



# Land Use

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## Memorandum

To: Land Use staff, Referral Agencies, LUCode Listserv, Interested members of the public

From: Abby Shannon Janusz

Date: March 21, 2011

Re: Planning Commission action on Docket DC-11-0001

### **DC-11-0001: SOLAR GARDENS AND COMMERCIAL SOLAR ENERGY SYSTEMS**

Proposed Land Use Code text amendments to better facilitate statewide Solar Gardens legislation and to allow small to medium sized commercial scale solar energy power generation facilities. This docket will propose amendments to Art. 4-514(J) Small Solar Energy Systems and 4-514(E) Major Facility of a Public Utility; and will propose a new use classification for Medium Solar Energy Systems or Solar Gardens as a principal use.

On March 16, 2011, Planning Commission recommended approval of certain Land Use Code text amendments in support of Solar Gardens and commercial-scale solar energy systems. Planning Commission recommended some changes to staff's recommendation. This document includes the Planning Commission-approved language. The Board of County Commissioners is scheduled to discuss this docket at a public hearing on Tuesday, April 19, 2011, at 2:00 pm. The following proposed Code amendments may be edited based on staff discussion and input from the public. A final staff recommendation will be available by April 13, 2011.

Existing code language is indicated with a standard font style. Proposed changes have been indicated in strikethrough (indicating it would be deleted) or underline (indicating this language would be added).

### **Art 4-514(J) Small Solar Energy System or Solar Garden**

1. Definition: A system composed of a solar energy collector which may include an energy storage facility, and components for the distribution of transformed energy, and which may be used for one or more users ~~on neighboring parcels~~.
2. Districts Permitted: By site plan review in all districts if the system will disturb less than ~~5,000~~ 1 acre of land. By ~~limited impact special review~~ special review in all districts if the system will disturb ~~5,000 square feet but not more than 7,500 square feet~~ 1 acre but less than 4 acres of land. ~~By special review in GI, LI, and C if the system will disturb 7,500 square feet or more.~~
3. Parking Requirements: ~~None~~ To be determined through the review
4. Loading Requirements: None
5. Additional Provisions:
  - a. This use is required to be located on a building lot or an outlot platted for this purpose.
  - b. If necessary for the system's effectiveness, ground-mounted solar energy collectors may be located within the minimum lot line setbacks for the subject property zoning district and within any applicable major road supplemental setback without the

need for a variance, provided that the solar energy collector is located no less than five feet from lot lines and no less than 15 feet from road rights-of-way.

- c. If necessary to reduce visual impact or to overcome exceptional or extraordinary physical circumstances of the subject property, the maximum acreage may be exceeded by no more than 50%.
- d. Ground-mounted solar energy collectors may not be located within utility easements or ditch easements.
- e. ~~This use shall not have a significant adverse visual impact on the natural features or neighborhood character of the surrounding area and shall be located to minimize glare on adjacent properties and roadways.~~ This use shall be located to minimize glare on adjacent properties and roadways so as to reduce the adverse visual impact on the natural features or neighborhood character of the surrounding area.
- f. Applications shall be reviewed ~~according to the required review criteria~~ with special consideration to lands identified as Environmental Resources in the Boulder County Comprehensive Plan.
- g. Roof-mounted systems proposed as a principal use may be mounted on any legal structure. They will be reviewed through the building permit process. Roof-mounted systems shall be mounted as flush as possible to the roof. In order to achieve proper solar orientation, panels may exceed the roofline by up to five feet or the maximum height of the zone district by up to five feet (whichever is more restrictive).
- h. This use classification shall be reviewed by staff and discussed at a public meeting with the Board of County Commissioners on or around [3 years after effective date of amendment].

(New Section in Art. 4-514)

**Medium Solar Energy System or Solar Garden**

1. Definition: A system composed of a solar energy collector which may include an energy storage facility, and components for the distribution of transformed energy, and which may be used for one or more users.
2. Districts Permitted: By special review in GI, LI, C, A, F if the system will disturb more than 4 acres of land but do not meet the Land Use Code definition of Power Plant
3. Parking Requirements: To be determined through the review
4. Loading Requirements: None
5. Additional Provisions:
  - a. Commercial solar energy systems in the Forestry zone district will be permitted only if the applicant demonstrates the area used has been contaminated or damaged such that it is not suitable for agricultural, forestry, or residential uses. These areas may include but are not limited to former landfills, brownfields, Superfund sites, etc.
  - b. Commercial solar energy systems in the Agricultural zone district will be permitted only if the area is not designated as Agricultural Lands of National or State Significance by the Boulder County Comprehensive Plan and the applicant demonstrates the area used is of marginal value for agricultural purposes.
  - c. This use is required to be located on a building lot or an outlot platted for this purpose.
  - d. This use cannot be located in Critical Wildlife Habitat areas as designated by the Boulder County Comprehensive Plan.
  - e. If necessary for the system's effectiveness, ground-mounted solar energy collectors may be located within the minimum lot line setbacks for the subject property zoning district and within any applicable major road supplemental setback without the

