

BUCHANAN COUNTY PLANNING AND ZONING
St. Joseph, Missouri

Denise K. Embrey
Director of Planning & Zoning
411 Jules Room 204
St. Joseph, MO 64501
816-271-1429



James Whitson, Chairman
Robert J. Atha, Vice Chairman
Twyla Morgan, Secretary

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To whom it may concern:

On June 7th, 2013 the Buchanan County Commission adopted a Court Order regarding Solar Energy Conversion Systems (SECS) and Accessory Solar Energy Systems (ASES) to be a part of the Buchanan County Zoning Orders.

A packet is enclosed with the rules, regulations and definitions for your reference. The application must be filled out in the Buchanan County Zoning Office.

If you should have any questions or concerns, please feel free to call this Office.

Sincerely,



Denise K. Embrey
Planning & Zoning Director

BUCHANAN COUNTY, MISSOURI

SOLAR ENERGY CONVERSION SYSTEMS

1. PURPOSE: To set forth standards that will assist property owners and industry providers in the determination of the proper installation and placement of solar related equipment with the understanding that solar capabilities may not be possible or feasible on all properties within Buchanan County, Missouri.

2. DEFINITIONS.

ACCESSORY SOLAR ENERGY SYSTEM: An area of land or other area used for a solar collection system used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power and primarily for on-site use. An accessory solar energy system consists of one (1) or more free standing ground or roof mounted solar arrays or modules or solar related equipment and is intended to primarily reduce on-site consumption of utility power or fuels.

GLARE: The effect produced by light with an intensity sufficient to cause annoyance, discomfort or loss in visual performance and visibility.

PRINCIPAL SOLAR ENERGY SYSTEM: An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for off-site use. Principal solar energy systems consist of one (1) or more free-standing ground or roof mounted solar collector devices, solar related equipment and other structures and buildings including light reflectors, concentrators and heat exchangers, substations, electrical infrastructure, transmission lines and other appurtenant structures.

SOLAR EASEMENT: A solar easement means a right, expressed as an easement, restriction, covenant or condition contained in any deed, contract or other written instrument executed by or on behalf of any landowner for the purpose of assuring adequate access to direct sunlight for solar energy systems.

SOLAR ENERGY: Radiant energy (direct, diffuse and/or reflective) from the sun.

SOLAR PANEL: That part or portion of a solar energy system containing one (1) or more receptive cells or modules, the purpose of which is to convert solar energy for use in space heating or cooling, for water heating and/or for electricity.

SOLAR RELATED EQUIPMENT: Items including a solar photovoltaic cell, module, panel, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing and possibly foundations or other structures used for or intended to be used for collection of solar energy.

1. SOLAR ARRAY: A grouping of multiple solar modules with the purpose of harvesting solar energy.

2. SOLAR CELL: The smallest basic solar electric device which generates electricity when exposed to sunlight.

3. SOLAR MODULE: A grouping of solar cells with the purpose of harvesting solar energy.

SECTION 3: ACCESSORY SOLAR ENERGY SYSTEMS (ASES)

A. REGULATIONS APPLICABLE TO ALL ACCESSORY SOLAR ENERGY SYSTEMS:

1. ASES shall be permitted as a use by right in all zoning districts.

2. EXEMPTIONS

a. ASES constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of these regulations. Any physical modification to an existing ASES whether or not existing prior to the effective date of this Section that materially alters the ASES shall require approval under this regulation. Routine maintenance or like-kind replacements do not require a permit.

3. All on site utility, transmission lines and plumbing shall be placed underground to the extent feasible.

4. The owner of an ASES shall provide Buchanan County Planning and Zoning written confirmation that the public utility company to which the ASES will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection. Off-grid systems shall be exempt from this requirement.

