

YAVAPAI COUNTY

Development Services

Prescott - (928) 771-3214 Fax: (928) 771-3432
Cottonwood - (928) 639-8151 Fax: (928) 639-8153



Flood Control District

Prescott - (928) 771-3197 Fax: (928) 771-3427
Cottonwood - (928) 639-8151 Fax: (928) 639-8118

500 S. Marina Street, Prescott, AZ 86303 and 10 S. 6th Street, Cottonwood, AZ 86326

Addressing – Building Safety – Customer Service & Permitting – Environmental – Flood Control District – Land Use – Planning & Design Review

June 23, 2010

TO: Planning and Zoning Commissioners

FROM: Nicole Russell, Planner

RE: Hearing item H9138, consideration of an Amendment to the Yavapai County Planning and Zoning Ordinance in order to establish standards for solar and wind energy production.

Background & Proposal:

There is a new societal awareness and use of solar and wind energy resources and technologies as an alternative to the primary non-renewable energy resources. This increased awareness is due, in part, to the new local, state and federal incentive programs. With these new incentives there is an anticipated increase in permits and therefore, a desire to be proactive to create a simplified permitting process and generate standards to minimize misunderstandings. These reasons, together with limited references to performance standards in our ordinances and codes, are why this matter has risen to the forefront. Currently Yavapai County does not regulate on-site use of on-site generated power and the county ordinance does not define the difference between on-site use of on-site generated power and a power generation utility. The proposed Zoning Ordinance Amendment is an attempt to regulate on-site power generation for on-site use and to define the differences between on-site power generation/consumption and power generating utilities.

The United States Congress passed the Energy Policy Act of 2005 which was seen as an attempt to address the country's growing energy problems. This allowed for what is called "net metering" which is defined by the Act as:

Each electric utility shall make available upon request net metering service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term 'net metering service' means service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.

In October of 2008 net metering rules were adopted by the Arizona Corporation Commission (ACC) which went into effect in March of 2009. Net metering requires that utility companies buy back excess electricity produced by a homeowner up to 125% of their consumption needs. These rules would not apply to a large scale power generating facility, designed specifically to generate power for sale.

This proposed Zoning Ordinance Amendment states that if an on-site solar or wind installation, designed for on-site use exceeds the zoning district height, an Administrative Review with Comment application will be required in order to exceed the height limitation for the zoning district. The Administrative Review would require the property owner to contact the neighbors and let them know of the proposal to exceed the height limitations of their zoning district in order to construct a wind turbine. The last issue this Zoning Ordinance Amendment addresses in the text amendment is the allowance of large scale power generating facilities as a matter of right in the M2 (Industrial; heavy) zoning district.

This amendment would clarify and allow solar and wind energy production in Yavapai County. Below please find the proposed new text bold and underlined. New proposed text since the last meeting is highlighted.

SECTION 410 R1L DISTRICT

G.11. Solar installations and wind turbines for on-site use only (including NET METERING as adopted by the Arizona Corporation Commission) in all zoning districts.

Solar proposals that exceed the district building height limitations above average natural grade and principle setback requirements are subject to Administrative Review with Comment Period per Section 504 in all zoning districts.

Wind turbine installations that exceed primary setback requirements or exceed 55 feet in height as measured from average natural grade to the tip of the rotor blade at its highest point, are subject to Administrative Review with Comment Period per Section 504 in all zoning districts.

SECTION 301 DEFINITIONS

Power Generating Utility (For purposes of generating power – electrical or otherwise)

Any facility designed to generate power that transfers power off-site for sale. With the exception of NET METERING, as adopted by the Arizona Corporation Commission.

Net Metering Definition- Net metering is a practice where a property owner can offset some of the costs of purchased electric power by selling surplus electric power back to the utility company.

Wind Turbine Height- The height of a wind turbine is measured from the average natural grade to the tip of the rotor blade at its highest point.

SECTION 432 M2 ZONING DISTRICT

C. Power Generating Utilities (For generating power – electrical or otherwise)

Reviewing Agency & Public Comments:

The proposed Zoning Ordinance Amendment was sent out to local solar and wind companies within Yavapai County and staff received positive feedback from those who responded. This proposed Amendment was then sent out to various reviewing agencies throughout Yavapai County including municipalities, homeowners associations, fire districts, solar & wind companies and community associations.

