

On February 10, 2015, the Botetourt County Board of Supervisors held a joint Wind Energy work session with the Botetourt County Planning Commission. Dr. Scothorn opened the joint Board of Supervisors work session at 6:00 PM, followed by Mr. Nicely, who then called the February 10, 2015 Planning Commission work session to order in Meeting Rooms 226, 227 and 228 at the Greenfield Education Training Center in Daleville, Virginia.

PRESENT: Mr. Hiawatha Nicely, Jr., Chairman, Planning Commission
Mr. Todd Dodson, Member, Board of Supervisors
Mr. William Thurman, Vice-Chairman, Planning Commission
Dr. Mac Scothorn, Chairman, Board of Supervisors and Planning Commission Ex-Officio Member
Mr. Steven L. Kidd, Member, Planning Commission
Mr. John Williamson, Member, Board of Supervisors
Mr. John Griffin, Member, Planning Commission
Mr. Jack Leffel, Vice-Chairman, Board of Supervisors
Mr. Billy Martin, Member, Board of Supervisors
Mr. Jim H. Guynn, County Attorney
Mrs. Kathleen D. Guzi, County Administrator
Mrs. Nicole Pendleton, Planning Manager/Zoning Administrator
Mr. Jeffrey Busby, Planner
Mrs. Susan Fain, Secretary to the County Administrator
Mrs. Laura Goad, Administrative Assistant

ABSENT: Mr. Sam Foster, Member, Planning Commission

OTHERS PRESENT: Mr. David Moorman, Deputy County Administrator
Mr. Brandon Nicely, CBO, Director of Community Development
Mr. Cody Sexton, Information Specialist
Mr. Stephen Vaughn, Vice-Chairman, Board of Zoning Appeals

Dr. Scothorn announced that tonight's meeting would be between the Board of Supervisors, Planning Commission and Staff, who would hold a discussion between the two boards.

Mrs. Guzi expressed her appreciation for both groups working together on the proposed Wind Energy Ordinance. She stated their participation would make the process much better, more quickly. Mrs. Guzi stressed the need to hear questions from both boards, although additional research might be needed to find the answers. She referenced a couple of documents for the boards—the state model ordinance that was created by a statewide focus group and the PowerPoint presentation by Mrs. Pendleton. Mrs. Guzi stated the importance of crafting the best ordinance for Botetourt along with finding balance between supporting utilities, balancing the rights of property owners, and protecting viewsheds. She encouraged members to ask questions at any time and to share thoughts and opinions during tonight's meeting.

Mrs. Pendleton greeted both boards, noting this work session would have good dialogue with conversational breaks to answer questions. Mrs. Pendleton stated that during the Planning Commission January work session, they reviewed key components of the zoning ordinance, such as the administration functions of the Zoning Ordinance, as well as the regulatory parts, noting that every sub-use would have to meet certain requirements. Additionally, she noted the Zoning Ordinance would allow application requirements specific to each project, which would allow the applicant to present ideas to the county. Mrs. Pendleton brought up that some regulations would apply to each project, while some would be more site specific, things that we might require from a Special Exception Permit. She then discussed a few specifics to be considered, such as permitting for utility scale wind energy system, permitting and definitions for meteorological (MET) towers, zoning districts, minimum land area for wind energy systems and MET towers, considerations of regulations for appearance, height, setbacks, lighting, and noise.

Regarding utility scale wind energy systems, Mrs. Pendleton proposed a definition of utility scale wind energy systems noting that they would be defined as a wind energy system with a rated capacity of one (1) mega-watt or greater that generates electricity from wind and consists of one or more wind turbines and other accessory structures and buildings, that includes substations, post-construction MET towers, and electrical infrastructure and other structures and facilities within the boundaries of the site.

Mr. Williamson wanted to know if one (1) mega-watt was for one or more wind turbines, such as those seen in the Mid-West, if they were a half mega-watt each, and the correlation.

Dr. Scothorn asked what one mega-watt would produce for us, as citizens.

Mrs. Pendleton explained that advances in technology has allowed for smaller turbines to produce more energy. a lot of the previous turbines that produced one (1) mega-watt were now capable of producing multiple mega-watts of energy at the same height. Some would produce 2.5 mega-watts, and some European models were rated to produce five mega-watts of energy. She noted that a project of 80 mega-watts or more could produce power for tens of thousands.

Mr. Williamson asked if one (1) mega-watt unit was consistent with this definition.

