

Town of Enfield Wind Farm Advisory Committee Meeting –  
March 1, 2016 - Enfield Community Building

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PRESENT: Peter Bardaglio, Councilperson Mike Carpenter, Charlies Elrod, Martha Fischer, Marcus Gingrich, Jude Lemke, Mimi Mehaffey, Councilperson Michael Miles,

ABSENT: Rob Tesori

STAFF: Sue Thompson/Wind Farm Advisory Recording Secretary

OTHER: Councilperson Henry Hansteen and Julie Schroeder, Alternate Wind Advisory Committee

Michael Miles called the meeting to order at 7:00 p.m. and lead the assemblage in the Pledge of Allegiance to the Flag.

### **Approval of Minutes (2-9-16)**

Corrections suggested to February 23, 2016:

Page 4 – First paragraph – Change to: They are under a warranty of 2 years and under 24/7, 365 days surveillance by facilities in Schenectady, NY and in Germany.

Page 4 No correction – There was discussion on “*If a wind turbine fails, catches fire and burns is a respirator needed in fighting the fire? No GE turbine has caught on fire they are designed to not catch on fire. If there was a fire you do not enter the turbine and the machine would be shut down.*” Mike Carpenter did not think staying a distance away was an answer.

Page 4 – 2<sup>nd</sup> paragraph – any material up to lighting of the tower can be supplied, such as mounting brackets. GE does not do the lighting of the tower if required

Page 5 – 1<sup>st</sup> paragraph –No correction. GE does not do the installation of the wind turbines. They hire an installation company for the turbines. BOWF does not do this.

Michael Miles made a motion to approve the February 23, 2016 minutes as corrected. Motion passed unanimously.

### **Old Business**

Michael Miles reminded everyone of the [windadvisory@townofenfield.org](mailto:windadvisory@townofenfield.org) e-mail to send articles/research/comments/suggestions to and the <https://trello.com/enfieldwindfarmadvisorycommittee> site for research articles, laws, and minutes of the Committee.

Michael Miles reminded the audience to keep all comments until the end of the meeting during the Privilege of the Floor.

### **Update on Technical Experts**

Peter Bardaglio will ask Jim Manwell, Director of the Wind Energy Center at the University of Massachusetts to speak to the Committee. He is also waiting for Bob Frick to return to the country to ask him to recommend an acoustic engineer to speak to the Committee.

Mike Carpenter asked to discuss the presentation from Bob Frick, GE. He thought GE did not give an answer regarding respirators and smoke from a wind turbine fire. He feels that the smoke is toxic and that a respiratory mask should be required.

There was discussion on how questions asked of the BOWF are not directly answered or answered wrong and not corrected. There was discussion on the legal implications for agreements.

Mimi Mehaffey was concerned about the fact that GE could not give out the acoustic specs for the wind towers because of the contracts with the company and developers. She felt the acoustic specs should be added to the wind law application for the wind turbines.

Jude Lemke would like to ask Rick James who is an acoustician to speak with the Committee. He is an acoustic consultant/researcher and testifies in lawsuits regarding wind turbines.

### **Update on Supplemental Draft EIS**

Peter Bardaglio informed the Committee that the Draft Supplemental EIS has been submitted to the Town Board. The EIS is not available to the public until the Town Board has approved its acceptance. Mike Carpenter and Michael Miles confirmed that they did receive copies of the EIS.

### **Member Discussions**

Michael Miles asked the Committee how they felt in their progress of Committee work.

Jude Lemke submitted two reports to the Committee which were compiled by local residents (attached to the minutes): “Proposal for the Town of Enfield Wind Farm Advisory Committee” and “Example of the Residential Property Value Guarantee Agreement to be included in any Industrial Wind Turbine Permit Issued by the Town of Hammond and Shall Become a Part of the Town of Hammond Wind Law”.

Jude Lemke stated that to amend the wind law is a big task. The group came up with some compromises between residents and BOWF. A short moratorium may be needed in regard to the BOWF and the wind law. A longer moratorium might be needed in regarding to changes in the current wind law.

A few of the compromises are:

Setbacks measured from the property lines.

Schools, hospitals, libraries, etc. need to be included in setbacks.

Setbacks greater of 2 kilometers or 12 x the rotor diameter

Noise – 40 dBA during the day and 35 dBA at night.

Stronger enforcement and mitigation protections for both noise and flicker

Property Value Guarantee was referred to in the above listed “Example of the Residential Property Value Guarantee Agreement of the Town of Hammond.

Town of Freedom has lights shielded from ground view they recommend this procedure.

Surety for decommissioning costs with regard to salvage value. They want to be positive that this money for decommissioning of \$125,000 will be there.

Liability insurance BOWF is not required by the law to have the insurance but they do. It is required by the state law for contractors to have insurance. Wind Law page 29 Article 5 Indemnity and Limitation covers the liability issue.

