

**ARTICLE 8: SUPPLEMENTAL REGULATIONS**

interior of each viewing room but excluding restrooms, to which any patron is permitted access for any purpose. An operator's station shall not exceed 32 square feet of floor area. If the premises have two or more operator's stations designated, then the interior of the premises shall be configured in such a manner that there is an unobstructed view of each area of the premises to which any patron is permitted access for any purpose, excluding restrooms, from at least one of the operator's stations. The view required in this paragraph must be by direct line of sight from the operator's station. It is the duty of the operator of an adult establishment to ensure that at least one employee of an adult establishment is on duty and situated in each operator's station at all times that any patron is on the premises. It shall be the duty of the operator of an adult establishment, and it shall also be the duty of any employees of an adult establishment present on the premises, to ensure that the view area specified in this paragraph remains unobstructed by any doors, curtains, walls, merchandise, display racks or other materials or enclosures at all times that any patron is present on the premises.

- H. It shall be the duty of the operator of an adult establishment to ensure that no porous materials are used for any wall, floor, or seat in any booth or viewing room.
- I. It shall be unlawful for a person having a duty under subsections 8.11.04 (9)(A) through 8.11.04 (9)(H) above to knowingly or recklessly fail to fulfill that duty.
- J. No patron shall knowingly or recklessly enter or remain in a viewing room less than 150 square feet in area that is occupied by any other patron.
- K. No patron shall knowingly or recklessly be or remain within one foot of any other patron while in a viewing room that is 150 square feet or larger in area.
- L. No person shall knowingly or recklessly make any hole or opening between viewing rooms.
- 10. It shall be the duty of the operator of an adult establishment to ensure that the interior premises shall be equipped with overhead lighting of sufficient intensity to illuminate every place to which customers are permitted access at an illumination of not less than five foot candles as measured at the floor level and the illumination must be maintained at all times that any customer is present in or on the premises.
- 11. Unless a culpable mental state is otherwise specified herein, a showing of a reckless mental state shall be sufficient to establish a violation of a provision of this section 8.11.04.

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**Section 8.12 Solar Energy – Individual and Neighborhood Solar Conversion Systems**

No solar panel shall be constructed within the residential zoning jurisdiction of Otoe County unless a Zoning Certificate therefore is approved and issued by the Zoning Administrator and is constructed in conformance with the state building codes and the following requirements. For those devices that include electrical, plumbing and heating constructions, the applicable permits shall also be obtained. Solar panels shall meet the following requirements.

**8.12.01 Lot and Height Requirements:**

Solar panels shall conform to the required front, side and rear lot setback requirements except as provided herein:

- 1. A solar panel which is attached to an integral part of the principal building may project two feet into the front yard; six feet into the rear yard; and two feet into the side yard.
- 2. A solar panel which is freestanding may be located only in the required rear yard provided it does not exceed six feet in height and is located not less than five feet from the rear lot line and not closer than one foot to any existing easement as measured from the closest point of the structure including its foundation and anchorage's, nor shall the solar panel be located in the required side yard or front yard.

**8.12.02 Structural Requirements:**

The physical structure and connections to existing structures shall conform to the applicable state building codes.

**8.12.03 Plot Plan:**

The application for a permit shall be accompanied by a plot plan drawn to scale showing property lines, existing structures on the lot, **existing utilities above or below ground**, proposed solar panel location with respect to property lines, and dimensions of the proposed solar panel.

**8.12.04 Permit Fees:**

Permit fees are required. This permit fee shall be paid prior to the issuance of the zoning permit **and will be determined by the Board of Commissioners. Present individual fee is \$ 100.00.**

**8.12.05 Preexisting Solar Panels:**

Notwithstanding noncompliance with the requirements of this section, a solar panel erected prior to the adoption of these Regulations, pursuant to a valid building permit issued by the County, may continue to be utilized so long as it is maintained in operational condition.

**8.12.06 Individual Solar Conversion systems (ISCS)****A. General requirements for ISCS :**

1. A structure mounted ISCS may project two feet into the front yard, six feet into the rear yard, and two feet into the side yard:
2. A ground mounted ISCS may be in the rear yard. It must be located at least five feet from the rear lot line and not closer than one foot to any existing easement as measured from the closest point of the structure including its foundation and anchorage.
3. All ground mounted ISCS shall have an executed Solar Access Easement on the side yard from any neighboring properties. Said easement shall be filed with the Otoe County Register of Deeds office against the property where it is located and said easement shall stay in place as long as the ground mounted ISCS is in place and operational.

