

ARTICLE 3 – DEFINITIONS

(BOCC Resolution 2021-41; September 1, 2021)

Renewable Energy Conversion System: A Solar Energy Conversion System or any other commercial system determined by the Director of Planning and Zoning to convert existing natural processes, systems, or power into electricity for commercial or wholesale sales. Also referred to as Renewable Energy Facility.

Solar Energy Conversion System (SECS): 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 via connection to a larger electrical network exclusive of individual use and includes all associated support facilities including, but not limited to, roads, substations, operation and maintenance buildings, as specified in the application.

ARTICLE 19 – TABLE OF USES

(BOCC Resolution 2021-41; September 1, 2021)

S = Special Use Permit	R-2.5/5	R-1/ R-2/ R-3/ R-4 (One Fam/ Two Fam/ Apt)	B-1 Neighborhood Business	B-2 Limited Business	B-3 General Business	I-1 Limited Industry	I-2 Light Industry	I-3 Heavy Industry	PR-1/PR-2/PR-3 Planned Residential District	MXD Mixed Land Use	PC Planned Commercial	PI Planned Industrial
A = Allowed Use	Rural											
Renewable Energy Conversion System	S					S	S	S				S
Solar Energy Conversion System	S											

ARTICLE 57 – RENEWABLE ENERGY CONVERSION SYSTEMS

(BOCC Resolution 2021-41; September 1, 2021)

Section 1. PURPOSE

The placement, permitting, and use of Renewable Energy Conversion Systems are subject to the requirements of this Article.

Section 2. GENERAL REQUIREMENTS

The following requirements shall be applicable to all Renewable Energy Conversion Systems, unless superseded by the following Sections:

1. *General Regulations*

- a. *Underground Lines.* On-site communication lines and power collection lines are to be installed underground. Above ground utility or power lines may be used only in public rights-of-way, easements or other legally dedicated land permitting such uses, or when conditions on-site are found to make installation of such lines or facilities impractical or infeasible, such as existing underground pipelines, utilities or high groundwater.
- b. *Fencing.* The facility shall be enclosed by perimeter fencing at least 8 feet tall to restrict unauthorized access. No outdoor storage of any materials or equipment is permitted.
- c. *Signage.* All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on a wind generator, tower, building, or other adjacent structure associated with a Renewable Energy Facility visible from any public street or adjacent property shall be prohibited.
- d. *Lighting.* No lighting over 15 feet in height shall be installed on a renewable energy facility unless approved as part of the Special Use Permit review process and is required by local, state or federal requirements. No light source greater than one foot-candle shall be directed off-site. Security or safety lighting and accessory structures shall be limited to the minimum necessary

and full cutoff lighting (e.g., dark sky compliant) may be required when determined necessary to mitigate visual impacts. Lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or the night sky. Motion sensor control is preferred.

- e. *Outside Agency Approval.* The applicant shall provide a list of all Local, State and Federal agencies requiring approval and a copy of such approval, including all required studies, reports and certifications. In the event that a State or Federal Agency has not yet approved a required study, report or certification, then the approval of the special use permit shall be subject to receipt of a copy of such approval, unless good cause is shown to the satisfaction of the Director of Planning and Zoning.
 - f. *Socioeconomic & Environmental Impact.* The applicant shall provide an evaluation of potential impacts together with any plans and proposals for alleviating social and economic impacts upon local governments or special districts and alleviating environmental impacts which may result from the proposed facility.
 - g. *Interference.* The renewable energy facility operation shall not interfere with radio, television, computer, or other electronic operations on abutting or nearby properties.
 - h. *Compliance with Code.* Renewable energy facility installation shall conform to the National Electric Code, as updated from time to time.
2. *Permitting*
- a. *Special Use Permit.*
 - 1) A pre-application meeting shall be required for all renewable energy facility applications.
 - 2) A Special Use Permit shall be required for before the start of any construction of any renewable energy conversion system.
 - 3) Upon final approval of the special use permit, construction shall begin within two years from the date of final approval; otherwise, the special use approval shall be deemed to be null and void unless an extension to begin construction is administratively approved by the County. The Director of Planning and Zoning is authorized to administratively grant a one-time, up to one-year extension for construction to begin. Extensions for more than one year require a public hearing and approval by the Leavenworth County Planning Commission.
 - b. *Building Permit*
 - 1) A building permit is required prior to construction of renewable energy facility.
3. *Site Plans.* For all renewable energy facilities, a site plan shall be submitted in compliance with the requirements provided by:
- a. Article 27 – Site Plan Approval;
 - b. Any plans that are identified relative to a specific request for a Renewable Energy Conversion System may be included within the information required for consideration of the Special Use Permit; and
 - c. Any additional information required by Article 57.
4. *Environmental plans.*
- a. The applicant shall provide information that addresses: stormwater drainage, soil erosion, sediment control, and will detail how same will be addressed, prevented or enhanced by grading, re-vegetation or other standard construction practices in accordance with the reclamation recommendations of the Leavenworth County Conservation District. Damage to