need for a variance, provided that the solar energy collector is located no less than five feet from lot lines and no less than 15 feet from road rights-of-way.

- f. Ground-mounted solar energy collectors may not be located within utility easements or ditch easements.
- g. This use shall be located to minimize glare on adjacent properties and roadways so as to reduce the adverse visual impact on the natural features or neighborhood character of the surrounding area.
- h. Roof-mounted systems proposed as a principal use may be mounted on any legal structure. They will be reviewed through the building permit process. Roof-mounted systems shall be mounted as flush as possible to the roof. In order to achieve proper solar orientation, panels may exceed the roofline by up to five feet or the maximum height of the zone district by up to five feet (whichever is more restrictive).
- i. This use classification shall be reviewed by staff and discussed at a public meeting with the Board of County Commissioners on or around [3 years after effective date of amendment].

#### **4-514 (E) Major Facility of a Public Utility**

- 1. Definition: Any electric transmission lines, power plants, or substations of electric utilities; major gas regulator stations, transmission and gathering pipelines, and storage areas of utilities providing natural gas or petroleum derivatives; and their appurtenant facilities.
- 2. Districts Permitted: By review under the regulation of areas and activities of state interest, or special review and location and extent review in all districts. Power plants are by review under the regulation of areas and activities of state interest in GI, LI, C, A, F
- 3. Parking Requirements: To be determined through the review
- 4. Loading Requirements: None
- 5. Additional Provisions:
  - a. This use is not required to be located on a building lot, nor comply with the minimum lot size requirement for the district in which it is located.
  - b. Power plants in the Agricultural or Forestry zone districts will be permitted only if the applicant demonstrates the area used has been contaminated or damaged such that it is not suitable for agricultural, forestry, or residential uses. These areas may include but are not limited to former landfills, brownfields, Superfund sites, etc.
  - c. Power plants cannot be located on areas with the following Boulder County Comprehensive Plan designations: Agricultural Lands of National Significance, Agricultural Lands of State Significance, and Critical Wildlife Habitat.

#### **4-101 (F)(5) Forestry**

Medium Solar Energy Systems, Small Wind-Powered Energy Collectors Systems and Small Solar Energy Collectors Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

#### **4-102 (F)(5) Agricultural**

Medium Solar Energy Systems, Small Wind-Powered Energy Collectors Systems and Small Solar Energy Collectors Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-103 (F)(5) Rural Residential**

Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-104 (F)(5) Estate Residential**

Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-105 (F)(5) Suburban Residential**

Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-106 (F)(6) Multifamily**

Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-107 (F)(4) Manufactured Home Park**

Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-108 (F)(6) Transitional**

Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-109 (F)(6) Business**

Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-110 (F)(6) Commercial**

Medium Solar Energy Systems, Small Wind-Powered Energy ~~Collectors~~ Systems and Small Solar Energy ~~Collectors~~ Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-111 (F)(6) Light Industrial**

Medium Solar Energy Systems, Small Wind-Powered Energy Collectors Systems and Small Solar Energy Collectors Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-112 (F)(6) General Industrial**

Medium Solar Energy Systems, Small Wind-Powered Energy Collectors Systems and Small Solar Energy Collectors Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

**4-117 (F)(5) Mountain Institutional**

Small Wind-Powered Energy Collectors Systems and Small Solar Energy Collectors Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

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**Next Steps**

The Board of County Commissioners will consider these proposed amendments at a public hearing on Tuesday, April 19, 2011, at 2:00 pm. Let us know what you think! You are encouraged to submit comments and suggestions related to these proposals. Written testimony received by Tuesday, April 12, 2011 at 9:00 am will be included in the staff materials sent to the Board and posted online. Please send your comments to [ajanusz@bouldercounty.org](mailto:ajanusz@bouldercounty.org).