

Town of Fort Fairfield
Wind Energy Technical Review Committee
Council Chambers
Monday, January 12, 2015
6:00 P.M.

Members: Dick Langley, Jim Everett, Carl Young, Todd Maynard, Barbara Hayslett, John Herold,
Heather Cassidy, Michael Bosse, Tim Goff, David McCrea and Phil Christensen
Excused: Brent Churchill
Also Present: Tony Levesque
Citizens: 1

I. Call to Order – Richard Langley, Esq. – Committee Chair

II. Review/Acceptance of Minutes of December 29, 2014

Motion: Phil Christensen moved to approve Minutes of December 29, 2014 with the addition of Mike's amendment.

Second: Heather Cassidy

Vote – All affirmative

III. Old Business –

A. Review/Discuss – Wind Turbine Classification Chart – Tim followed the State Ordinance Chart that was provided and took the information that was available in the Montville ordinance and plug it in numbers wise. In doing that and in consultation with Tony we decided that maybe we should clarify a little bit of our numbers and that is the explanation below the chart. In a sense we made it equal to or less than rather than just less than. Because it would become a grey area that if it were at 10KW which one does it fall under. If it were exactly 100 feet which one does it fall under, so we made that designation. Also, the other change, other than the visual layout of this, is the local review and approval. While 1 & 2 were expressly written into that ordinance it really was left to assume 3 & 4 would be planning board as well. So we took that step and just plug it in there so it would be a complete chart, the same way the State's model was done. We really didn't change any of the values, those were pretty much laid out in the ordinance.

Tim also presented a map of upstate New York showing the different decibels, shows 37 wind turbines projects. The scale is basically 8 miles from side to side and this can be used as a visual of what a sound decibel chart is.

Todd – Weren't we talking about still keeping the wording as it is and having the chart below the wording to make it easier to understand? We take how it was written and explained out in each paragraph and we utilize the chart as a tool, is that what we are doing here?

Dick – We did talk about that, I am thinking the numbers are the same as they are in the model ordinance.

Tony – These numbers are a little larger than the States model, but they reflect the

Montville ones with some clarifications.

Todd - But that was the reason why we decided to go with the chart, so it was easier understood.

Tim – There is a minor modification, it doesn't say less than but less than and equal too.

Tony – Two interjections (in Montville 9.1.1 & 9.1.2) equal to or less than 100 feet, or equal to or less than 150 feet. Not a big deal, if you use this verbiage add it to the adopted section in our ordinance, this is the only modification you would need to have. So to me a 3 is definitely different than a 4 and you can see that in your guidance.

Carl – But, #3 <1MW < 300 feet includes 1 & 2. Those things are less than a megawatt and less than 300 feet.

Tony – They have more turbines and its going to require the DEP site location permit required.

Carl - # 3 has maximum number of turbines as 3, well it could be one.

Tim – But 1 & 2 are not subject to site approval by the DEP and that does spell out what would and wouldn't be required under site approval. I believe that is the determining factor between 1, 2 & 3 in that sense.

Tony – It is a progressive chart it doesn't have to be an all exclusive chart. You could it up by adding more information.

Carl- It would seem to me that it would be more progressive since #2 was less than or equal to 100kW. Why wouldn't 3 be great than 100 kW or equal to? You are working your way up from 10 to 100 and you are saying less than so why doesn't 3 just become over the 100 greater than or equal to. Why did we all of a sudden jump clear up to a MW less than, why couldn't we just progress right on up from 2 being less than and 3 being greater than 100MW and maximum number 3 towers. Because 4 jumps right up to greater than or equal to 1 MW. 3 seems to not be progressive and there is a large jump between.

David – Carl would you rather have it say greater than 100 kW but less than 1 MW?

Carl – No I would like to see it say greater or equal to 100kW and that progresses from #2 which is less than, and #3 which is greater than, but is limited to the number of towers. #4 which is greater than the 1MW with no power limitation. That seems to be more progressive to me.

Todd- I guess my idea, this chart was a tool, as an aid to help better understand the distance, the heights, the amount. I would think you would still have to refer to the

actual document after the chart to get clarification. Maybe if we make a note here.

Dick – Carl is there any way, I understand that the symbols are different and not necessary progressive, but can it be construed in any way contradictory to the 1, 2, 3, 4 progression?

Carl – Well, like I say, less than 1 MW includes everything in 1 & 2 if you just take it as a single tower. #2 is less than 100kW and #3 is greater than 1kW, pretty simple pretty clear. Also, for #3 & #4 under DEP site requirement we say yes, but somewhere I read that it is yes unless it's not for sale or net metering and both of those cases.

