

Solar Farm Ordinances Comparison

	Champaign (as recommended by ZBA)	Christian	Fulton	Kankakee	Knox	Tazewell	Whiteside	IL Solar Energy Association (Specific Recommendations)	North Carolina Model (Hartke version of Alliance for Wise Energy Decisions model)	North Carolina Model (NC Sustainable Energy Assoc/NC Clean Energy Tech Center)
Adoption date	-	11/21/2017	10/10/2017	May 2017	8/23/2017	5/31/2017	4/18/2017	8/30/2017	draft received 5/9/17	version 1.4 10/6/2016
Utility scale solar facility description	Community PV Solar Farm, PV Solar Farm	Solar Energy Facility	Commercial/Large Scale Solar Farm (SES)	Solar Farm, Solar Power Plant, Solar Energy Generation Facility	Solar Garden, Solar Farm	Community Solar Garden, Commercial/Large Scale Solar Farm (SES)	Solar Garden, Solar Farm	Utility Scale Solar	Solar Energy Facility (SEF)	Solar Energy System (SES)
Zoning Districts	AG-1 or AG-2 districts with a County Board Special Use Permit	can only be located in areas that are zoned AG-1 Agriculture or I-2 Industrial with special use and building permits	all AG, CR and I districts with a Cond. Use Permit	A1 Agriculture district with County Board Special Use Permit	C Conservation, A Agriculture, M, and M-2 Industrial districts with a Conditional Use Permit	all AG, CR and I districts with Special Use Permit	AG districts with Special Use Permit	Solar should be permitted in all zones (accessory use for behind-the meter systems and principle use for other systems) as "by-right" if it meets certain requirements	only in Agricultural districts	Agricultural, Residential Commercial, Office/Institutional with Special Use Permit, Development Standards required for Industrial districts
Min Lot Size	No	5 acres	not in solar ordinance	5 acres	5 acres	5 acres	5 acres	no limits if they meet other requirements and conform to project size	not specified	varies per district
Height	max height of all above ground structures shall be identified in the application and as approved in the Special Use permit	same as principal structure in zoning district	same as principal structure in zoning district	30 feet	20 feet	same as principal structure in zoning district	20 feet	20 feet	20 feet	20 feet
Noise	must comply with the applicable Illinois Pollution Control Board (IPCB) regulations (35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910)	not in Solar Farm Ordinance	not in Solar Farm Ordinance	50 decibels max at the property line when located adjacent to an existing residence or residential district	not in Solar Farm Ordinance	not in Solar Farm ordinance	not in Solar Farm Ordinance	not in recommendations	not in ordinance model	not in ordinance model
Agricultural protection	Drainage District tile must have 30-foot no-construction buffer on either side of the DD tile. Agriculture tiles must be repaired by the applicant, and must have Agricultural Impact Mitigation Agreement with the IL Dept of Ag regarding tile repairs, soil compaction, underground wiring, land leveling, topsoil placement	must repair drainage tiles if broken during construction	not in Solar Farm Ordinance	not in Solar Farm Ordinance	compliance with LESA	not in Solar Farm Ordinance	compliance with LESA	If LESA evaluation is required, it should be clear how county will use the LESA score	not in ordinance model	example finding: installation of large-scale industrial solar energy facilities can create drainage problems through erosion and lack of sediment control of facility and access road sites, and harm farmlands through construction methods utilized, but no specific language in the ordinance

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Setbacks	<p>PV SOLAR FARM fencing shall be set back from the street centerline a minimum of 40' from a MINOR STREET, 55' from a COLLECTOR STREET, and 60' from a MAJOR STREET.</p> <p>For properties participating in the solar farm, no required separation. For non-participating properties of 10 acres or less, 240 feet from property line; for more than 10 acres, 255 feet from any existing dwelling or principal building and otherwise the perimeter fencing shall be a minimum of 10 feet from a side or rear lot line. Additional separation may be required per the Board.</p>	<p>Improved areas shall be at least 100 feet from any residence or church, measured from the principle building in a non-residential area.</p> <p>Improved areas shall be 50 feet from a residence or church, measured from the property line in a residential area</p>	<p>must meet all applicable setback requirements for an accessory structure in the zoning district</p>	<p>100 feet front setback, and 50 feet from all other property lines except 100 feet from neighboring properties in residential use or district</p>	<p>must meet all applicable setback requirements in the zoning district, 500 feet from a residence that is not part of the permit</p>	<p>50 feet from all property lines, and solar panels shall be kept at least five hundred (500) feet from a residence that is not part the Special Use permit</p>	<p>50 feet from all property lines, and solar panels shall be kept at least five hundred (500) feet from a residence that is not part the Special Use permit</p>	<p>subject to the same setbacks as other standard structures in the same zone or twenty-five (25) feet, whichever is less; waivers ok</p>	<p>two hundred fifty (250) feet from property lines</p>	<p>Generally 30 feet front setback, 15 feet side, and 25 feet rear. Low density residential districts have 50 feet setback on all sides. 100 feet setback to any residential dwelling unit in all districts.</p>
Compliance with building code, electric code and all Federal/State requirements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Perimeter Fencing	7 feet	at least 6 feet	not in Solar Farm or Zoning Ordinance	8 feet	8 feet max	8 feet	not in Solar Farm ordinance	8 feet, waivers ok	continuous opaque, unperforated barrier minimum 6 feet, made of dirt, wood, stone, steel, or other metal, or any substance of a similar nature and strength which will hide the SEF	examples provided in appendix