**B. Structural Requirements:**

The physical structure and connections to existing structures shall conform to the applicable local, state and federal codes and requires a Nebraska Professional Engineer with a licensed Certificate doing business in Nebraska.

**C. Plot Plan:** The application for a permit shall be accompanied by a plot plan drawn to scale showing property lines, existing structures on the property, the proposed ISCS location with respect to property lines, and dimensions of the proposed ISCS.

**D. Witness Test:** Prior to the interconnected operation of any ISCS that has potential to generate electricity, a final inspection must be performed by the electric utility or their agent to insure the ISCS was constructed as designed and the system is safe to interconnect.

**8.12.07 Neighborhood Solar Conversion Systems (NSCS)**

- A. The NSCS shall be designed and constructed for no more than the anticipated maximum solar usage in the designated neighborhood.
- B. A net metering agreement between the developer, Homeowners Association, and other entity or electric utility shall exist in case of excess electricity. No net excess power generated shall be sold to or used outside the agreed upon neighborhood or development.
- C. All ground mounted NSCS's shall have an executed solar access easement from any neighboring properties. The said easement shall be filed with the Otoe County Register of Deeds. The said easement shall stay in place as long as the ground mounted NSCS is in place and operating.
- D. The developer shall provide Otoe County with all solar easements established; however, Otoe County shall not be responsible for enforcing said easements.
- E. All solar easements shall be enforced by an established Homeowners Association for the development/neighborhood.
- F. An access easement between the developer, Homeowners Association, any other necessary entity and the electric utility shall exist in case of an emergency.
- G. The NSCS shall be set on its own lot within the neighborhood/development.
- H. The developer shall provide evidence that the project meets commonly accepted management practices for avian, wildlife, and environmental protections in place at the time of the application process.
- I. The NSCS shall comply with any specific requirements of the fire district, and all operations shall have signage stating specific language as outlined by the electric utility.
- J. All connections to the uses within the neighborhood shall be made underground, and a ground mounted NSCS shall be protected with fencing.
- K. Whenever an NSCS is part of a proposed subdivision, the developer shall outline the specific lot or outlot

where the NSCS will be placed. Specific developments/neighborhoods initially designed with an NSCS shall identify all solar easements on the preliminary and final plats and shall be recorded the same as other utility easements. In addition, the subdivision plats shall indicate the location of all proposed underground conduits serving the other lots in said subdivision.

**Section 8.13 Solar Farms: - Commercial Solar Conversion System (CSCS)**

**Applicability**

The purpose of this subsection is to provide standards for fixed-panel photovoltaic solar farms consisting of ground-mounted solar panels that capture energy from the sun and convert it to electricity. The provisions of this section are based on a ground-mounted photovoltaic facility using a rammed post construction technique and panels that support the flow of rainwater between each module and the growth of vegetation beneath the arrays and limiting the impacts of stormwater runoff. The rammed post construction technique allows for minimal disturbance to the existing ground and grading of the site. Based on the assumed solar farm design, Otoe County finds the use to be low intensity with minimal trip generation, low amounts of impervious cover, and low emission thus the use is compatible in non-urbanized, low-density areas with other agricultural and scattered industrial uses.

**8.13.01**

**Definitions**

The following definitions pertain specifically to this section of the Resolution.

**AG-1 : Agricultural Preservation District** (See Article 4: Zoning Districts)

**F-1 : Flex District**

**TA-1 : Transitional Agriculture District**

**Development Limit Definition :** No more than 1% of the agricultural land in Otoe County shall be used for Commercial Solar

**Fencing :** Fencing up to eight feet in height is permitted, provided the fencing material is predominantly open. For security and safety purposes, chain-link fencing and wildlife fence or similar is required.

**Non-Participating Landowners :** Any landowner who has not signed an agreement with the project owner or developer.

**Owner :** The entity or individual that has ownership over a solar energy system.

**Participating Landowner :** A landowner who has signed an agreement with a project owner or developer.

**Screening :** A fence, wall, hedge, earth berm, buffer are or any combination of these provided to create a visual and/or physical separation between certain land uses. Screening may be located on the property line or elsewhere on the site.