existing vegetation shall be minimized. Land disturbance shall be minimized. Disturbed areas shall be reseeded in accordance with the reclamation recommendations of the Leavenworth County Conservation District. Weed control shall be maintained as directed by the Leavenworth County Noxious Weed Department.

- b. The applicant shall submit an Environmental Assessment to EPA standards that addresses the project's impact, if any, on: wildlife habitat; bird migration; the projects potential to cause bird and bat strikes or death; officially listed flora and fauna; and flood zones.
5. *Transfer of Ownership.*
- a. Whenever the renewable energy facility and/or property upon which the renewable energy facility is sited are transferred to new ownership, all requirements and responsibilities pertaining to the renewable energy facility are transferred to the new ownership.
 - b. If the Special Use Permit is to be transferred from the renewable energy facility owner/operator to a different renewable energy facility owner/operator, said transfer must first be approved by the Board of County Commissioners. The first party shall inform the second party of all requirements of the Special Use Permit. The second party, or new holder, of the Special Use Permit shall meet all requirements of the Special Use Permit. The County Commissioners may direct the Planning Director, the Public Works Director, and/or a designated to field inspect the renewable energy facility to determine current compliance with required conditions. A transfer fee of \$1,000.00 shall be paid to the County to compensate for work related to the transfer.
6. *Insurance.*
- a. Applicant shall indemnify and hold County harmless from and against any and all claims, demands, suits, and losses to the extent arising out of, relating to or resulting from or in connection with the negligent action or omission of applicant or its contractors or assigns during the development, construction or operation of applicant's wind energy project located within Leavenworth County, Kansas. Notwithstanding the foregoing, in no event shall the applicant, its contractors or assigns (or any of their respective affiliates, members, shareholders, officers, directors, agents or employees) be liable for consequential, incidental, indirect, special, exemplary or punitive damages.
 - b. During the construction phase of the project, applicant or its main contractor shall, at their own expense, maintain the following insurance policies:
 - 1) Commercial General Liability Insurance
 - 2) Commercial Automobile Liability Insurance
 - 3) Umbrella Excess Liability Insurance
 - 4) Workers' Compensation and Employer's Liability Insurance
 - c. Additional insurance during the renewable energy facility operational period beyond property owners' or homeowners' coverage shall not be required.
7. *Development Agreement.*
- a. A Development Agreement between the developer and/or applicant and the County shall be written and accepted by the Board of County Commissioners before the Special Use Permit can be granted.
8. *Abandonment, Decommissioning, and Reclamation Plan.*

The applicant shall enter into a Decommissioning Agreement with the Board of County Commissioners upon the approval of the special use permit and before any construction begins for a renewable energy facility. Compliance with the plan shall, at all times, be a condition of the special use permit whether or not explicitly listed in any document reflecting the agreement. Decommissioning of the renewable energy facility must occur in the event the facility does not generate electricity for nine (9) consecutive months, unless the Board approves a request to maintain the facility.

- a. Abandonment.
 - 1) A renewable energy facility shall be considered to be abandoned in the event the facility does not generate electricity for nine (9) consecutive months.
 - 2) The Director of Planning and Zoning shall issue a Notice of Abandonment to the owner/operator of the facility. The owner/operator shall have the right to respond to the Notice of Abandonment within 30 days from the Notice receipt date. The Director of Planning and Zoning may withdraw the Notice of Abandonment and notify the owner/operator that the notice has been withdrawn if the owner/operator provides sufficient information to demonstrate that the facility has not been abandoned which may include documentation or certification by the owner/operator of the local electric utility.
- b. Decommissioning & Reclamation Plan
 - 1) The plan shall describe the manner and cost in which the all facility improvements will be dismantled and removed from the site within 12 months of the abandonment or the end of the useful life of the renewable energy facility or of such improvement that shall require the removal of all above-ground components of the renewable energy facility.
 - 2) The plan must ensure the site will be restored to a useful, nonhazardous condition without delay including:
 - i. Regrading and seeding of the land after the removal of equipment; and
 - ii. Revegetation of restored soil areas with crops or native seed mixes, excluding any invasive species.
 - 3) Concrete and other materials used in the construction of the site must be removed.
 - 4) Following a continuous nine (9) month period in which no electricity is generated, or if substantial action on the project is discontinued for a period of nine (9) months, the permit will have one year to complete decommissioning of the facility. Decommissioning shall be completed in accordance with the approved decommissioning plan. The land owner or tenant must notify the county when the project is discontinued.
 - 5) The plan shall include estimated decommissioning costs in current dollars and the method for ensuring that will be available for decommissioning and restoration. The applicant shall provide the basis for estimates of net costs for decommissioning the site (decommissioning costs less salvage value). The cost basis shall include a mechanism for calculating adjusted costs over the life of the project.