5. The display of advertising is prohibited except for reasonable identification of the manufacturer of the system.

6. Glare

a. All ASES shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways.

b. The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

7. Solar Easements

a. Where a subdivision or land development involves the use of solar energy systems, solar easements may be provided. Said easements shall be in writing, and shall be subject to the same conveyance and instrument recording requirements as other easements.

b. Any such easements shall be appurtenant; shall run with the land benefited and burdened; and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easement shall include but not be limited to:

i. A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or the hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed.

ii. Restrictions on the placement of vegetation, structures and other objects which may impair or obstruct the passage of sunlight through the easement;

iii. Enumerate terms and conditions, if any, under which the easement may be revised or terminated.

iv. Explain the compensation for the owner of the real property subject to the solar easement for maintaining the easement and for the owner of the real property benefitting from the solar easement in the event of interference with the easement.

8. Prior to the issuance of a permit, applicants must acknowledge in writing that the issuing of said permit for a solar energy system shall not and does not create in any other property owner, its, his, her or their successors and assigns in title or create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on any other property, unless a solar easement is established according to the provisions of these regulations.
9. Screening – The support structure for any ASES shall be 100% screened from all adjacent rights-of-way and property that is residentially zoned or used for residential purposes. Screening may consist of skirting, landscaping, privacy fence or other type of fencing.
10. No part of a solar energy system shall be used to display advertising, including signage, streamers, pennants, spinners, reflectors, ribbons, tinsel, balloons, flags, banners or similar materials.

11. Permit Requirements

- a. Permit applications shall be accompanied by drawings showing the location of the system on the building or property, including property lines.
- b. The permit shall be revoked if the ASES, whether new or pre-existing, is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the ASES not to be in conformity with these regulations.

12. ROOF MOUNTED AND WALL MOUNTED ACCESSORY SOLAR ENERGY SYSTEMS:

1. A roof or wall mounted ASES may be located on a principal or accessory building.
2. Roof mounted ASES may exceed the maximum building height specified for principal or accessory buildings within the applicable zoning district by no more than three (3) feet.
3. Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying zoning districts.
4. Solar panels shall not extend beyond any portion of the roof edge.
5. Roof mounted solar panels shall be located only on rear or side-facing roofs as viewed from any adjacent highway or road unless the applicant demonstrates that, due to solar access limitations, no location exists other than the road or highway facing roof, where the solar energy system can perform effectively.
6. For roof mounted systems and wall mounted systems, the applicant shall provide evidence that the plans comply and that the roof or wall is capable of holding the load imposed on the structure.

13. GROUND MOUNTED ACCESSORY SOLAR ENERGY SYSTEMS:

1. SETBACKS

- a. The minimum yard setbacks from side and rear property lines shall be equivalent to the accessory structure setback in the zoning district.
- b. A ground mounted ASES shall not be located in any front yard.

2. HEIGHT

- a. Freestanding ground mounted ASES shall not exceed the maximum accessory structure height in the underlying zoning district.
- 3. Appropriate safety/warning signage concerning voltage shall be placed at ground mounted electrical devices, equipment and structures. All electrical control devices associated with the ASES shall be locked to prevented unauthorized access or entry.
- 4. Ground mounted ASES shall not be placed within any legal easement or right-of-way location, or be placed within any storm water conveyance system or in any other manner that would alter or impede storm water runoff from collecting in a constructed or natural storm water conveyance system.

14. CAVEAT: Property owners subject to deed restrictions and covenants and/or Homeowner's Association Rules should check to determine if solar energy panels and structures are permitted on the subject tract.

SOLAR ENERGY CONVERSION SYSTEMS (SECS)

ACCESSORY SOLAR ENERGY SYSTEMS (ASES)

RULES AND REGULATIONS

- 1. Solar panels, modules, photovoltaic panels and any other solar related equipment shall follow the same requirements as their respective zoning district.**
- 2. Support structures for ground level panels must be screened, using lattices, fencing or landscaping from view of right-of-way and residential properties.**
- 3. Roof-mounted ASES may exceed the maximum building height specified for principal or accessory buildings within the applicable zoning district by no more than three (3) feet.**
- 4. Panels may not be placed in front yards, except for primary use in light and heavy industrial districts.**
- 5. Panels must be placed to minimize glare on adjacent properties or roadways.**
- 6. There shall be a permit fee of one hundred dollars (\$100.00) for any solar system.**
- 7. Caveat: Property owners subject to deed restrictions and covenants and/or Homeowner's Association rules should check to determine if solar energy panels and systems are permitted.**