Cannon Solar & Wind LLC: “I agree with this.” Patrick H. Cannon

Village of Oak Creek Association: “The Architectural Review Committee met on 3/16/10 and reviewed the request for public comment for the Alternative Energy Performance Standards Zoning Amendment, HA#H9138. Home Owners Associations are restricted for regulating solar installations if such restrictions affect the cost or the efficiency of the solar application. VOCA does have a set of guidelines which if followed will reduce the visual impact of these applications on the local community however these guidelines do not address wind turbines. The Committee has no comment on the zoning change relating to solar installations. In regards to wind energy production the Committee feels that the possible impact on residential neighborhoods is far greater than that of solar installations. Specific concerns for wind turbines is the visual impact, height requirements, and noise. The Committee feels that wind turbines should still require Administrative Review and provide for the opportunity for public comment.” Bob Powers; *Property Inspector/Compliance coordinator*

Central Yavapai Fire District: The Central Yavapai Fire District has no objections to the proposed Zoning Ordinance Amendment.

Public Works: Public Works has no objection to the amendment provided that all set back requirements are met.

Town of Chino Valley: The Town of Chino Valley has no objection to this proposal.

City of Prescott: “The City of Prescott supports energy generation alternatives such as solar and wind power. The current Prescott Land Development Code permits solar collectors in all residential, commercial and industrial zoning districts and prohibits collectors in Natural Open Space districts.

Wind power generation units require a CUP to ensure the equipment used does not interfere with the tranquility of adjacent properties. Note: older model wind generating units were considered noisy - modern units appear to be much quieter.” Ryan Smith, Community Planner

Town of Prescott Valley: “Although I really appreciate simplicity, I can’t help but wonder if you have done any outreach regarding this issue. Most communities restrict wind generators to a ½ acre, and deal with such issues as noise, the threat to birds and a phenomenon of agitation allegedly caused by the operation of wind generators. Are you permitting them as long as they meet primary structure setbacks or accessory structure setbacks? Do you allow them to be allowed as a matter of right as long as they get building permits and do not exceed the maximum building height? Many jurisdictions require that they be able to fall on the property on which they are placed, which would of course eliminate them from smaller properties. Will you require a Use Permit for any proposed wind generators that exceed the height limit? According to my research, wind generators are the most effective when they meet a minimum height of fifty (50) feet; and once you hit sixty-five feet the FAA gets involved.” Al Sengstock, Community Services Manager, Town of PV

State Fire Marshal: “State Fire Marshal Office would not get involved in Residential alternative power requirements.” John Wrobel; Assistant State Fire Marshal

Land Use Unit:

1. District Building Height and setbacks would allow solar arrays/wind turbines to be within 5' of the rear property line per Section 516 density chart foot notes. It would also allow a zero line setback in C1; C2 Zoning Districts when such lot borders other commercial zoning districts. District Building Heights do not apply on any solar array/wind turbine when placed upon a roof of a building if it does not occupy more than 25% of the roof area. Density District 1 has a 50' building height and Density District 2 has 40' building height.
2. C1 Zoning District waves any requirement for Administrative Review with Comment Period. So wind turbines/solar arrays would have no height restrictions/setbacks in commercial/industrial zoning districts. NOTE: There are many residential dwellings in the Village of Oak Creek, Verde Village, Cordes Lakes, Spring Valley, Rimrock, Mayer, and other older detailed zoning communities.
3. If the intent of the ZOA is to mitigate the impact on the neighboring parcels and still encourage the permitting of Solar/wind. I offer the following:
 - a. Maintain density district principle building/dwelling setbacks (just like stables, barns, or structures for sheltering or feeding animals.)
 - b. Maintain Density District Building Heights.
 - c. If they want to encroach the building setback or increase the allowed height then they would have to apply for a variance just like a building setback encroachment, or an increase in building height or an increase in the height of a sign. To maintain consistency.
 - d. Any other areas that allow an increase in building height by right would still be in place for the top of buildings like they would be for ham radio towers etc. Section 540 A. would stay the same.
 - e. Change "homeowner" to "occupant"

Findings:

Mohave County and Cochise County have extensive sections in their ordinance to address residential and commercial requirements for solar/wind and other alternative energy generation. There are several counties, like Yavapai County that scarcely make mention of alternative energy generation such as solar and wind power in their zoning ordinances. Many counties deal with such installations on a case by case basis or make sure that the installations meet only height and setbacks for the zoning district that the installations are proposed in. Maricopa and Yuma Counties are currently drafting up Zoning Ordinance Amendments of their own to address concerns that alternative energy production has provided to their jurisdictions.

No action is requested at this time since this is the first public hearing on this proposed amendment. The Zoning Ordinance Amendment has been sent out to local solar and wind companies and staff received positive feedback from those who responded.

Action Requested:

Staff will ask the Commission to make a recommendation to the Board of Supervisors on this hearing application number H9138