Tony – Why don't we put maybe, well you are going to have to spell it out and it is a maybe.

Carl – It is yes unless it's not for sale or net metering. Seems like you could put a 1 up here super script 1 and go to the bottom of the chart and state Not for Sale or net metering. But we do that all the time, if you look at our town ordinance, at our Shoreland zoning ordinance underneath all those columns where it says yes's and no's and what not they have little 1's & 2's clear up to 10. Down at the bottom of the chart it has notes 1 through 10 that define it more defiantly then just the yes or no.

Motion: Phil Christensen move to accept the chart with the change that we put a footnote on the yes on #3 & #4 and include the same wording in the description.
Second – Heather Cassidy

Discussion:

Tim - I think that it's most important that we realize that we bring this to the table as an exercise as opposed to a final draft. I am fine with any changes that we want to make because this is our document, ultimately when this goes into our document the word Montville is coming off and modify is coming off.

Dick - have we discussed in prior meetings the language itself, “does not sell or convert electricity for offsite use including net metering” did we decide what it means and what its supposed to accomplish? Why is it there?

Tim- I would say that even before we get into that do we agree with these amounts and heights, because they do differ from what we talked about. Again I want to make sure that this is proposed, this is how we move forward. This is what you asked us to put together, do we agree with these amounts.

Jim – Carl what would you change for the heights?

Carl #3 would be greater than 150 to go along with the great than 100kW.

Tim – The States turbine in 1 is 80 I believe, do we want to bump that up to 100 in

our document? The values are different.

John – I read somewhere, that there was a blade safety clearance between the ground and the arc of the blade, the states requirement was 25ft and in the Montville ordinance I remember seeing it at 100ft. So that would account for the overall height of the turbine because if you have the same blade and you bring it 25 feet from the ground verse 100 feet from the ground. That is going to make it the 100 foot blade clearance a much more heigher overall. I think that maybe responsible for some of the differences in the numbers that you have.

Dick – Prior to the discussion we had a motion to footnote the yes under 3 & 4 under DEP site permit required how do we vote.

Vote – All affirmative

John – Just as a footnote to all of this, the overall total height thing we end of within our chart, is going to end depend on what we choose for a blade safety clearance.

Tony – I disagree again, it talks about the tip of the blade at its highest point, the height of the tower. Correct, that is the standard nationwide.

Todd – But he is talking about the radius of the blade as it comes closest to the ground.

Tony – It's still not going to get any taller.

Carl – If you raise the clearance from the bottom from 25ft to 75 ft. the tip of the blade at the top will be 25 to 75 feet higher. It does raise the height of the turbine.

Phil – They don't have the diameter in the chart, it has nothing to do with the diameter.

Tim – If I can interject I think his point is the reason these heights are higher is because their minimum blade height is higher. I feel like this document reflects the newer turbines that on the market anyway. So I think there is a progression to higher heights, so it does seem to me that that's part of why this seem more workable.

Dick – Doesn't it already come to the developer deciding whether or not they fall under 3? or 4 even with John's concern.

John – My thinking if you bring the minimum blade height up then you are going to bump certain turbines from category 3 to category 4.

Tony – And again I read the definition for height, “the total distance measured from the grade of the property as it existed prior to the construction of a WES, facility, tower, turbine or related facility at the base to its highest point”. So even if you have a gap, segregate what we are going to have, it is going to be one standard if its300 or less and if its 300 or more, it doesn't matter about the gap at the base, I am measuring the circle.

John – exactly, and that’s going to affect the developers decision on the project.

Tony – That’s the economic decision, that’s not anything to do with safety.

Tim – I think we are all on the same page here.

Carl – I wonder, I don’t personally know, all of the turbines in type 1 that we are talking About, all of the individual home turbines singular ones that we see would fall in that category 1. Does anyone know off hand what the standard height for one of those things is?

Tony – at the time of their sale they were given a couple of options, I thought they were a 69 feet and 99 feet.

Todd - It depends on the manufacture that you use and of course it depends on the slope of the land for what you actually need for height.

Carl – I am just wondering if the 20 foot difference between 80 and 100 is going to be restrictive in the sense that nobody in Fort Fairfield is going to put up a turbine on their lot around town at 100, but some of them may be able to at 80.

Todd – I really don’t think so, because if you look at the technology today they are trying to get them in smaller package and stay below the 100 feet. Because of the structural steel needed to go higher. So they are trying to get them lower within the 80 – 100 ft.

Carl - But as many old homes that we have that have 60 – 70 foot trees on the lot, they got to get them high enough to get them above the turbulence, 100 feet would make it easier.

Todd – That’s kind of in the site preparation, I don’t know if we want to address that in the ordinance.