**Solar Access:** A property owner's right to have sunlight across any real property for any solar energy device.

**Solar Collector:** An assembly, structure, or design, including passive elements, used for gathering, concentrating or absorbing direct or indirect solar energy, specifically designed for holding a substantial amount of useful thermal energy and to transfer that energy to a gas, solid or liquid or to use that energy directly; this may include, but is not limited to, a mechanism or process used for gathering solar energy through thermal gradients, or a component used to transfer thermal energy to a gas, solid or liquid or to convert into electricity.

**Solar Conversion System ( NSCS) :** An assembly, structure, or design used for gathering, concentrating, or absorbing direct or indirect solar energy, specifically designed for holding a substantial amount of useful energy and transferring that energy to a gas, solid, or liquid or using that energy directly. This may include, but is not limited to, a mechanism or process used for gathering solar energy, or a component used to transfer thermal energy to a gas, solid or liquid or to convert it to electricity.

**Solar Conversion System, Commercial (CSCS)** A CSCS with the following characteristics: a series of solar modules and equipment connected, with a project area greater than one acre (1), to commercially supply the converted energy to a community or power grid.

**Solar Energy:** Radiant energy received from the sun at wavelengths suitable for heat transfer, photosynthetic use, or photovoltaic use.

**Solar Energy System:** A system that uses the power of the sun to capture and store energy and reduce on site consumption of utility power.

**Solar Energy System, Freestanding:** A solar energy system that is not attached to another structure and is ground mounted.

**Solar Energy System, Joint:** A solar energy collector or storage mechanism that supplies energy for structures or processes on more than one lot or in more than one dwelling unit or leasehold, but not to the general public and involves at least two owners or users.

**Solar Sky space:** The maximum three-dimensional space extending from a solar collector to all positions of the sun necessary for efficient use of the collector.

- Where a solar energy system is used for heating purposes only, solar sky space shall mean the maximum three-dimensional space extending from a solar energy collector to all positions of the sun between nine o'clock (9:00) A.M. and three o'clock (3:00) P.M. local apparent time from September 22 through March 22 of each year.
- Where a solar energy system is used for cooling purposes only, solar sky space shall mean the maximum three-dimensional space extending from a solar collector to all positions of the sun between eight o'clock (8:00) A.M. and four o'clock (4:00) P.M. local apparent time from March 23 through September 21 of each year.

**Solar Sky Space Easement:** A right, expressed as an easement, covenant, condition, restriction or other property interest in any deed, will or other instrument executed by or on behalf of any landowner or in any order of taking, appropriate to protect the solar sky space of a solar collector at a particularly described location to forbid or limit any or all the following where detrimental to access to solar energy: structures on or above ground; vegetation on or above ground; or other activities. Such right shall specifically describe a solar sky space in three-dimensional terms in which the activity, structures or vegetation are forbidden or limited or in which such an easement shall set performance criteria for adequate collections of solar energy at a particular location.

**Solar Storage Mechanism:** Equipment or elements such as piping and transfer mechanisms, containers, heat exchangers or controls thereof and gases, solids, liquids or combinations thereof that are utilized for storing solar energy, gathered by a solar collector, for subsequent use.

**Transmission Lines:** Power lines used to carry electricity from collection systems or substations over long distances.

