

February 22, 2022

**To:** Board of County Commissioners  
Penny Post oak Ferguson, County Manager

**Fr:** Jay C. Leipzig, AICP, CEcD, Director  
Sean Pendley, AICP, Deputy Director  
Karen Miller, Senior Planner

**Re:** Feb 24<sup>th</sup> Committee of the Whole to consider Regulation of Solar Facilities

In order to plan for present and future energy needs while appropriately identifying and managing the unique impacts of Utility-Scale Solar Facilities (USSFs), the Planning Commission has thoroughly studied the topic of Solar Facilities and has recommended amendments to the comprehensive plan and the zoning regulations for the regulation of Solar Facilities for the Board's consideration.

Over the course of a year and 9 public meetings (7 of which entertained public comment including city comment) and a public hearing, the Planning Commission with the assistance of a consultant, The Berkley Group, worked to identify USSF characteristics (i.e. large scale, wide geographic distribution, and long life spans) and the corresponding impacts on, among other things, future city development, rural character and open space, and the environment. Once land use policies were established, the Planning Commission drafted zoning regulations to appropriately control and manage these important priorities.

As indicated in the draft comprehensive plan amendments, USSFs can be an appropriate use within the county if properly managed. However, because these facilities pose unique challenges to the unincorporated areas and adjacent cities, county staff addressed drafting regulations with caution and with a desire for moderation, lest the unincorporated areas become inundated with this single use. In keeping with this philosophy, staff's initial recommendations were conservative and meant as a starting point for discussion. As a result, there was significant input and several adjustments in the intervening meetings between the first drafts and the Planning Commission's final recommendation. (See the attached table for a summary of adjustments.)

**Recommended Zoning Regulation Amendments:** The following are highlights of draft Utility-Scale Solar Facility Development Standards that would be required as part of a conditional use permit designed to uphold the above policies:

**Selected Recommended Development Standards regulating a new Solar Facility Conditional Use Permit:**

**1. Term: Up to 20 years.**

- The typical planning period (e.g. the life of a comprehensive plan) is 20 years, which is the interval of time in which cities and counties tend to project land uses into the future and in which they tend to predict their growth.

- CUP terms coordinate with the city buffer recommendation and are intended to accommodate future growth while ensuring that this type of development is compatible with the development patterns of the fringe cities.
- Industry leases tend to run for 25 or 30 years, which has been asserted to impact financing.

**2. Maximum Project Area: 1,000 acres (1.6 sq. mi.).**

- The current draft regulations allow the solar facility to be a collection of noncontiguous parcels which are separated by not more than ½-mile.
- A maximum area of 1,000 acres is more in line with early versions of USSF projects in other jurisdictions. However, as recommended by the consultant, projects exceeding 1,000 acres is the future trend for USSFs and 2,000 acres is considered conservative in this approach.

**3. Distance from other Solar Facilities: At least 2 miles.**

- To avoid concentrations of solar facilities in close proximity to one another, a minimum distance of 2 miles is recommended between different USSFs.

**4. Distance from Cities: Greater than 2 miles. Excludes city “islands” that are less than 80 acres in size. Waiver available, upon review and approval by the BOCC with findings that the waiver does not conflict with planned uses for the subject area.**

- The draft regulations include a minimum distance requirement from cities to accommodate future growth. Some of the cities are requesting specific buffers to match their future growth areas:
  - Edgerton requests 3 miles,
  - Gardner requests 2 miles, and
  - Overland Park requests applying regulation on a watershed basis (which is the extent of a sewer district) and requests omission of USSFs from the Blue River watershed, which is their future sewer and growth area.

**5. Development Ratio: PV Panel Coverage/Project Area up to 70%.**

- The intent for this maximum area requirement is to limit the area for solar panel use in relation to the total Project Area.
- One of the primary purposes of the coverage requirement is to support stormwater management and preservation of existing vegetation.
- The consultant engaged by the County recommends the 70% coverage requirement and does not recommend higher (e.g. 80% or 90%) coverage ratios in order to, among other reasons, avoid difficulties controlling stormwater.

**6. Setbacks: Photovoltaic panels and fencing at least 50 ft. from Project Boundary or Official Street Line and at least 250 ft. from existing dwellings. Waiver available upon review and approval by the BOCC.**

- This requirement is intended to work in combination with screening, coverage ratio and fencing requirements.
- 50 ft. is the required distance of structures from roads in the Rural District, which includes buildings for agricultural purposes.
- Setback requirements have multiple purposes:

- Provide open space that upholds rural character or contributes to the character of a neighborhood.
- Provide buffering between sensitive areas or structures such as dwellings and other views or activities.
- Provide areas in which to locate utilities such as water, gas, neighborhood sewer, and telephone lines.
- Several property owners have pointed out that they anticipate that their property will be surrounded on several sides by a potential USSF. This issue can be intensified by land fragmentation, which occurs when a single solar facility consists of multiple spatially separated parcels. Additional setback requirements have been recommended to address this situation.

**7. Screening: Roads, residential zoning and existing dwellings screened from view of photovoltaic panels, equipment and storage.** *Waiver available upon review and approval by the BOCC.*

- The draft requires views from abutting roads, parcels with residential zoning and existing dwellings to be screened using a combination of existing vegetation, landscaping and fencing.

**8. Battery Energy Storage Facilities:**

- The draft includes locational criteria; construction, maintenance, operation and inspection requirements; a requirement to follow adopted codes; and an additional two adopted standards to supplement the County’s building and fire codes. Adoption of these two standards requires a public hearing in front of the Board.

**9. Decommissioning and Reclamation:**

- A decommissioning and reclamation plan prepared by a professional engineer and surety are required.

**Other Regulations:** The proposed zoning regulation amendments also update Small-Scale Solar Facilities (less than 1 acre) and create a new conditional use permit to allow Medium-Scale Solar Facilities (between 1 and 10 acres).

**Next Steps:** It is anticipated that the Board will consider the amendments recommended by the Planning Commission at the April 4<sup>th</sup> regular meeting and that such consideration will include a public hearing for the adoption by reference of two standards to regulate Battery Energy Storage Facilities.

*A copy of the recommended amendments are attached in their entirety.*

**Attachments:** Table tracking Planning Commission Discussion; Solar Facility Amendments Recommended by Planning Commission on December 14, 2022; and Staff Power Point Presentation