- pp. **Renewable Energy Systems.** Renewable energy systems, as defined by this Code and where permitted, shall always be considered Conditional Uses and subject to Sec. V-D (Conditional Use review procedures). Renewable energy systems shall be subject to the following:
- (1) All wind energy conversion system (WECS) are prohibited within the unincorporated portion of Sedgwick County and the City of Wichita.
- (2) For all SECS applications, a site plan shall be submitted in compliance with the requirements provided by the Site Plan Guidelines for Conditional Use Application and shall provide the following supplemental information:
- (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, per its user's manual to evaluate the solar glare aviation hazard. The full report for each flight path and observation point, as well as the contact information, shall be submitted to the Planning Department Director at least 30 days before the required public hearing for the Conditional Use Permit for the SECS. Any applicable SECS design changes (e.g. module tilt, module reflectivity, etc.) after initial submittal shall be rerun in the SGHAT tool and the new full report shall be sent without undue delay to the Planning Department Director for accurate records of the as-built system. The analysis shall provide an assessment of when and where glare will occur throughout the year.
- 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 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.
- (e) 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 Sedgwick County Conservation District. Damage to existing vegetation shall be minimized. Disturbed areas shall be reseeded in accordance with the reclamation recommendations of the Sedgwick County Conservation District. Weed control shall be maintained as directed by the Sedgwick County Noxious Weed Department.

(f) The applicant shall provide information on the construction materials generally anticipated to be used in the SECS. The construction materials shall be reviewed by the Director of the Sedgwick County Department of Environmental Resources and Household Hazardous Waste for properties in the unincorporated County, or the Storm Water Engineer, Public Works and Utilities Department for properties in the City. After review of the construction materials, a recommendation shall be forwarded to the Planning Commission concerning approval or denial, as well as a recommendation of what types of potential groundwater contaminants should be tested for. Failure by the Director of the Sedgwick County Department of Environmental Resources and Household Hazardous Waste for properties in the unincorporated County, or the Storm Water Engineer, Public Works and Utilities Department for properties in the City to make a recommendation shall not prevent consideration of the application.

(g) The applicant shall provide information and test results of any soil and groundwater testing required by the appropriate Governing Body to the Director of the Sedgwick County Department of Environmental Resources and Household Hazardous Waste for properties in the unincorporated County, or the Storm Water Engineer, Public Works and Utilities Department for properties in the City. The testing of soil and groundwater shall be based on contaminants of concern, as listed as an EPA regulated contaminant, related to the specific site. Evaluation of test results will be based on current EPA regulations in effect at the time of the tests, which are subject to change. The required information and test results shall be provided in accordance with the following schedule, unless otherwise changed by the appropriate Governing Body during the application review process:

1. For groundwater:

a) Prior to the commencement of any construction of the SECS.

b) Periodic testing every five (5) years during the life of the SECS, Additional testing may be required as reasonably determined by the Director of the Sedgwick County Department of Environmental Resources and Household Hazardous Waste for properties in the unincorporated County, or the Storm Water Engineer, Public Works and Utilities Department for properties in the City. Prior to any scheduled testing, the applicant shall inform the appropriate above- designated individual of any substantial change in the construction materials used, or to be used, in the SECS. Additional testing may be required as reasonably and directly related to the change in construction materials.

c) Within ninety (90) days of the completion of the SECS decommissioning and reclamation plan and prior to the release of any financial assurance. If decommissioning and reclamation occurs in phases, the required testing shall be submitted within ninety (90) days of the substantial completion of any such phase.

2. For soil, testing shall only occur as reasonably requested by the Director of the Sedgwick County Department of Environmental Resources and Household Hazardous Waste for properties in the unincorporated County, or the Storm Water Engineer, Public Works and Utilities Department for properties in the City in relation to spillage or another extenuating circumstance in the area that suggests the soil might have been compromised or contaminated.

(h) (f) 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.

(i) (g) 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 Sedgwick 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.

(j)-(h) 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 enforcement of the conditional use permit shall be subject to receipt of a copy of such approval, unless good cause is shown to the satisfaction of the Planning Department. Director.

(k)-(i) The SECS shall not exceed twenty-five feet (25') thirty-five feet (35') in height; provided, however, said height restriction shall not apply to substation facilities or transmission lines.

(I)-(j) 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.

(m)-(k) The SECS 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.

(n)-(1) 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.

(o) (m) There shall be no signage allowed on the SECS with the exception of safety and emergency contact signs, warning signs, directional or project identification signs.

(p)-(n) 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.

(q) (o) The applicant shall identify the potential fire risk associated with the project, including both prescribed burning and nonprescribed burning.

(r) Project review and approval by the Wichita Fire Department for properties in the City, or Sedgwick County Fire District # 1 for properties in the unincorporated County, is required. Any issues of non-compliance shall be specifically articulated, and in accordance with the adopted fire code, and any amendments thereto.