## 8.13.03

**Site Development Standards.**

1. Lot coverage: No more than five percent of the gross site area shall be occupied by enclosed buildings and structures.
2. Height: The average height of the solar panel arrays shall not exceed 18 feet.
3. Landscaping Buffer: The primary use of the property shall determine the buffer requirement. Where a ground-mounted photovoltaic solar farm is the primary use the property shall be considered agricultural for the purposes of buffer requirements. There is no requirement for screening from public streets.
4. Stormwater Management: Fixed panel solar arrays shall be considered pervious and any Requirement of detention shall be considered based on impervious cover. The impervious cover calculation shall include the support posts of the panels, any roads or impervious Driveway surfaces, parking areas and buildings on the site.
5. Subdivision: A property developed pursuant to this subsection shall be required to plat however water and sewer connections shall not be required. Suitable fire department access shall be required.
6. Signage: Signage shall conform to Article 7 of this Resolution as well as any sign limitations of the zoning district.
7. Customer owned on-site power lines shall be buried except where connecting to existing overhead utility lines. This requirement shall not apply to fiber optic connections.
8. Fencing: Due to the unique security requirements of this land use, and to facilitate the Educational value of seeing this land use, fencing up to eight (8) feet in height is permitted provided the fencing material is predominantly open as defined in Appendix A.
9. All State and Federal codes and provisions not specified in this subsection are required including but not limited to tree preservation, traffic impact analysis and historic preservation.
10. **CSCS are allowed subject to a conditional use permit in the AG-1, TA-1, and F-1 Zoning Districts**
11. **The required setbacks shall be 1000 feet from the CSCs panels and equipment to the nearest edge of a non-participating residence. There shall be no setbacks to participating residence. A 75 foot side and rear yard setback shall apply from the CSCS panels and equipment to the lot line. There shall be no side or rear yard setback for any lot line where the CSCS is located on adjacent or contiguous participating landowner parcels.**
12. **Screening: The CSCS owner may use existing natural features, topography, and vegetation to provide visual screening. In the AG-1 District, the CSCS owner shall provide visual screening only along the portion of a lot line abutting a non-participating residential use. In the TA-1 and Flex-1 districts, the CSCS owner shall provide visual screening along the portion of a lot line abutting a non- participating residential use. at least 75 feet in both directions and until the lot lines meet a public right-of-way. Screening is not required where the CSCS abuts a participating residential use or where the homeowner requests a waiver of screening by written notice to the County Zoning Administrator.**
13. **A sightline study will be conducted by a Nebraska Professional Engineer with a licensed Certificate doing business in Nebraska.**
14. **Noise**  
**No noise shall exceed 40 dba at the nearest structure occupied by humans. No solar panel system shall exceed 40 dba during daytime and 37 dba at night (night hours are 8:00 P.M. to 8:00 A.M.) at the nearest residence of a non-non-participating property or: Three (3) dba maximum 10- minute equivalent continuous sound level allowed above ambient noise level.**

15. **Screening Maintenance:** The CSCS owner shall maintain screening to establish healthy vegetative material and remove and replace damaged or dead plantings as soon as possible. In the event of any such defect, the Zoning Administrator shall confer with the CSCS owner to determine the necessity and substance of the remedy.
16. **On-site power lines** shall be buried where reasonably feasible, except where connecting to overhead utility lines. This requirement shall not apply to lines transmitting power from a parcel on which the CSCS is located to the point of intersection to existing utility lines, including lines running between parcels on which the CSCS is located for collection of electricity for transmission to the point of interconnection to existing overhead utility lines.
17. **Insurance:** A holder of a permit shall secure and maintain a CSCS public liability insurance for personal injuries, death and property damage, and umbrella coverage for the duration of the permit.
  - A. **Commercial General Liability** covering personal injuries, death, and property damage: \$1,000,000 per occurrence / \$ 2,000,000 aggregate
  - B. **Automobile Coverage:** \$ 1,000,000 per occurrence / \$2,000,000 aggregate.
  - C. **Workers' Compensation and disability:** Statutory amounts
  - D. **The insurance policies shall contain an endorsement obligating the insurance company to furnish to the Otoe County Clerk with at least 30 days written notice in advance of the cancellation or reduction of the insurance amounts.**
18. **Roads:** The Otoe County Road Department shall receive a set of detailed plans showing the road and bridges affected by the construction of the solar energy project. Any improvements needed on the roads will be paid for by the CSCS owner. All roads and bridges shall be in good working order before, during and after the project is completed as determined by the Otoe County Roads Department.

#### 8.13.04 **Districts**

Ground-mounted fixed-panel photovoltaic solar farms may be allowed upon the approval of a Conditional Use Permit as established in Article 5 of this Resolution.

#### 8.13.05 **Submittal Requirements:**

Conditional Use Permits are required for solar farms. Plans shall contain the following:

1. A plot plan, drawn to scale, of the property indicating the total site acreage, landscape and buffer areas, tree preservation, location of all structures, the proposed location of the solar panels, the distances of the solar panels to structures on the property as well as distances to the property lines.
2. The plot plan shall include any roads, electric lines and/ or overhead utility lines.
3. A description of the electrical generating capacity and means of interconnecting with the electrical grid as coordinated and pre-approved with the appurtenant Power District.
4. A copy of the interconnection agreement with the local electric utility or a written explanation outlining why an interconnection agreement is not necessary.
5. Drawings or blueprints of solar panels and arrays in conjunction with the application for a building permit for a solar farm/solar power plant.
6. Structural engineering analysis for a solar panel, array and its foundation, as applicable.
7. Manufacturer's recommended installations, if any; and
8. Documentation of land ownership and/or legal authority to construct on the property.
9. A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event they are not in use for 12 consecutive months. The 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. **The Board of Commissioners will require the establishment of an escrow account to ensure proper decommissioning.**

