

DEPARTMENT OF COMMUNITY SERVICES
LAND USE AND TRANSPORTATION PROGRAM
MULTNOMAH COUNTY PLANNING COMMISSION

MINUTES OF JUNE 7, 2010

- I. **Call to Order-** Chair John Ingle called the meeting to order at 6:30 p.m. on Monday, June 7, 2010, at the Multnomah Building, Room 101, located at 501 S.E. Hawthorne Blvd., Portland, OR.
- II. **Roll Call-** Present- John Ingle, Pat Brothers, Chris Foster, Katharina Lorenz, John Rettig, Michelle Gregory
Absent- Greg Strebin, Julie Cleveland, Bill Kabeiseman
- III. **Approval of Minutes of May 3, 2010.**
Motion by Commissioner Brothers; seconded by Commissioner Lorenz.
Motion passed unanimously.
- IV. **Opportunity to Comment on Non-Agenda Items.**
None.
- V. **Election of Officers**
Brothers nominated Chair Ingle and Vice-Chair Foster to continue as Chair and Vice-Chair respectively. All were in agreement.
- VI. **Work Session: Zoning Code Amendments for Alternative Energy Systems: PC-10-003**
Don Kienholz, Multnomah County Land Use Planner, presented the staff report. Over the last few years, we have received inquiries about residential wind turbines and solar panels in the rural areas for property owners to establish more self-sufficient power sources. Currently, our code does not address wind turbines or solar panels. Staff has typically permitted solar panels as accessory uses under the zoning code, but have not been able to include wind turbines, due to noise and visual impacts.

Staff would like to have clear standards to evaluate the types of alternative energy systems that could be on residential properties. We recommend using the average household energy usage (explained in the staff report) as a threshold, and a 50 ft high maximum threshold as an outright allowed use for wind turbines. It was noted that the City of Portland caps the height at the base zone height limitation. Proposed systems capable of generating above and beyond average usage, or taller than 50 ft, would fall under Type II Accessory Use Determination. Also, rural areas would likely have overlays and natural features that would mitigate the noise and vision concerns.

Staff asked the Planning Commission about developing an outright and review use approach to height, and if the proposed threshold of 50-80 is appropriate. There is no production threshold, because every project would be required to go through an NSA site review, which puts the burden on the applicant to show it is a residential use. However, the Gorge Commission strongly suggested that there be a cap in order to be very clear that it is residential and not industrial or commercial.

Kienholz invited Mike Gross to the table to give some perspective from the commercial side of the industry, obstacles they encounter in getting residential uses approved, and barriers to that.

Mike Gross, Anderson Electric. Mr. Gross said the first obstacle in every county is the 35 foot rule. Another issue is height where the wind is. We have to be 30 feet above any obstacle; otherwise we encounter very poor wind and turbulence, which cuts the life of the turbine. Even with the 50 ft rule, we would be hard-pressed, as the majority of towers will be over 50 ft. The Energy Trust of Oregon (ETO) offers incentive money that requires a different set of guidelines. There has to be a minimum of 1 acre of property, the tower has to be a minimum of 60 feet and a minimum of 10 mph of wind at that height.

I'd like to note that limiting the size of the turbine for residential could be a hindrance. It would be advantageous to have some overproduction that would donate a portion to the grid.

Tim Lynch, Multnomah County Sustainability Program, In addressing height in relation to wind and noise, the higher the tower, the less likely it is to have noise impacts.

Commissioner Brothers asked how these will fit into design standards. I'm hesitant to set a limit on photovoltaic (PV) production amount, I would rather see the limit be on the size of the roof area.

Gross said with PV, there is a limitation on the roof size, because a 12 kW system is not always possible unless it's on the ground.

Commissioner Rettig agreed with Brothers. It would not make sense to establish a production limit. Setting a cap at 12 kW would be unnecessarily limiting.

Lynch offered that ground mounted systems in rural areas should be strongly considered so the 100% or greater threshold could be reached. Under the current net reading program there would be no financial benefit given for generating beyond 100% of use, but would benefit the grid.

Kienholz reminded the Commissioners that the proposed cap is for out right allowed uses on an accessory to the dwelling. The threshold is to determine whether it's an outright building permit process, or a Type II land use. The language was drafted with this in mind, and any issues beyond that would need to be explored further.

Brothers asked if the vertical tip of the blade is factored into the tower height of the turbine. On an 80 ft tower, how big is the blade.

Gross said on a 10 kW turbine, the diameter is 21 ft. If you put that at 80 ft, it would actually sit at 82 ft at the hub, so the total height would be about 92-93 ft. The average generation for a 10 kW turbine, with an average wind speed of 10mph, would be about 16,000 kW hours per year. The higher up you go, it goes up astronomically.

Ingle said what happens with a variance with regard to tower height, when the other party sells.

Keinholz said there would be different options to explore on that issue, such as an easement, or a recorded covenant with the land. Those details would need to be discussed, because it would be an issue for buyers.

Ingle said in looking at various codes from several jurisdictions, what appear to be missing in regards to the wind turbines are the issues of abandonment, and shadowing and flickering.

Commissioner Gregory added that from a legislative standpoint, whatever we adopt should include the caveat to readdress this issue every few years. There will be changes we cannot anticipate, so regulations and incentives should be periodically reviewed. Also, it would be helpful to know how the noise and vibration would affect large breed animals that live in rural areas.