Mrs. Pendleton responded that this was not necessarily to say that one (1) mega-watt equaled one turbine and the definition would consider all the other things that go into it.

Mrs. Pendleton brought up temporary meteorological (MET)towers , defined as “a free standing tower with instrumentation, such as anemometers, designed to provide real-time data pertaining to wind speed and direction, and used to assess the wind resources at a particular site”, noting the data would be used to see if wind turbines would be feasible on that site. Mrs. Pendleton stated the term “temporary” usually meant no longer than 24 months.

Mrs. Guzi asked if any MET tower would look similar to the one shown in the presentation.

Mrs. Pendleton responded that some would like this, while others may have a lattice structure.

Mr. Williamson said the county currently did not have a MET tower; Mr. Martin mentioned the Fraley property.

Mrs. Pendleton explained MET towers are currently not a permitted use in Botetourt County; a ground based sodar unit on the Fraley property is a permitted use because it meets setback and height requirements for that zoning district.

Mrs. Guzi noted the property owner previously had something else, that it was removed and replaced with a ground based unit, but not the tower.

Mrs. Pendleton said that Staff thought permitting utility scale wind energy systems only by Special Exception Permit was most appropriate, based on other uses in the ordinance permitted by SEP. She asked members their thoughts about the districts they thought most appropriate, suggesting the A-1, Agricultural and FC, Forest Conservation districts as a place to start, and then asked for some discussion on permitting in the Industrial, M-1, M-2, and M-3 Districts.

Dr. Scothorn brought up requiring a certain amount of acreage.

Mr. Williamson confirmed that quarries and cement plant were zoned M-3.

Mrs. Pendleton remarked that she had researched the average parcel size for each district.

Mr. Griffin questioned if there would be one or multiple [wind energy] units.

Mrs. Pendleton responded that there could be one substation connected to grid or a series that would be one, two or three megawatts or greater.

Mrs. Guzi said that more than likely when discussing utility wind, there would be multiple units.

Mr. Williamson asked if an industry, wanted to put up two of these to augment their power supply, would be considered public or private or utility in scale.

Mrs. Pendleton replied that the utility definition did not consider public versus private; instead, the definition would be based on scale. Mrs. Pendleton said the wind turbine at Volvo in Dublin was under one megawatt, and they were not regulated under the definition of utility-scale wind.

Dr. Scothorn asked about MET tower height; Mrs. Pendleton said that height would also be defined.

Mr. Dodson questioned if an industry requested a turbine that was 550 feet in height but did not generate one mega-watt of energy.

Mrs. Pendleton commented that other scales would be addressed following utility-scale, but for now we were working on the utility-scale.

Mr. Griffin remarked that he thought M-2, M-3, and FC zoning was appropriate, he thought A-1 would have a lot of houses involved and asked other members if they wanted to think about large, A-1 tracts, such as 10 acres or above.

Mrs. Pendleton mentioned their capability to look at applications on case-by-case basis when permitted by SEP.

Mr. Williamson commented that with the SEP provision, the Planning Commission could recommend and the Board could impose additional conditions if needed.

Mr. Nicely brought up height as a factor to consider.

Mr. Griffin said he was of the opinion that that Botetourt County had only two good places appropriate for wind farms

Mrs. Pendleton confirmed with board members that wind turbines should be only by SEP and that asked about revisiting the zoning districts after reviewing other sections to be considered.

Mr. Nicely brought up lot size space requirements, and the importance of good visual regulations, citing Volvo as an example. He mentioned New River Community College, which has another similar unit that sits amid an array of solar panels and it has created power for their parking, plus several of their buildings.

When Mr. Williamson mentioned that these were not mountain top units, Mr. Nicely noted these units would not generate megawatts of energy.

Mrs. Pendleton talked about temporary MET towers, and the different ways their approval was handled across Virginia. She commented that based on what Staff had seen, based on other uses in the zoning ordinance, and based on history, that temporary MET towers should be approved only by SEP.

After questioning by Mr. Williamson, Mrs. Pendleton explained that a temporary MET tower, post construction, would be considered an accessory use because the prior large-scale wind turbine would have already completed the SEP route. Anything prior to construction would require the SEP. Mr. Williamson then confirmed the process with Mrs. Pendleton.

Mrs. Pendleton next discussed and explained varying heights for utility-scale wind.

As Mr. Williamson discussed his understanding of other ordinances, Mrs. Pendleton recognized that some localities permitted MET towers by-right or not addressed at all in a few places, and by SEP in other areas.

