

**Sustainable Code Committee**  
Minutes  
September 18, 2013  
3:00 PM  
Joel D. Valdez Main Library  
101 N. Stone Ave., 4<sup>th</sup> floor conference room

**1. Welcome and Introductions**

Attendees:

*City Staff:* Adam Smith (PDSD)

*Committee Members:* Merrill Eisenberg, Danielle Fidel, Hank Krzysik, Bruce Plenk

*Audience:* Sarah Butler, Kelly Lee, Jordan Miller

**2. Debriefing of the September 17<sup>th</sup> meeting with neighborhood representatives to discuss the proposed Urban Agriculture text amendments**

Staff and a couple Sustainable Code Committee members that attended the neighborhood meeting provided a summary of the meeting. Staff informed the committee that a task force comprised of members of the Sustainable Code Committee and neighborhood representatives will be formed to resolve the issues with the draft Urban Agriculture amendments. The committee was told to contact staff if they are interested in serving on the task force.

**3. Discussion of the Proposed Urban Agriculture Text Amendments**

Since a task force is going to be formed to discuss the proposed Urban Agriculture amendments, staff and the committee opted to not discuss the proposal any further and instead proceed with discussion of the proposed Solar Development Regulations.

**4. Overview and discussion of the proposed Solar Development Regulations**

Staff provided an overview of the draft solar development regulations.

The following is a summary of the questions, comments, issues, and suggested revisions to the proposal:

**Sec. 7.3.1 (Solar Energy Collectors Allowed)** – revise the purpose of solar energy collectors to match what is written in the proposed definition of ground-mounted solar collection systems. There may be other places in the draft that need the same revision.

**Sections 7.3.2 (Shadows from Multistory Structures) and 7.3.3 (Shadows from Trees) –**

- The proposal needs to be clarified to specify when and from what direction the shadows are going to be measured.
- There was discussion about whether the ordinance should only protect “existing” (i.e. those collectors installed prior to any development or planting of trees on adjacent properties that may create shadows) or if it should be broadened to prohibit shadows being cast onto adjacent properties that could adversely affect collectors prospectively.
- There was some discussion about Proposition 207 implications of applying any regulations prospectively.
- Is there some way of codifying some sort of mediation when a “tree vs. solar collector” issue arises?

**Sec. 7.3.4 (Solar-Ready Structures)**

- Rather than refer to an ordinance, can the solar readiness standards be incorporated into the UDC or Technical Standards Manual?
- Should the solar readiness standards be expanded to commercial and industrial uses in addition to single-family and duplexes?

**Ground-Mounted Solar Collection System – Principal Use**

- There are two obstacles preventing this from being a principal use: 1) Tucson Electric Power prohibits the off-site transfer of power other than from a TEP facility; and, 2) the City would require the lot where the collectors are located to be “combo-ed” with the site it serves, which would effectively make the collectors an accessory to the principal use it serves. For these reasons, consider deleting this type of system as a permitted principal use.
- If kept as a permitted principal use, proposed Sec. 4.9.11.D1.a needs to be deleted or revised. If the ground-mounted solar collection system is the principal use, then prohibiting them in the front yard does not make sense.

**Ground-Mounted Solar Collection System – Accessory Use**

- Allow a way for ground-mounted to be in the front yard of residences provided the arrays are not visible from the street. One committee member said her company installed a system in the front yard of a house on a large lot that could not be seen from the street because there was enough vegetation in the front yard.
- Consider limiting solar in the front parking areas to roof-mounted only.
- 1,000 sf system = 14-15 kw. The average home installs a 7 kw system.
- Tracker systems generally only seen with ground-mounted systems.

**Roof- and Wall-Mounted Solar Collection System – Accessory Use**

- The Building/Fire Code consider roof-mounted solar modules serviceable equipment, and therefore, require railings around the arrays when near the edge of the roof. These railings can cast shadows on the modules. Explore ways to declassify the modules as serviceable equipment or no longer require railings.

- Currently, solar must be a secondary use. The proposal needs to make sure solar parking arrays with no decking (or on which the modules make up the decking) are allowed since technically without the modules the parking structure would provide no shade.
- Revise the draft to allow arrays to double as carports even if the underside of the array does not have decking (note: putting decking on the underside of an array is not possible because the underside of an array requires ventilation/space for heat to dissipate for it to operate properly).
- Allow arrays to double as the roof of a carport and allow exceptions to the accessory height limits (note: current code requires the array to be mounted on top of a carport. Consequently, the scaffolding supporting the arrays is exposed and unsightly). This has been allowed in the past via Zoning Examiner interpretation but needs to be clarified with future projects that the maximum height of the structure is the 12' plus 10' additional for solar (or 22' total), not that the structure is 12' max and the solar is allowed to add 10' on top of that (which is when you run into the aesthetic issues with the racking).
- Don't require a 4' border (required for servicing purposes) around the edge of the panel if the underside can be accessed for fire safety/fire fighter access. The 4' border makes sense on a roof but not on a parking structure/ramada where the modules are the roof and any fire issues would be dealt with from below.
- Add a specific reference to the Building Code regarding roof-mounted system requirements.
- Confirm whether the Historic Preservation Zone, Neighborhood Preservation Zone, and National Register make accommodations for roof- or wall-mounted solar systems.

### **Ground Source Heat Pump Systems**

The committee saw little value in making accommodations for this in the code since it is a highly unlikely source of energy generation in Tucson.

### **Small Wind Energy System**

Only a definition is included in the draft. Like with the ground source heat pump systems, the committee didn't see this as being a significant source of energy generation in Tucson.

## **5. Call to the Audience**

There were no speakers.

## **6. Next Steps**

The next committee meeting is Wednesday, October 16<sup>th</sup> at 3 pm at the Joel D. Valdez Main Library (101 N. Stone Ave., 4<sup>th</sup> floor conference room).

The meeting concluded at 4:50.