9. *Bond.*

The applicant shall obtain and deliver to the County either a bond or a similar financial instrument or establish an escrow account to ensure proper decommission and restoration of the site.

- a. Any bond or escrow account shall be calculated to be equal to the cost specified in the Decommissioning Agreement or at a rate of \$40,000 per acre of disturbed soil, whichever is greater.

Section 2. SOLAR ENERGY CONVERSION SYSTEM REGULATIONS

1. *Standards*

The following standards apply to all Solar Energy Conversion Systems (SECS):

- a. *Height.* The SECS shall not exceed thirty-five feet (35') in height; provided, however, said height restriction shall not apply to substation facilities or transmission lines.
- b. *Setback.* All SECS structures shall be setback from the project boundary lines and public rights-of-way at least forty (40) feet. Additional setbacks may be required to mitigate site specific issues or to provide for access, road or commercial corridors.
- c. *Screening.* The SECS should be located to make maximum use of existing terrain, vegetation and structures to screen the Project from offsite views. To the greatest extent possible, SECS should be sited such that non-shading vegetation and/or existing structures are located between the facility and public and private viewpoints. Landscaping and/or screening may be required to help screen the SECS, at the discretion of the Director of Planning and Zoning.
- d. *Fire Risk.* The applicant shall identify the potential fire risk associated with the project, including both prescribed burning and nonprescribed burning.
- e. *Glare.* No SECS shall be placed such that concentrated solar glare casts onto adjacent properties or roadways.

2. *Application and Required Documents*

The applicant shall provide the following supplemental information with their Special Use Permit Application:

- a. Information shall be provided relative to the solar technology to be used (i.e. polycrystalline PV, monocrystalline PV, Cadmium Telluride PV, evacuated tube solar thermal, flat plate solar thermal, etc.); approximate number of solar modules/ panels; system mounting (i.e. fixed-tilt on flat roof, fixed-tilt groundmount, 1-axis tracking groundmount, etc.); the maximum height of the array from the ground or roof surface; the maximum height of any new utility poles; and power capacity of the system, in both DC and AC Watts where applicable; total acreage of array and acreage of total project; manner in which the project will connect (i.e. net meter to existing distribution line, to new distribution line, to transmission line); and, whether a new substation will be constructed. (If so, provide location and size).
- b. If a SECS is proposed to be placed within one (1) mile of any airport or airstrip as shown on the Airport and Airstrip Map incorporated herein by reference, the applicant shall provide acknowledgement of location approval from the Federal Aviation Administration prior to construction.
- c. The applicant shall provide a Solar Glare Hazard Analysis utilizing the latest version of the Solar Glare Hazard Analysis Tool (SGHAT), or its equivalent, to evaluate the solar flare aviation hazard and potential impact on neighbors.
 - 1) If solar glare is predicted, the applicant shall provide mitigation measures to address the impacts of solar glare. Mitigation measures may include and are not limited to textured glass, anti-reflective coatings, screening, distance, and angling of solar PV modules in a manner that reduces glare to surrounding land uses of non-participating property owners.
- d. The applicant or developer shall meet with the appropriate department of public works, and/or Kansas Department of Transportation to determine what roads may be used as transportation routes for construction and maintenance, and shall provide a map of the route(s) to be used in Leavenworth County. No building or construction permit shall be

issued until the applicant submits proof that appropriate permits and any required guarantees dealing with road damage or maintenance can be provided.

- c. *Vesting of rights.*
 - a. Construction for a SECS will be considered to have begun once the first array of solar panels has begun to be installed.