Mrs. Pendleton suggested a minimum land area of at least a five (5) acres minimum lot size per turbine and one (1) to two (2) acres for MET towers. When Mr. Williamson asked about circumstances, Mrs. Pendleton said the boards could choose not to have a minimum lot size for MET towers.

Regarding appearance, Mrs. Pendleton recommended that turbines shall be compliant with FAA standards, and maintain a galvanized steel finish, or be painted a non-reflective, unobtrusive color such as white, off-white, or gray that blends with the surrounding environment. No advertising, is permitted, however, appropriate warning signage would be required on the turbine, the electrical equipment, and the project entrances. In addition to manufacturer's or installer's identification on the wind turbine, any signage required by federal and state agencies,

In response to Mr. Williamson's question of the actual galvanized finish, Mrs. Pendleton noted that many ordinances specified a galvanized steel finish or a painted, non-reflective finish; Members discussed the galvanized finish and telecommunication tower colors, Mrs. Pendleton offered to follow up after further research.

Dr. Scothorn considered how to maintenance the turbine's finish.

Mrs. Pendleton replied that they would be required to maintain the finish.

Mr. Nicely commented wind turbines in the west had an off-white finish.

Mr. Dodson stated that he did not want to go against industry standard.

Mrs. Pendleton explained how visual impact would be further addressed through SEP application requirements. She stated the applicants would be required to provide a description of visual impacts and include photographic simulations and scaled elevation views which would demonstrate project siting and proposed mitigation so that the wind energy system would minimize impact on the visual character of Botetourt County. The applicant shall provide accurate-to-scale photographic simulations that show the relationship of the wind energy system and its facilities in development to the surroundings. She further stated the photographic simulations shall show such views of wind energy structures from locations such as property lines and roadways, as deemed necessary by the county in order to assess the visual impact of the wind energy system. The total number of simulations and the prospectus for which they are prepared shall be established by the zoning administrator after the pre-application meeting required of all applicants. Mrs. Pendleton specified these representations shall be in color, shall include actual pre-construction photographs and accurate post-construction simulations depicting the height and breadth of the wind system; existing, proposed buildings and tree coverage, accompanied by complete descriptions of technical procedures used to produce visualizations. Additionally, the applicant shall also provide scaled elevation views.

When Mr. Williamson confirmed with Mrs. Pendleton that all of the proposed requirements were technically feasible now, Mrs. Pendleton expressed that a lot of localities currently have these requirements in place.

Mrs. Pendleton proposed that the individual turbines not exceed 500 feet in height as measured from the ground to the highest vertical portion of the blade when fully extended, unless a greater height were to be approved by the Board of Supervisors through the SEP process. The applicant shall provide evidence that the proposed height of the wind turbine results in additional benefits, in terms of energy production and efficiency does not exceed industry standards, and the height would be recommended by manufacturer or distributor.

Dr. Scothorn wanted to know where the maximum wind coverage was located, as far as the height. He asked if it was 300 feet higher than the mountain top.

Mrs. Pendleton explained that while she did not know the technical answer to his question, the SEP process would require the applicant to demonstrate that the proposed height would be correct for energy turbine.

After further discussion regarding height, Mr. Griffin wanted to know if height was measured at the center or tip of the blade.

Mrs. Pendleton replied that height was measured from the ground to the highest vertical portion, and the county could have same the caveat for met towers.

Mr. Kidd inquired about a time limit, if the time limit would be by-right on how long to leave a MET tower in place.

Mrs. Pendleton responded that a MET tower could be defined so as to not exceed 24 months by definition.

Mr. Griffin commented that the county could conditionally approve a SEP.

Mrs. Pendleton discussed setbacks. She recommended a 110% setback from all adjacent non-participating landowners' property lines, and a distance equal to 150% from nearest occupied building on a non-participating landowners' property.

Mr. Griffin questioned if 110% setback would be enough, as did Mr. Thurman. Mr. Thurman noted that at 200 feet, the setback would be only 220 feet. Mrs. Pendleton said there were other ordinances with higher percentages and that she would follow up with further info at their next meeting.

Mrs. Pendleton discussed lighting, stating that wind energy systems or MET towers shall not be artificially lighted, unless required by the Federal Aviation Administration or appropriate authority; if lighting would be required, the applicant shall provide a copy of the FAA determination to establish the required markings and/or lights for the wind turbine. Lighting of other parts of the wind energy turbines, such as appurtenant structures shall conform to outdoor lighting requirements.