Foster asked if the manufacturer had any studies on noise and the relation to distance.

Gross said that on ARE 442 measured on the ground, a 10 kW machine averages, I believe, between 40-60 decibels. A lot of factors depend on how heavy the air is, how fast the turbine is spinning, but it levels out and shouldn't go higher than about 60 decibels.

In referring to a draft guide, Lynch read that sound decreases 4-fold with every doubling of distance from the turbine, so sound level readings at 25 ft from the top of the tower drop by a factor of four at 50 ft, so there is a significant reduction of noise with a relatively small increase in height or distance.

Ingle said that the noise issue is intriguing, because much of what the Commission deals with is complaint driven, so if it's too noisy or too tall, and someone complains, I would think we would be reluctant to make someone take the tower down. So, at this point, it seems that whatever the manufacturer's noise decibel reading is what would guide the approval process.

Gross said recommended going through the testing lab for more accurate findings on decibel levels.

Gregory asked what the siting standards would be for sharing spaces where multiple property owners wanted to put up two or three towers. Would a variance run with the land or between the parties. And there should be a disclosure aspect of the sale.

Gross said that all the properties involved would be evaluated to decide which property would be best for the turbine as far as orientation ,and where the most efficient energy source would come from.

Commissioner Lorenz asked about the access requirements to the turbine, and whether there are issues with the turbines throwing ice. Gross said access depends on the tower, but generally, as long as you can walk into it. Ice is a non-issue because if they ice up, it stops. Northwind builds a machine that is designed for Antarctica and they don't have an issue with throwing ice.

Gregory asked if they get stuck by lightning. Gross said, they do; but they're grounded very well. On a lattice tower, every leg is grounded, and the system itself is grounded.

Gregory questions the wisdom of having much outright allowance at this stage. Perhaps we should set some outright provisions at another time, because it's so ambiguous right now.

Rettig suggests that as we go forward with these alternate types of energy sources, specifically wind turbines, we should consider waiving some of the visual screening requirements currently

imposed. It wouldn't be beneficial if they restrict the efficiency of the alternate technology we are trying to encourage.

Kienholz asked if the Commission thinks the 50 foot threshold between outright use and review use is acceptable.

Foster thinks they should be reviewed for awhile to get a sense of what's involved before we start regulating them. Gregory felt the same about minimum lot size.

Ingle said it appears that the only thing we haven't addressed yet is the potential impact of noise generated; what approach should staff adopt.

Gross said that although the US is trying to establish an accreditation standard, right now all we can rely on is a noise lab for unbiased readings.

VII. Hearing: CFU Zone Updates PC-10-004

Chair Ingle read into the record the Legislative Hearing Process for the Planning Commission for a public hearing and the process to present public testimony. The Commissioners disclosed no actual or potential financial or other interests which would lead to a member's bias or partiality. There were no objections to the Planning Commission hearing the matter.

George Plummer, Multnomah County Land Use Planner, presented recommended changes to the Commercial Forest Use (CFU) code, and an amendment that will affect the definitions in our land use code. This is intended to reconcile the procedures and standards for reviewing replacement and changes of existing dwellings and new accessory dwellings within 100 ft to make them allowed uses without review.

We are proposing to change the discretionary Type II review for new dwellings and replacement dwellings, and accessory structures located more than 100 ft. from the existing dwelling.

Requested changes to the Setbacks and the Fire Safety Zones Table 1 would allow additions to existing structures and dwellings to maintain the existing setbacks if they are less than 30 ft.

We propose to delete the access standards from the CFU Development Standards and move them to Chapter 29, and amend Development Standards for new dwellings and restored or replacement dwellings located more than 100 feet from the existing dwelling. We also want to add the Lot of Exception option to the Review Uses of the CFU-3 zone that was inadvertently left out and an amendment to add definition for "access easement" to the Rural Plan Area zoning codes.

Ingle closed the public hearing aspect, and asked for a motion from the Commissioners for further deliberation. Gregory made the motion to adopt the housekeeping amendments. Rettig seconded.

Motion passed unanimously.

VIII. Briefing: Springdale and Burlington Rural Community Plans PC-10-009 and PC-10-010

Plummer, Staff Planner, presented the staff report on the Springdale and Burlington Rural Community Plans. These items were on the PC 2010 Work Program to prepare Community Plans

for the unincorporated communities of Burlington and Springdale. Statewide Planning Goals and Guidelines require planning of all unincorporated communities. This planning project was launched at the beginning of the year, and after thorough inventories regarding transportation, infrastructure and land use, it has been determined both communities meet the requirements for a Rural Community designation. We held public meetings for both communities and collected feedback from the residents, and there are two more public meetings planned for June and September.

IX. Director's Comments.

Chuck Beasley, Senior Planner, said in regards to one of the Housekeeping items, expiration provisions. We discovered that we have three sections of our code that contain provisions for expiration permits, with similar standards, so we thought we should examine those and consolidate as appropriate, so we will bring that to you at a later date.

There will be no Planning Commission meetings for the rest of the summer, but we anticipate a full slate for the September meeting.

Meeting adjourned at 8:30 p.m.

The next Planning Commission meeting will be September 13, 2010.

Recording Secretary,

Kathy Fisher