(s) (p) No SECS shall be placed such that concentrated solar glare casts onto adjacent properties or roadways.

(t)-(q) No lighting over 15 feet in height shall be installed on renewable energy facilities unless approved as part of the conditional use 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 of the SECS 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.

- (u) (r) The applicant(s) shall provide a site and facility decommissioning and reclamation reclamation and decommissioning plan which indicates the planned life of the SECS and the means by which the facility and its site will be decommissioned and reclaimed at the end of the facility's life. Said decommissioning and reclamation reclamation and decommissioning plan shall certify that any owner of land within the SECS and its site who is not the applicant(s) has been consulted in development of the decommissioning and reclamation reclamation and decommissioning plan. If the permit is granted, the plan shall be updated every five (5) years until site decommissioning and reclamation reclamation and decommissioning is complete. Before final inspection by public officials, the applicant shall provide evidence that the decommissioning and reclamation decommissioning plan, and amendments thereto, have been recorded with the Register of Deeds. The decommissioning and reclamation reclamation and decommissioning plan shall provide that, at the end of the project's life, - or any array component of an SECS, all, or the appropriate portion, of the site's equipment and access roads shall be removed from the site and the site shall be returned to original condition, or restored to such condition as to allow a use compatible with surrounding uses as determined by the Planning Department Director, or to such condition as agreed to by the landowner and the SECS owner, developer, and/or operator. The landowner may choose to have access roads left intact.
- (v) (u) The required decommissioning and reclamation plan as outlined in Sec. III-D.6.pp.(2)(u) shall be submitted by the applicant and provide the following:
- 1. Financial assurance that the decommissioning and reclamation plan will be completed in accordance with said plan at the end of the life of the SECS.
- a) The amount of financial assurance shall be the full amount of estimated decommissioning and reclamation cost without regard to the possibility of salvage value.
- b) The estimated decommissioning and reclamation cost shall be recalculated every five years, at which time the applicant shall deposit additional surety if, and in the amount that, the new cost estimate exceeds the existing financial assurance.
- c) The required financial assurance may be provided in the form of a surety bond, cash held in escrow, or any other financial instrument acceptable to the appropriate Governing Body. If in the form of a surety bond, then said bond either: (1) shall not have an expiration date, (2) may only be released with consent of the obligee, or (3) is callable if not renewed within sixty (60) days prior to expiration. If in the form of cash held in escrow or other financial instrument, then said financial assurance either: (1) may only be released with the consent of the obligee, or (2) is callable if not renewed within sixty (60) days prior to expiration.
- d) In the event the applicant is not in compliance with the decommissioning and reclamation plan, the appropriate Governing Body shall have the right to call the financial assurance, and use it to implement and/or complete the decommissioning and reclamation plan. Should there be any remaining balance, the appropriate Governing Body shall have the right to withhold payment of any refund until the decommissioning and reclamation plan is completed to the satisfaction of the appropriate Governing Body.
- 2. A statement or proposed agreement that provides that the appropriate Governing Body will be notified in the event of any change of ownership of the SECS.

- 3. A statement or proposed agreement that provides for, and sets forth the continuity of the required financial assurance. The required financial assurance shall be conditioned such that the required financial assurance shall remain in full force and effect and will survive any change of ownership of the SECS. Any new owner of the SECS shall be bound by, and fulfill all terms and conditions of the required financial assurance.
- 4. A statement or proposed agreement that sets forth the estimated or anticipated date the SECS will cease the generation of electrical power, if possible; the timeframe in which the decommissioning and reclamation process will commence after the generation of electrical power of the SECS or any portion thereof ceases; and the duration of the decommissioning and reclamation process. This shall include the date of the commencement of the decommissioning and reclamation process, and the estimated timeframe when the decommissioning and reclamation process will be completed. The dates shall be consistent and in conformance with the approved decommissioning and reclamation plan.
- 5. A statement or proposed agreement that the appropriate Governing Body will be notified on or about six (6) months prior to, at the commencement of, and at the completion of the SECS decommissioning and reclamation plan.
- 6. A statement or proposed agreement which provides that all equipment or structures and any portions thereof which are located below grade shall be removed to a minimum depth of four feet (4')
- 7. Any of the aforementioned statements or proposed agreements shall be binding upon the applicant, or any new owner of the SECS.
- (w) (s) Upon final approval of the Conditional Use, construction shall begin within two years from the date of final approval; otherwise, the conditional use approval shall be deemed to be null and void unless an extension to begin construction is administratively approved by the Director of Planning. The Director of Planning, with the concurrence of the Zoning Administrator, 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 Metropolitan Area Planning Commission. Construction for a SECS will be considered to have begun once the first array of solar panels has begun to be installed.
- (x) (t) Any other issues or concerns that are identified relative to a specific request for a Renewable Energy System may be included within the information required for consideration of the Conditional Use Permit.