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Airports	500 feet separation for any airport or its approach zone; same for legal restricted landing area or residential airport that had a Special Use Permit application received by April 22, 2010 or complete and provide results from the Solar Glare Hazard Analysis Tool	not in Solar Farm Ordinance	not in Solar Farm Ordinance	not in Solar Farm Ordinance	max height limits established by the requirements of the Airport Zoning Resolution for the City of Galesburg for buildings near the municipal airport	if there is solar within 500 feet of any airport or its approach zones, applicant must complete and provide results from Solar Glare Hazard Analysis Tool	if there is solar within 500 feet of any airport or its approach zones, applicant must complete and provide results from Solar Glare Hazard Analysis Tool	Projects developed near airports are subject to approval from the FAA. Any additional regulation at the local level is unnecessary.	within five (5) miles of any civilian or military airport runway, or heliport, the Applicant shall provide a copy of the FAA determination resulting from the filing of FAA Form 7460-1. The Applicant shall also demonstrate compliance with all Local, State and Federal airport related laws	for farms greater than 0.5 acre, must do map analysis, consider potential impacts to military flight paths, and applicant must complete and provide results from Solar Glare Hazard Analysis Tool
Ground cover and buffer areas	Best prime farmland inside the PV Solar Farm shall be offset by a vegetative ground cover with native plant species. Visual screen required if within 1,000 feet of a dwelling or residential district; but waiver will be considered if a landscape plan is provided by an Illinois Registered Landscape Architect or a neighbor agrees in writing to a waiver	not in Solar Farm or Zoning Ordinance	not in Solar Farm Ordinance	when required by CB, must be 3 feet tall when planted, with hedge growing to at least 8 feet within 3 years. If buffer is to be part of solar farm, a landscape plan should be submitted	Solar Farms shall be located in a manner to reasonably minimize the view of the system from surrounding properties	not in Solar Farm ordinance	Soils shall be planted to and maintained in perennial vegetation to prevent erosion, manage run off and build soil	native vegetation is typical, and mowing maintenance is common	minimum landscape buffer of 25 feet on sides where neighboring homes can see into the SEF. The buffer shall contain evergreen trees or bushes planted no more than 8 feet apart and at least 4 feet tall at time of planting. The buffer shall obtain a height of 10 feet within 3 growing seasons	SEEs shall be constructed with buffering as required by the applicable zoning district or development standards
Weed/Grass Control Plan required	Yes	Yes	not in Solar Farm Ordinance	Yes	not in Solar Farm Ordinance	Yes	Soils shall be planted to and maintained in perennial vegetation to prevent erosion, manage run off and build soil.	No	Yes	No
Fine for maintaining fence, weed/grass control	per Nuisance Ordinance	not in Solar Farm Ordinance	not in Solar Farm Ordinance	Yes	not in Solar Farm Ordinance	Yes	not in Solar Farm ordinance	No	only if there is local ordinance for it	No
EcoCat natural resource review or other environmental review required	EcoCat required	not in Solar Farm Ordinance	not in Solar Farm Ordinance	not in Solar Farm Ordinance	Yes	Yes	Yes	Yes	post-construction Environmental Impact Statement if requested by County	links to information on resource mapping in appendix
Economic Impact Study required	No	No	No	No	No	No	No	No	Economic Impact Study required as part of permit application	No
Fire Protection Plan required	upon request by local fire protection district	not in Solar Farm Ordinance	not in Solar Farm Ordinance	not in Solar Farm Ordinance	not in Solar Farm Ordinance	Yes	not in Solar Farm ordinance	not in recommendations	incident response plan for all emergency responders	No; links to information on fire safety in appendix