Mrs. Pendleton reviewed the aspect of noise by saying that audible sound shall not exceed 60 decibels, as measured from any adjacent non-participating landowners property line; this could be exceeded during short-term, exceptional circumstances, such as severe weather.

Dr. Scothorn asked about dBA, dBC and resonation, particularly regarding health concerns.

Mrs. Pendleton responded that SEP could require a sound study by an acoustical engineer with a professional engineering license in the Commonwealth, and the applicant would be responsible for the cost. She recommended this to be a part of the SEP process, and would assess both pre-construction and post-construction conditions, and provide noise complaint response procedures and protocol for post-construction monitoring, and so that the county would not need to purchase equipment to measure decibels.

Mr. Martin wanted to know how far to measure the sound from the utility tower.

Mrs. Pendleton answered that would be at the property line, and the operator of the wind energy system should ascertain on a long-term periodic basis that the noise level comply with the study and any violation would constitute a zoning violation.

Regarding the proposed timeline, Mrs. Pendleton stated that the initial presentation took place during January, that Staff would like to come back and have a similar process to address concerns; she then asked members about the proposed timeline.

Mr. Martin said he wanted to visit a wind farm if there was an opportunity.

Mrs. Pendleton brought up an offer from James Madison University for our group.

Mr. Williamson remarked that maybe two or three could go.

Dr. Scothorn questioned how to tax that situation with farm area, then a wind mill, and how to manage machine, tool taxes.

Mrs. Guzi replied that the Commissioner of Revenue, would tax separately from machinery and tools, and that Mr. Spickard would do additional research. She noted the difference of utilities selling back to the grid, versus your own use.

Mr. Williamson inquired about the potential wind farm visit, asking about the nearest facility.

Mrs. Pendleton replied that the wind farm in Greenbrier County would be the closest location.

Mrs. Pendleton asked if the timeline was still feasible, and if the members had any changes or comments. She then wanted to know about scheduling a March 2015 joint work session or establishing dates.

When Mrs. Guzi mentioned the possibility of a joint public hearing or two separate public hearings, Mr. Martin said he preferred the joint public hearing. She also brought up that a draft ordinance might be available in April.

Mr. Nicely said he thought a joint public hearing would be advantageous for all.

Mr. Dodson stated that two public hearings would be best to allow for more public comments.

Mr. Kidd said he would prefer a public hearing before draft because the public might have better ideas.

Mr. Williamson mentioned an open forum.

Mrs. Pendleton said the Planning Commission did not have public hearings scheduled for April, and a community meeting could be held at that time.

Dr. Scothorn said he was in favor of an open forum for public at that time.

Mrs. Guzi referred to Mr. Kidd, who wanted to make sure of having the public's idea before we craft ordinance, and to give the public something to respond to, such as height or appearance.

Dr. Scothorn expressed that it would be interesting for members to see someone who has constructed them.

Regarding a March work session, Mr. Williamson brought up the importance of decommissioning a wind turbine.

Mrs. Guzi said that during the March work session, additional information from tonight would be reported, plus Mrs. Pendleton would talk about construction and decommissioning. She is it would be important to get their questions, and then in early April, have a public forum.

Mr. Williamson said he wanted enough information ahead of time to change the draft, plus he wanted to tour the wind farm.

Mrs. Guzi stated the need to include research.

Dr. Scothorn concluded the evening's presentation; Mrs. Guzi stated that the presentation had concluded, although she did not want to curtail additional discussion.

Mr. Williamson inquired about the length of time that the West Virginia wind farm had been in operation, and Dr. Scothorn asked if their county administrator could be available to answer questions.

Mrs. Guzi she could make sure proper persons would be there to answer questions.

At 7:08 PM, Mr. Leffel motioned to adjourn the Board of Supervisors. Mr. Dodson seconded, which was unanimously approved with the following recorded vote:

Aye: Mr. Leffel, Mr. Dodson, Mr. Williamson, Mr. Martin, Dr. Scothorn
Nay: None
Absent: None
Abstain: None

Mr. Kidd motioned to adjourn the Planning Commission. Mr. Griffin seconded, which was approved with the following recorded vote:

Yes: Mr. Kidd, Mr. Griffin, Mr. Nicely, Mr. Thurman
No: None
Absent: Mr. Foster
Abstain: None