10. **A Conditional use fee of \$ 600.00 per individual site or application.**

11. **A building permit fee of \$ 1500.00 per every APPLICATION that comes before the planning and Zoning board.**

**8.13.06 Compliance with Other Regulations:**

1. Zoning permit applications for solar farms shall be accompanied by a line drawing of electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the State's adopted electrical code and that has been pre-approved by the associated power district meeting their Distribution Generation Requirements and Guidelines; and
2. This subsection does not waive any requirements of any state or Federal codes, electrical codes or other technical codes as applicable.

**8.13.07 DISCONTINUATION**

A solar farm shall be considered abandoned after **two years** without energy production. The Owner of the CSCS shall remove all solar equipment and appurtenances within 90 days of abandonment.

- A. **A cost estimate for the decommissioning of the CSCS and any estimated resale or salvage value shall be provided at the cost of the applicant. The applicant shall provide Otoe County a revised and updated decommissioning cost estimate every five years from the date of approval.**
- B. **A decommissioning plan to ensure that facilities are properly removed after their useful life. The plan shall include provisions for removal of all structures and foundations to a depth of (4) four feet, restoration of soil and vegetation and a plan ensuring the financial resources will be available to fully decommission the site. Upon the five-year interval when the decommissioning cost estimate set forth in this section shows a positive net decommissioning cost, Otoe County SHALL require the Establishment of an escrow account to ensure proper decommissioning. The net surety amount shall account for the estimated resale and salvage value of materials. An escrow account shall be required by the Board of Commissioners to cover any reasonable costs of a Professional Consultant.**



**Section 8.14 Performance Standards for Industrial Uses****8.14.01 Physical Appearance:**

All operations shall be carried on within an enclosed building except that new materials or equipment in operable condition may be stored in the open. Normal daily wastes of an inorganic nature may be stored in containers not in a building when such containers are not readily visible from a street. The provisions of this paragraph shall not be construed to prohibit the display of merchandise or vehicles for sale or the storage of vehicles, boats, farm machinery, trailers, mobile homes, or similar equipment when in operable condition.

**8.14.02 Fire hazard:**

No operation shall involve the use of highly flammable gasses, acid, liquids, grinding processes, or other inherent fire hazards. This provision shall not be construed to prohibit the use of normal heating fuels, motor fuels and welding gasses when handled in accordance with other regulations of Otoe County.

**8.14.03 Noise:**

No operation shall be carried on which involves noise in excess of the normal traffic noise of the adjacent street at the time of the daily peak hour of traffic volume. Noise shall be measured at the property line and when the level of such noise cannot be determined by observation with the natural senses, a suitable instrument may be used and measurement may include breakdowns into a reasonable number of frequency ranges.

**8.14.04 Sewage and Liquid Wastes:**

No operation shall be carried on which involves the discharge into a sewer, water course, or the ground, liquid waste of any radioactive or poisonous nature or chemical waste which are detrimental to normal sewage plant operation or corrosive and damaging to sewer pipes and installations.

**8.14.05 Air Contaminants:**

1. Air Contaminants and smoke shall be less dark than designated Number One on the Ringleman Chart as published by the United States Bureau of Mines, except that smoke of a density designated as Number One shall be permitted for one four-minute period in each one-half hour. Light colored contaminants of such a capacity as to obscure an observer's view to a degree equal to or greater than the aforesaid shall not be permitted.
2. Particulate matter of dust as measured at the point of emission by any generally accepted method shall not be emitted in excess of two tenths (0.2) grains per cubic foot as corrected to a temperature of 500 degrees Fahrenheit, except for a period of four minutes in any one-half hour, at which time it may equal but not exceed six tenths (0.6) grains per cubic foot as corrected to a temperature of 500 degrees Fahrenheit.
3. Due to the fact that the possibilities of air contamination cannot reasonably be comprehensively covered in this section, there shall be applied the general rule that there shall not be discharged from any sources whatsoever such quantities of air contaminants or other material in such quantity as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public in general; or to endanger the comfort, repose, health, or safety of any such considerable number of persons or to the