Tony – that’s not up to us, we are not supposed to be more restrictive in anyway, we are supposed to establish standards in which to issue permits not restrict permits.

Todd – 100 feet gives a little more space for residential person to have an opportunity to decide between the manufactures.

John - Well if we are following the Montville ordinance, if you look at type 1 & 2 on section 9.1.1. & 9.1.2 it says this ordinance does not apply to the residential.

B. Sound Instruction Update –

Mike – I did some research on line and with speaking to some folks. I started with the University of Maine’s Composite group and told them our quest was to seek a professional sound person that could come and give us some instruction on what sound and noise was in a non-bias fashion. I was referred to Karen Horton who is a professor at the University of Maine in Orono and had a really nice conversation with her. She is willing to make the drive up, but she has asked if we could do a teleconference. That

opens her schedule up even more because the drive up can only be on a Tuesday. She is perfect for what we are looking for and I told her we are looking for instruction on sound and noise, she is well qualified. I am waiting for her to get back to me with a time frame that is available. Does anyone have any concerns with doing a teleconference? We would go up to the high school, because they have the equipment that we can use at no cost. After a brief discussion it was decided to try to schedule for Tuesday the 27th for 4 pm – 6 pm. She will be sending out material ahead of the conference.

Carl – Made a request to put “Other” after old business rather than at the end of the agenda, because after we have public comments there really isn’t much time left for other comments. He also asked, “What are we supposed to do with the prepared materials, are we supposed to review and comment on them now or do we save them for a later time?”

Dick – My recollection is we are trying to get a rough draft of an ordinance put together. We started with 1-8, Becky put them in written form. Then we will add on it tonight, keep adding on until we get to the end. The game plan was to go back and work with the draft we have put together.

Carl – So we are saving questions until later. Last week we decided not to do definitions like we talked about. We said okay we will wait and do them later. I think we need to modify that and build a few definitions as we go. Because there are going to be terms that pop up here very shortly and we are going to need to know what that definition is that we are looking at.

Dick – I think we do that and work on definitions as we go.

David – I think we all will feel very comfortable once we have a draft then we can start fine tuning it.

IV. New Business

A. Discussion – Permit and Operation License Requirements –

Dick – are there any comments?

Carl – suggested that we take the State model and use Montville and any other models as a reference.

Tony – A point for discussion that I think you guys need to consider is that in the Montville ordinance it expires after five years, it then needs to be renewed and it has an ongoing renewal requirement. I believe the only requirement in the State’s model is that if you haven’t started after such a date that the license lapse then they need to reapply. We need to decide as a community what standards you would like to have and if you would like to have an ongoing renewal or not.

John –Nowhere in the Montville ordinance, that I saw, does it discuss the requirement for a periodic safety inspection. We may still want to require an annual inspection.

Jim – Wouldn't the company require that themselves, actually monthly inspections?

John – If we don't require it, then they can do whatever they please.

Tony – I think Montville does address that, it calls for an updated safety plan as required in section 14.3, "inspections are required on an annual bases and provide a copy of the report".

Carl – I think we have digressed. Right at the moment we are throwing darts at a dart board of topics. We are not saying okay, section 9 of the State, lets do it. All of a sudden we have a concern about a particular issue which doesn't actually belong anywhere until section 12 or so in the State one. Then go over in section 14 of the Montville one which is way down stream from where we are supposed to be at. We are supposed to be talking about the Permit and Operational license requirement and the application process.

Todd – That's where we started, was with permits and applications and we had some questions with discussions. We moved to section 14 and now we have moved back.

Carl- Plus the other thing I would say, I think we need to be careful with Montville. We have to understand that we just did a chart of all four types and the Montville doesn't address 1 and 2 beyond that first section and the State one does. So we need to be careful that we don't get to far over into that Montville ordinance and forget that we have a lot of this 1 & 2 stuff.

Mike – It's good to know where we are going so that you can have a good start.

Carl – I am just concerned that we are discussing things that are in section 12 of the state and section 14 of Montville

Mike – Only because it was referred to earlier.

Dick – The next paragraph chronologically is the permit and operation plans, we have discussed for twenty minutes now and I think Todd was about to say that 10 in the Montville ordinance is a pretty good place to start except that we need deal with the five Year requirement.

Todd – And that goes back to your comment about financing a project and I think that's where we left off at one of our meetings. So we need to find a way to address that. So what do we do? We take that out until we address it or leave it as a note, come back to it later once we get into some of these definitions. Then you find out why they were probably looking at the 5 year window and maybe not. May be it won't work for Fort Fairfield

David – It could be that at the end of 5 years we review to make sure they are still with in compliance of the original application.