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Power and communication lines	All underground wiring or cabling shall be at least 5 feet below grade or deeper to maintain a minimum one foot of clearance between the wire or cable and any ag drainage tile or a lesser depth if so authorized by the Agricultural Impact Mitigation Agreement with the IL Dept of Agriculture. Burying power and communication wiring underground shall be minimized consistent with best management practice regarding solar farm construction and minimizing impacts on agricultural drainage tile.	underground	not in Solar Farm Ordinance	underground	not in Solar Farm Ordinance	not in Solar Farm ordinance	underground, except with variance	underground is typical, but not necessary	underground	links to information on wildlife friendly power lines in appendix
Glare	standard condition to minimize glare	not in Solar Farm Ordinance	a solar collection device or combination of devices will be designed and located to avoid glare or reflection onto adjacent properties and adjacent roadways and shall not interfere with traffic or create a safety hazard	not in Solar Farm Ordinance	reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties	reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties	solar energy systems using a reflector to enhance solar production shall minimize glare from the reflector affecting adjacent or nearby properties	majority of panel technology is antireflective, so glare risk is minimal to non-existent. If the authority wants to include glare guidance, it should be minimal. Per federal regulations, projects around airports need approval from the FAA	design and construction of the SEF shall not produce light emissions, either direct or indirect (reflective), that would interfere with pilot vision and/or traffic control operations as stated in section 3.2.2 of the DoD AICUZ report	glare considered only in relation to airport operations within 5 miles of a SES
Inspection by Zoning Department	building permit compliance	building permit compliance	building permit compliance	building permit compliance	building permit compliance	yearly	building permit compliance	not in recommendations	County can inspect, and applicant must do yearly inspection and report to the Planning Board within 30 days	not in ordinance model
General liability insurance required	\$5 million/event \$5 million/aggregate	not in Solar Farm Ordinance	not in Solar Farm Ordinance	not in Solar Farm Ordinance	not in Solar Farm ordinance	\$2 million/event \$5 million/aggregate, deductible <\$5,000	not in Solar Farm ordinance	not in recommendations	\$5 million/event \$10 million/aggregate, deductible <\$5,000	not in ordinance model

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Road use agreement required	Prior to the close of the ZBA public hearing, the Applicant shall enter into a Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality except for any COMMUNITY SOLAR FARM for which the relevant highway authority has agreed in writing to waive the requirements of subparagraphs 6.1.5 F. 1., 2., and 3.	Each SEF shall have a written agreement with County Engineer & Township Highway Commissioner(s) re: use of road, bridges and right-of-way. Performance/surety bonds may be required before a building permit can be issued	not in Solar Farm Ordinance	Prior to the issuance of a building permit, the applicant shall submit an executed agreement between the solar power plant owner/operator and all road district authorities with infrastructure affected by the solar power plant to the county	not in Solar Farm ordinance	Routing for construction and maintenance shall be approved subject to the approval of the County Highway Engineer in coordination with the Township Road Commissioners. Road repair plan and letter of credit when warranted.	not in Solar Farm ordinance	No	Applicant shall reimburse the NC DOT and/or County for any and all repairs and reconstruction to roads that are necessary due to construction or decommissioning	not in ordinance model
Decommissioning plan required	Yes	Yes	not in Solar Farm Ordinance	Yes	Yes	Yes	Yes	No	County reviews projected decommissioning costs every 5 years	Yes
Time period for requiring decommission due to farm being out of service/ not producing electrical energy	can require decommissioning in as little as 6 months per 6.1.5Q.5.(e).	12 months	12 months	12 months	12 months	12 months	12 months	established by each county	3 months	established by each county
Time allowed for decommission	not in Solar Farm ordinance	12 months	90 days	not in Solar Farm ordinance	not in Solar Farm ordinance	6 months	not in Solar Farm ordinance	established by each county	3 months to decommission or mitigate safety issues	established by each county
Fees	Building permit fee varies on MW - 7.5 MW or less is \$1,800 per MW and >7.5 MW is \$13,500 plus \$1,260 for each MW more than 7.5 MW. Special Use Permit fee varies on MW - 7.5 MW or less is \$1,320 per MW, >7.5 to 112 MW is \$9,240 plus \$102 for each MW over 7.5, more than 112 MW \$180 per MW	Building permit fee is \$10,000 for first 2 MW and \$1,000 per additional MW + \$1,000 for Special Use hearing	Conditional Use Permit fee is \$500 per application (not solar specific)	Building permit fee is \$6,526 for first \$1 million in value plus \$1 per each additional thousand dollars in value after that; Special Use Permit fee is \$5,000 per application	Building Permit fee depends on kilowatts; 1 to 2 MW is \$5,000; no fee shown for CUP	Building Permit fee depends on kilowatts; 1 to 2 MW is \$5,000; Special Use Permit starts at \$300 based on acreage	\$500/MW + \$750 per public hearing + court stenographer + \$75 LESA eval	If the authority requires a fee for permit application, the industry prefers a clear delineation of such fees.	\$10,000 escrow per application for use by local dept from application to decommission; permit fee is \$500 per MW for new, \$250 per MW renewal	not in ordinance model