with similar capital value and cost.

(j) Except as otherwise provided in this Section, a county shall not require standards for construction, decommissioning, or deconstruction of a commercial wind energy facility or commercial solar energy facility or related financial assurances that are more restrictive than those included in the Department of Agriculture's standard wind farm agricultural impact mitigation agreement, template 81818, or standard solar agricultural impact mitigation agreement, version 8.19.19, as applicable and in effect on December 31, 2022. The amount of any decommissioning payment shall be limited to the cost identified in the decommissioning or deconstruction plan, as required by those agricultural impact mitigation agreements, minus the salvage value of the project.

(k) A county may not condition approval of a commercial wind energy facility or commercial solar energy facility on a property value guarantee and may not require a facility owner to pay into a neighboring property devaluation escrow account.

(l) A county may require certain vegetative screening surrounding a commercial wind energy facility or commercial solar energy facility but may not require earthen berms or similar structures.

(m) A county may set blade tip height limitations for wind towers in commercial wind energy facilities but may not set a blade tip height limitation that is more restrictive than the height allowed under a Determination of No Hazard to Air Navigation by the Federal Aviation Administration under 14 CFR

Part 77.

(n) A county may require that a commercial wind energy facility owner or commercial solar energy facility owner provide:

(1) the results and recommendations from consultation with the Illinois Department of Natural Resources that are obtained through the Ecological Compliance Assessment Tool (EcoCAT) or a comparable successor tool; and

(2) the results of the United States Fish and Wildlife Service's Information for Planning and Consulting environmental review or a comparable successor tool that is consistent with (i) the "U.S. Fish and Wildlife Service's Land-Based Wind Energy Guidelines" and (ii) any applicable United States Fish and Wildlife Service solar wildlife guidelines that have been subject to public review.

(o) A county may require a commercial wind energy facility or commercial solar energy facility to adhere to the recommendations provided by the Illinois Department of Natural Resources in an EcoCAT natural resource review report under 17 Ill. Admin. Code Part 1075.

(p) A county may require a facility owner to:

(1) demonstrate avoidance of protected lands as identified by the Illinois Department of Natural Resources and the Illinois Nature Preserve Commission; or

(2) consider the recommendations of the Illinois Department of Natural Resources for setbacks from protected lands, including areas identified by the Illinois Nature Preserve Commission.

(q) A county may require that a facility owner provide evidence of consultation with the Illinois State Historic Preservation Office to assess potential impacts on State-registered historic sites under the Illinois State Agency Historic Resources Preservation Act.

(r) To maximize community benefits, including, but not limited to, reduced stormwater runoff, flooding, and erosion at the ground mounted solar energy system, improved soil health, and increased foraging habitat for game birds, songbirds, and pollinators, a county may (1) require a commercial solar energy facility owner to plant, establish, and maintain for the life of the facility vegetative ground cover, consistent with the goals of the Pollinator-Friendly Solar Site Act and (2) require the submittal of a vegetation management plan in the application to construct and operate a commercial solar energy facility in the county.

No later than 90 days after the effective date of this amendatory Act of the 102nd General Assembly, the Illinois Department of Natural Resources shall develop guidelines for vegetation management plans that may be required under this subsection for commercial solar energy facilities. The guidelines must include guidance for short-term and long-term property management practices that provide and maintain native and non-invasive naturalized perennial vegetation to protect the health and well-being of pollinators.

(s) If a facility owner enters into a road use agreement with the Illinois Department of Transportation, a road district, or other unit of local government relating to a

commercial wind energy facility or a commercial solar energy facility, the road use agreement shall require the facility owner to be responsible for (i) the reasonable cost of improving roads used by the facility owner to construct the commercial wind energy facility or the commercial solar energy facility and (ii) the reasonable cost of repairing roads used by the facility owner during construction of the commercial wind energy facility or the commercial solar energy facility so that those roads are in a condition that is safe for the driving public after the completion of the facility's construction. Roadways improved in preparation for and during the construction of the commercial wind energy facility or commercial solar energy facility shall be repaired and restored to the improved condition at the reasonable cost of the developer if the roadways have degraded or were damaged as a result of construction-related activities.

The road use agreement shall not require the facility owner to pay costs, fees, or charges for road work that is not specifically and uniquely attributable to the construction of the commercial wind energy facility or the commercial solar energy facility. Road-related fees, permit fees, or other charges imposed by the Illinois Department of Transportation, a road district, or other unit of local government under a road use agreement with the facility owner shall be reasonably related to the cost of administration of the road use agreement.

(t) Notwithstanding any other provision of law, a facility owner with siting approval from a county to construct a commercial wind energy facility or a commercial solar energy facility is authorized to cross or impact a drainage system, including, but not limited to, drainage tiles, open drainage districts, culverts, and water gathering vaults, owned or under the control of a drainage district under the Illinois Drainage Code without obtaining prior agreement or approval from the drainage district, except that the facility owner shall repair or pay for the repair of all damage to the drainage system caused by the construction of the commercial wind energy facility or the commercial solar energy facility within a reasonable time after construction of the commercial wind energy facility or the commercial solar energy facility is complete.

(u) The amendments to this Section adopted in this amendatory Act of the 102nd General Assembly do not apply to (1) an application for siting approval or for a special use permit for a commercial wind energy facility or commercial solar energy facility if the application was submitted to a unit of local government before the effective date of this amendatory Act of the 102nd General Assembly or (2) a commercial wind energy facility or a commercial solar energy facility if the facility owner has submitted an agricultural impact mitigation agreement to the Department of Agriculture before the effective date of this amendatory Act of the 102nd General Assembly.

(Source: P.A. 101-4, eff. 4-19-19; 102-1123, eff. 1-27-23.)