Tony- I would do that annually. One reason I am saying that is I think we are going to have some reclamation funds set aside. In the beginning they may not have to put much money into that, but by year 5 they should probably have 75% there. We don't want to wait 5 years to find out that they didn't put a penny in. Any change in ownership the operations will be reviewed for consideration.

Dick - After hearing this discussion and with Carl's concerns about the language, we will take section 10 in the Montville ordinance and delete 5 years. Chose the language, clean it up so that Becky has something to plug into the draft ordinance.

Tony - Here is a suggestion, seeing how your next meeting is probably going to be a live meeting with the consultant on the noise and sound issue. That we try to cut and paste something that might be considered useful as we progress through the chapters for you to discuss. Send out to you this week as homework. Then we will come back either ratify it or chew it up and spit it out. Just the section, "Permit and Operation License Requirement".

Dick – In conjunction with what Tony just said, if you want to try and come up with some sort of language requiring an operational review periodically.

Tony – We will try to find something that can at least be reviewed.

Dick – The Montville ordinance has the next paragraph, not that I am sticking to the Montville. Montville 11.0, Permitting Authority, Tony have you looked at this?

Tony – I think the States model 9.1 through 9.3 is similar. Actually the States model under 9.3, 9.4.2 is very similar to the language in 11.0 in the Montville ordinance, only it's a little bit longer. For once I think the Montville is simpler.

Dick – is the Montville language in 11 detailed enough, does it get it into the lap of the planning board the way it should?

John – suggested that we have a section which deals with such as Section 10.1 does in the Montville or on Permit Requirements. Than we go and have another section called Operation License as in 10.2.

Tony – that's a nice progression

John – yeah it's a progression, it shows you what happens first, you get the permit than you get the license then you do certain periodic things to maintain the license.

Phil – Section 16 in the Montville covers this stuff, "Application Submission".

Tony – I think it does cover everything that's in the sample.

B. Discussion – General Standards

Dick – I think when we talked about this, we used the States ordinance, paragraph 12 which

has less substance than the Montville ordinance. The Montville has standards for setbacks, noise and etc.

John - suggested a different route, usually they say all ordinance and laws tend to move from the general to a specific. So in the interest of getting something done before 8 o'clock tonight why don't we go to section 13 "general standards" realizing that shadow flicker and setbacks are probably going to be some of the pretentious standards that we deal with. Lets just take 13 and go through it and get that done.

Tony – That is partially part of section 12 in the general standards in the States, they are somewhat similar.

Phil – discussed the information sent out by Carl, he urge those that hadn't yet to read it. Its not one sided, a lot of good information.

Carl – I think that after a fashion we will come to realize that today as compared to 2007 or 2008 time frame. There is a range of sound, decibel levels, that are starting to become today's standards for setbacks and what's acceptable.

Todd It depends a lot on the area.

Carl – Yes, topography has an awful lot to do with it. They start looking at setbacks as sound levels rather than distances.

Todd – different noise affects different people differently and I think we will learn from the professor when she explains how noise affects someone. I am glad you are bringing in someone with those credentials. The biggest complaint you are going to see is the noise.

Tony – so besides the standards, you are progressing towards, application fees. So I am guessing that we can cover that next time to. Try to craft an appendix B, in the States its call Appendix A, called application fees.

Dick – One of the key difference between Montville and the States is on noise. Montville seems to say you measure the ambient sound as it exist now and you can add 5 decibels to it. The State says they don't measure they impose a specific decibel level. So they come at it in two difference directions. We are going to have to ponder those questions.

C List of Topics to be Researched in Advance of Next Meeting.

It was decided that Tony and Tim would cut and paste the sections on "Permits and Operation License Requirement". They would try to email something out to everyone to go over for homework then we will come back at our next meeting and go over it.

Dick – Also asked if they would try to come up with some sort of language requiring an operational review periodically.

Public Comment Period –

January 12, 2015

Wind Energy Technical Review Committee

Rick Shepherd – He passed out some information about “what influence does setbacks have on real estate values”. It’s a common sense point of view, if someone tells me that putting a 600ft wind tower up a few hundred feet from my door step is not going to affect my real estate value, its just common sense. He hopes this handout will help the committee with any questions they may have and help save time on them doing the research.

Other – There was a discussion on another group visiting the Mars Hill Wind facility.

It was decided that Mike would try and schedule the professor from the University of Maine in Orono for January 27th

Motion: Phil Christensen moved to adjourn at 8:00 PM

Second: Jim Everett

Vote – All affirmative

Respectfully submitted,

Rebecca J. Hersey
Secretary Pro-Tem