

PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT TECHNICAL POLICY

TECHNICAL POLICY TECH 032

EFFECTIVE DATE: August 27, 2014
REVISED DATE: N/A

POLICY TITLE: Permitting Single-Lot Alternative Energy Installations

PURPOSE: To provide consistency to permitting alternative energy installations for single-lot development.

BACKGROUND: Pima County has a stated goal of promoting the use of alternative energy production by residents of Pima County. To this end, the County desires to streamline the permitting process for such installations to the greatest extent practicable while still maintaining requisite standards for safety and compliance with local, state and federal regulations. In keeping with these goals, this policy provides detailed guidance on permitting alternative energy installations within flood and/or erosion hazard areas.

The National Flood Insurance Program considers roof mounted alternative energy installations to be an improvement to the value of structures under the Substantial Improvement/Substantial Damage Guidelines. As such, the District is required to regulate alternative energy installations that are attached to non-conforming use structures the same as any other improvement to the structure when the structure is located within a Special Flood Hazard Area. The District extends this requirement to locally mapped high flood hazard areas including erosion hazard areas. Roof-mounted alternative energy installations on structures located in moderate flood hazard areas may be expedited through the permitting process with minimal conditions due to the low probability of damage to the structure.

POLICY:

I. Applicability

This policy applies to all active ground mounted and roof mounted (or otherwise structurally attached) alternative energy systems within a regulatory floodplain, erosion hazard area or riparian habitat. Active alternative energy systems include active solar systems (primarily photo-voltaic panels), wind energy, and similar installations. Passive solar systems such as solar hot water heaters and solar pool heaters do not require District review and/or approval since they are considered to be like kind replacements of existing water heating systems.

While leased systems must be installed per the requirements below, since they are owned by an entity other than the property owner, they do not add value to the property and therefore should not be included in nonconforming use calculations. If a leased system is later purchased by the property owner, the cost of the system must then be included in any non-conforming use calculations. Documentation of the lease must be provided at the time of permitting to demonstrate that the system is and remains a leased system.

II. Roof Mounted Installations in Moderate Flood Hazard Areas

Moderate flood hazard area refers to Other Flood Areas as shown on the FEMA Flood Insurance Rate Maps, and to locally mapped sheet flow floodplains with a Base Flood Elevation (BFE) depth of 0.5 feet or less.

District review and approval is not required for roof mounted alternative energy installations within moderate flood hazard areas, provided the installation is not within an erosion hazard area or a mapped flow corridor and there are no potential violations on the property. Development Service Department (DSD) Activity Permits may be approved over the counter. DSD may be directed to approve these Activity Permits without sending them to the District for review, at the discretion of the District. Covenants are not required for this type of installation.

III. Roof Mounted Installations in High Flood Hazard Areas

High flood hazard area refers to any Special Flood Hazard Area as shown on the FEMA Flood Insurance Rate Maps, any erosion hazard area, and any regulatory floodplain other than moderate flood hazard areas as defined above.

One of the following steps must be taken by permit applicants to obtain District approval.

1. The applicant must demonstrate that the structure to which the installation will be attached is a conforming use and that the installation conforms to the Ordinance as follows:
 - a. If the non-conforming issue is related to a regulatory floodplain, by providing the District with an Elevation Certificate completed by an Arizona registered land surveyor or civil engineer that demonstrates that the structure conforms to the Ordinance;
 - b. If the non-conforming issue is related to erosion hazard setback, by providing necessary documentation, including but not limited to a report sealed by an Arizona registered civil engineer, demonstrating that the structure is safe from the identified erosion hazards;
 - c. In both cases, by providing the District with detailed plans sufficient to demonstrate that the installation conforms to the Ordinance. In most cases, this means that the plans must show that all electrical equipment is elevated at or above the Regulatory Flood Elevation (RFE).

2. If the structure is a non-conforming use or the applicant chooses not to establish whether or not the structure is a non-conforming use, the applicant must do the following.
 - a. If the system is leased (not including lease to own):
 - i. Provide documentation demonstrating that the system is being leased, such as a lease agreement. Documentation must include the value of the system being leased.
 - ii. At the time of subsequent permits on the same property, it may be necessary to demonstrate that the system hasn't been purchased and remains leased.
 - iii. If any other work is being done at the same time as the system installation, only the value of the system itself is excluded from non-conforming use calculations. Related improvements such as roof repairs, electrical system upgrades, etc. must be included in non-conforming use calculations.
 - b. If the system is purchased (owned by the property owner, including lease to own):
 - i. Provide a cost estimate for the installation that adheres to the guidelines established in Technical Procedure 108. The cost estimate must include the full cost of the installation without consideration given to any rebates or incentives that are often available for alternative energy installations.
 - ii. Either inform the District to use the assessed value of the structure or provide an appraised value of the structure for the purpose of determining whether the cost of the installation, considered cumulatively with all other currently proposed and previous improvements, is less than 50% of the value of the non-conforming use structure. (See Technical Procedure 108 for more details.)
 - iii. Provide the District with detailed plans sufficient to demonstrate that the installation conforms to the Ordinance. In most cases, this means that the plans must show that all electrical equipment is elevated at or above the Regulatory Flood Elevation (RFE).
 - iv. The property owner(s) must sign Conditions, Covenants and Restrictions (Covenants) running with the land acknowledging that the installation is an improvement to a structure that is at an increased risk of damage due to flood and/or erosion hazards and therefore the installation is also at risk.

IV. Ground Mounted Installations

District review and approval is required for all ground mounted alternative energy installations within any regulatory floodplain, erosion hazard area and/or regulated riparian habitat. DSD will be advised to direct all permit applications for ground mounted installations within these areas to the District.

A. Applicant Responsibility

All ground mounted alternative energy installations must conform to the Ordinance. Specifically, the applicant must provide detailed plans that clearly show and or address the following items.

1. All electrical equipment associated with the installation must be shown to be elevated at or above the RFE.
2. For solar panels, the bottom of the panels must also be elevated at or above the RFE.
3. If applicable, the applicant must demonstrate that any disturbance of riparian habitat has been minimized to the greatest extent practicable per Technical Policy 024.
4. As necessary, upon District request, the applicant must also demonstrate that the proposed installation will not alter or divert drainage in a way that adversely impacts any adjacent parcel.

It is *recommended* that applicants for ground mounted installations also consider the potential for scour and erosion undermining the supports for the system.

B. Ground Mounted Installations in Moderate Flood Hazard Areas

Ground mounted installations that meet the applicant responsibility guidelines in Section IV.A above may be approved over the counter if the following conditions have been met.

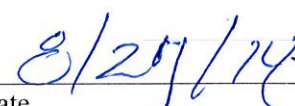
1. General and/or Access Covenants have been signed, as necessary. The application may be processed as a covenant only permit per Technical Procedures 103 and 105 if covenants have not already been signed.
2. The installation meets the criteria of Technical Policy 024 regarding minimizing the impact to regulated riparian habitat.
3. The installation is outside the erosion hazard area of a regulatory watercourse. (While discouraged, installations are allowed within the erosion hazard area, however, an FPUP and specific covenants are required.)
4. There are no potential violations on the property.

C. Ground Mounted Installations in High Flood Hazard Areas

Ground mounted installations in high flood hazard areas require an FPUP.

APPROVED BY:


Suzanne Shields
Director


Date

Original Policy Approved:
Date(s) Revised: