# **OLD BUSINESS**

6. Zoning Ordinance Amendment to Section 410 (R1L District), Section 301 (Definitions) and Section 432 (M2 District) to Establish Standards for Solar and Wind Energy Production; H#9138

## THESE MINUTES CONTAIN PUBLIC COMMENT

**Applicant: Development Services Staff** 

**Request:** Consideration of a text Amendment to the Zoning Ordinance Section 410 (R1L District), Section 301 (Definitions) and Section 432 (M2 District).

**P&Z Recommendations:** On May 19, 2010, in Cottonwood, and on June 9, 2010, in Prescott, the Planning and Zoning Commission heard this item. No action was necessary.

Nicole Russell, Planner made the staff presentation noting that language had been added to address the Commission's concerns regarding where the height of a wind turbine was measured from and which setbacks must be met by proposed installations. She explained that Yavapai County Planning and Zoning Ordinance Section 558 would address the noise issues which were also part of the Commission's concerns. Ms. Russell mentioned that staff also recommended pursuing a more comprehensive zoning ordinance amendment for wind generating facilities in the future.

Ms. Russell concluded her presentation by requesting that the Commission, after taking public comment, make a recommendation and forward that to the Board of Supervisors.

Chairman Reilly opened the discussion to the Commission.

Commissioner McClelland commented that the language shown on the overhead had not been included in the Commission packet. Ms. Russell explained that the revised language was highlighted in yellow in the packet but that it was not highlighted on the overhead screen.

Elise Link, Planning Manager commented that based on the number of times this item had been heard, staff had received input from experts relating to the height of wind turbines and had changed the language in the text to reflect that input. She explained that in the future staff would like to look further into criteria for wind turbine facilities for large scale generation but that this would be the first step. Ms. Link reiterated that currently these types of facilities were allowed as a matter-of-right without any restrictions relating to height/setbacks.

Chairman Reilly requested confirmation that the intent of this amendment was to allow placement of a wind turbine within the setbacks and no higher than fifty-five feet (55') above natural grade by simply obtaining a permit. Ms. Russell responded affirmatively.

Commissioner Kerkman requested clarification in reference to the definitions given in Yavapai County Planning and Zoning Ordinance Section 540 specifically as related to Item 3.d of the Land Use comments in the Commission packet. He noted that Section 540.A talks about towers and since turbines were often put on top of towers the verbiage seemed rather ambiguous as to what would be allowed as a matter-of-right. Ms. Russell commented that there was a difference between a ham tower and a wind turbine. Commissioner Kerkman said that the comment referred to Section 540 where there appeared to be no exclusion of wind turbine towers. Ms. Russell stated that this proposed zoning ordinance amendment would clarify that. Commissioner Kerkman

noted that there was nothing that distinguished a tower from a wind turbine in Section 540 and said he felt that was somewhat confusing language.

Commissioner Garner said that the concept of at least having some type of Ordinance created to meet the needs of the general public was a good idea but expressed the opinion that the Ordinance should reflect an opportunity for surrounding land owners to have public comment in regards to those installations in order to protect the tranquility of the neighborhood otherwise he could not support the amendment.

Commissioner Jackson said he could not imagine allowing these installations without any input from the surrounding neighbors. He stated his concerns regarding wind turbines noting that they were intrusive, unattractive, and that most of them were noisy, Commissioner Jackson said he supported inclusion of an allowance for public comment.

Ms. Russell commented that the Granite Oaks turbine referenced in the last hearing would have been required to have Administrative Review with Comment which would have allowed for public comment from the neighbors had these regulations been in place at the time. She stated that as it stands currently that installation was allowed as a matter-of-right because there is no regulation on the height of wind turbines. Commissioner Jackson said there was more than the height issue, it was a noise/appearance situation and that he was suggesting requiring a regular hearing not just an administrative review.

Commissioner Province expressed the opinion that there had to be a maximum amount of decibels allowed past the property line due to the noise issue, especially in areas where the lots were small.

Chairman Reilly said that might be problematic in terms of the noise generated as then the County would have to regulate everything that makes noise, e.g. air conditioning units, yard equipment, etc.

Commissioner McClelland said that the Village of Oak Creek Association wrote a very nice summary - "The committee feels the wind turbines should still require administrative review and provide for the opportunity for public comment." She said she had been to the turbine on Hudson Lane and that it could be heard out in the street. Commissioner McClelland said she understood the need for the Ordinance but that public input should be required.

Commissioner Lindner said it appeared that there was support from the Commissioners for getting the Ordinance right before moving it forward and suggested modifying the language to include a public participation component. He referenced the issue of these installations being a matter-of-right and suggested perhaps staff could give the Commission insight on how they could change what they were doing today or possibly deferring this item so language could be added so that it would not just be a matter-of-right to put a wind turbine on a residential lot.

Commissioner Garner suggested inclusion of language that would require all wind turbines to be processed via the Administrative Review with Comment because that would allow the neighborhood to have input with staff. He expressed the opinion that if the neighborhood had input with staff it would not be necessary to put the applicant through the public hearing process.

Steve Mauk, Development Services Director commented that that the County has acknowledged that this type of activity has been going on for some time and that it has

become more prevalent in the recent years. He expressed his concern regarding the suggestion that the County take away what had always been a matter-of-right and require it to go through a pseudo-public hearing process. Mr. Mauk said that the Commission could insert language and make a recommendation to Board of Supervisors that any wind turbine installation would require an administrative review, however, there needed to be discussion as that would be taking something away that had historically been allowed.

Chairman Reilly expressed the opinion that the purpose of having these Ordinances in place was to be able to regulate so that someone cannot do something with their property that would endanger or adversely affect a neighbor's property.

Mr. Mauk said that it was staff's role to present the information to the Commission and that staff was not there to take sides. Mr. Mauk asked Randy Schurr if there were any Proposition 207 issues with that proposal.

Randy Schurr, Deputy County Attorney said that Proposition 207 was something that always had to be considered in so far as whether a restricted right would also reduce the value of someone's property. Mr. Schurr commented that this change in the allowance for wind towers would definitely reduce a right but he did not know if that would also reduce the property value.

Commissioner Barnert said that he would certainly be willing to make comments, but first he asked Mr. Schurr if due to not being in attendance at the meeting in Prescott two weeks ago would be cause for him to recuse himself from voting on this item and Item #7. Mr. Schurr said he did not feel that would be necessary.

Commissioner Barnert commented that real estate values were not an exact science and as such it would be difficult to determine if the property value would be reduced. He requested confirmation that CC&R's could preclude any of this in an active working HOA area. Ms. Russell responded affirmatively. Commissioner Barnert suggested that an HOA could encourage this as well and commented that with the current market/economy it would be an interesting marketing aspect of any development if it were encouraged by the HOA. He said he had a problem with this due to Proposition 207 and that he preferred the amendment the way it was presented by staff.

Mr. Mauk clarified that staff acknowledged that there were on-going development issues that could possibly get out of control and so what staff wanted to accomplish was to put some minimal setback/height limitations on these installations. He noted that it was also currently possible for someone with enough property to create a wind generating facility well beyond the scope of what was needed to power their home and that this amendment also addressed and limited that activity. Mr. Mauk expressed the opinion that staff saw the opportunity to come in and clean the setback/height issues up fairly rapidly with the caveat that staff would then come back with something more inclusive at a later date.

Commissioner Garner noted that some of the other counties/municipalities were also struggling with these same issues and that Proposition 207 might or might not be an issue. He said that wind/solar power generation on private properties was already limited by what APS would buy-back at 125% and that commercial properties were also scrutinized by APS so he did not see that as an issue. He said he understood that staff wanted to get ahead of the game but in the interim if this was adopted and then the County started to receive complaints the installations would have been placed as a matter-of-right and the County would not be able to have them removed. Commissioner Garner expressed the opinion that if the County was going to do this it needed to be done correctly.

Mr. Mauk noted that it was currently a matter of right and it would continue to be so unless the County adopted language that caused it to have some type of special approval. He said that the Commission certainly had the ability to make that recommendation to the Board of Supervisors. Mr. Mauk commented that adoption of this amendment would not mean that staff could not come back with additional changes.

Commissioner Kerkman commented that the standard height of a wind turbine tower was 33-1/2' and with the windmill it was around 50' so by design those towers would exceed the building height which would prompt the Administrative Review with Comment which would prompt involvement of the community and a public hearing in the event of opposition. He expressed the opinion that it seemed that the Commission was over worrying and said he was very much in favor of this amendment as he believed it gave the County a start, didn't upset what had occurred over the last 30-40 years but did address the benefits of these new technologies with a built-in limitation right from the start.

Chairman Reilly asked staff for an indication of the implications for staff regarding applications for any wind turbine to go up on any property anywhere having to go through administrative reviews. Mr. Mauk replies that it would definitely increase the volume of work and it would be difficult to keep up with, particularly in the current environment where the Department is consistently losing staff that cannot be replaced at this time. Mr. Mauk mentioned that during the Administrative Review with Comment process it only took one (1) person objecting to bring the item to public hearing for approval so potential every wind turbine application could become a conditional Use Permit application.

Commissioner McClelland commented that in the packet there was a list of eight (8) current wind turbines in Yavapai County so it did not appear that there was a great impact and asked staff if that was a complete list. Ms. Russell responded that it was compiled from the current Customer Service and Permitting report on permitted alternative energy installations. Commissioner McClelland asked if there were unpermitted installations in the County. Mr. Mauk replied affirmatively noting that if the setback/height limitations were adopted when non-permitted activity became an enforcement issue staff could bring those installations into compliance.

Commissioner Jackson expressed the opinion that this was the right time to request that each installation have a hearing for a while then later on that might be relaxed. He said that he wanted the neighbors to have the opportunity to comment and he felt there was a need to address the noise issue until it could be determined if that was necessary or not.

There being no further questions of staff, Chairman Reilly opened the floor to public participation.

## Support:

Ken Kotalik, Southwest Wind Power said that they were the largest producer of small wind turbines. He said the most common installation was the Sky Stream 3.7 that provided a 2.4Kw grid tie system and was most often installed on ½ acre lots. He noted that permitting was the most difficult obstacle for small wind turbine dealers. Mr. Kotalik addressed the noise issue by explaining that their turbines utilized swept blades which meant that the noise dissipated when the blade passed the tower shadow. He said that their turbine operated at 300-360 rpm which helped to dissipate noise and eliminated bird strikes. He said that the decibel rate was less than 40 at the tower which then dissipated rapidly across the property. Mr. Kotalik noted that under high wind conditions their

turbine inverter utilized an electro-magnetic braking system that also dissipated noise. He said that he could provide the Commission with decibel level data if they so desired. Mr. Kotalik addressed the height issue noting that the 55' height was the key to the successful business of the small wind turbine dealers. He noted that anything higher than that would be a larger unit, but that if it were below 45' it would not be a practical energy producer. He concluded by encouraging the Commission to allow passage of the Ordinance amendment.

Commissioner Kerkman requested clarification regarding noise vs. wind speed. He noted that the turbines generated a constant noise as well as a modulating noise and asked how wind speed affected the turbine noise. Mr. Kotalik explained that the turbine started to spin at 7 mph and was designed to shut down at 60 mph. He noted that previously the alternator would whine but that now hear only the blade/inverter when it passes the tower itself however their blades were designed to dissipate the noise as well as designed to run at the slower speed which also minimized the noise. Mr. Kotalik confirmed that at 40-50 mph winds there would be a slightly higher decibel level. He said he would be happy to provide the Commission with data on noise, decibel levels, etc. [Mr. Kotalik provided the Commission with copies of a publication from the American Wind Energy Association.]

Commissioner Barnert asked if there was a way to set a threshold for technology that had occurred, i.e. pre-Ordinance/post-Ordinance level of technology. Mr. Kotalik responded that he was not currently aware of any industry standards for decibel levels.

Boyce Macdonald, Land Use Unit Manager said from an enforcement standpoint staff would prefer not to get into a situation similar to the pre-HUD prohibition on mobile homes as there are no health/safety issues attendant with these installations.

Commissioner Garner referenced the 40 decibel level at the back side given by Mr. Kotalik and asked what the noise level would be at 50'. Mr. Kotalik replied that it would depend on the type of turbine but that in terms of the Sky Stream it was around the 15 decibel range. Commissioner Garner expressed his concerns regarding the possible fall zone of a 55' tower located at a 25' side setback line and noise intrusion.

Commissioner Jackson requested a forecast of how many of these installations might exist in the near future and how available were they to the general public. Mr. Kotalik responded that the installed cost of a Sky Stream 3.7 would be around \$15-\$18,000 on a minimum ½ acre lot. He noted that they would not place a turbine in a location that did not have good wind and if the tower height was below 45'-50' it would also not be a viable location. Mr. Kotalik expressed the hope that the Commission could move past the noise issue and support this amendment.

Public Participation forms from members of the public not wishing to speak:

Patrick Cannon, Cannon Solar - in favor

There being no further public comment, the floor was closed to public participation and returned to the Commission for further discussion and/or a motion.

Commissioner Reilly noted that the Commission had a number of issues with the amendment, most particularly the need for an opportunity for the neighbors to comment on whether or not a wind turbine could be installed next door. He suggested that a restriction that any wind turbine installation would require the Administrative Review with

Comment process be added and then this item brought back to the next meeting in Prescott.

Ms. Link said perhaps the Chairman could take a poll of the Commission to get the direction of a majority of the Commissioners but that staff would prefer obtaining a recommendation to take to the Board of Supervisors at this meeting.

Chairman Jackson made a motion to recommend approval of the amendment with the inclusion of a requirement for public hearing.

Chairman Reilly asked if he wanted to amend Section 410 G.11 to require all wind turbine installations to go through the administrative review process prior to permitting. Chairman Jackson replied that he wanted the installations to go through Planning and Zoning hearing.

Commissioner McClelland expressed the opinion that the administrative review would be sufficient because if the neighbors didn't care there was no need for a public haring. She noted that the Administrative Review with Comment process would trigger a public hearing if there was any opposition to the installation.

Commissioner Jackson said if the other Commissioners felt that would be adequate that would be okay.

Commissioner McClelland suggested that the motion be amended to recommend approval with the addition that any wind turbine would be required to go through the Administrative Review with Comment process.

Ms. Link said that staff had deleted a portion of the language and that it now read "Wind turbine installations are subject to Administrative Review with Comment Period per Section 504 in all zoning districts.

Commissioner Jackson withdrew his motion.

**Action #1:** Commissioner McClelland made a motion to recommend approval of application H#9138, text Amendment to the Zoning Ordinance Section 410 (R1L District), Section 301 (Definitions) and Section 432 (M2 District) as shown on the overhead as follows:

#### 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 natural grade and principle setback requirements are subject to Administrative Review with Comment Period per Section 504 in all zoning districts.

Wind turbine installations 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.

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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)

Commissioner Stewart seconded the motion.

Voting ensued. The motion carried by a vote of eight (8) to one (1) with Commissioner Province voting in opposition to the motion.

Commissioner Province expressed the opinion that before this amendment was moved forward to the Board of Supervisors for approval there needed to be something included on noise levels as well as lot size.

This item will be heard by the Board of Supervisors on July 19, 2010.