Inspection provision penalties should be in place for violating any of the wind law. There is no regular inspection required on a regular basis; they would like to see inspection on regular basis.

Base-line Health Study is needed. Comment was made that there would need to be a larger population in the area to do such a study. There was a suggestion that encouragement of a health study be created for all wind farm residents. It was thought that Summerset has the health study in the wind law. Comment that it would be nice to have a study but BOWF should not be asked to perform such a study. A suggestion was made to table the issue.

Mike Carpenter requested a list of the residents involved in putting together the proposal. Proposals are from other town laws and residents of the area. Jude Lemke stated she will get a list of the residents to Mike Carpenter. She also said that not all the residents have read the proposal yet.

There was discussion regarding noise measurement and they only measure from the nearest residence and that it should be every residence. Sound levels in reference to the wind law (Page 15 – 17a) were discussed. It was thought the reference to above ambient sound was a mistake, you don't have an ambient sound level to go to what they meant was 60 decibels. This section will need an interpretation.

Michael Miles asked if the proposals are an adjustment to the current law or is there a specific proposal to BOWF to look at. Jude Lemke answered they would like to have the law changed immediately and then relook at the full law later. Mike Carpenter asked why change the law at all? Jude Lemke and Mimi Mehaffey both agreed that maybe a legal contract could be drawn up with the BOWF regarding the proposed changes. Mike Carpenter said that within the Finding Statement they can include stricter control over some issues. It was stated that the group tried to cover what people could live within the changes. Mimi Mehaffey stated that they brought the proposal document for the Committee to review. Michael Carpenter said they would go over it and that he was concerned with the indemnification issues.

Peter Bardaglio read an email from Peter Guldberg from Tech Environmental, regarding noise issues:

"The World Health Organization (WHO) has published two guidelines for sound levels in residential areas to prevent sleep disruption. The proposed Black Oak Wind Farm complies with both. The 'Night Noise Guidelines for Europe' (2009) lists a no-observed adverse effect level (NOAEL) for the annual average nighttime sound level in a residential area of 40 dBA. The 'Guidelines for Community Noise' (1999) lists an 8-hour average sound level of 45 dBA in a residential area, to prevent 'sleep disturbance, window open.' The WHO also states 'The night noise guidelines for Europe are complementary to the 1999 guidelines.' Acoustic modeling of the maximum short-term (1-minute) sound level from Black Oak Wind Farm show such sound levels at Non-Participating residences under the worst case condition will not exceed 45.0 dBA. Whereas these results are for a time period much shorter than 8 hours, they easily comply with the 8-hour sleep protection WHO guidelines. Since wind turbines only rarely operate at maximum power, the condition producing the maximum short-term sound level, and when winds are below the cut-in speed wind turbines do not operate at all, the annual average sound exposure from a wind farm is much less than the single highest 1-minute period. Calculations of this annual factor for a wind turbine reveal that annual average sound levels at night are about 8 dBA lower than the single highest 1-minute maximum level. Thus, for Black Oak Wind Farm, the annual average nighttime sound level at Non-Participating residences will not exceed 37 dBA, which is below the NOAEL of 40 dBA annual-average recommended by the WHO's 'Night Noise Guidelines for Europe'.

There was discussion regarding the noise level indications with the above e-mail. It was wondered what the "numbers" were used in the studies.

Michael Miles asked the Committee to address the issues of moving forward and solutions or recommendations for the wind farm issue.

Jude Lemke wanted to know how the BOWF felt about the proposed compromises. A possible moratorium might be needed and to take a thoughtful look at other statutes. She feels the law has lots of issues to address.

Charles Elrod wants Committee to look at the common ground of the project and discuss the proposal submitted to the Committee as it relates to this specific project. Feels residential value issue is a non-issue based on home sales. Mimi Mehaffey feels that the residential issue should be looked at.

Martha Fischer said she feels we need to look at the big picture of the health of our planet in regard to fossil fuels, electric lights, coal, etc. Residents put up with facilities in other areas, we should put up with BOWF, and yes she would put up with it. Health of the planet should be thought of and how everything is affecting it and we need to pitch in on making it healthy.

Peter Bardaglio stated also concern about the health of the planet and that the project is not about making money but about the future health of our planet and people. He said that BOWF has submitted a new supplement EIS and a vested right letter to the Town Board.

Marcus Gingrich is worried about his children. He doesn't feel the money investment is an issue.

**Technical Expert:**

Charles Elrod introduced Dr. Jonathan Rogers, Assistant Professor, Automation / Mechatronics, Georgia Tech. He is the Co-author of "A method for defining wind turbine setback standards" (paper attached to minutes).

He discussed a general overview of his paper (above). Dr. Rogers said he "ran" the numbers using their formula for setbacks for the BOWF wind turbines, based on what Charles sent him. This was in regard to if blades break how far would the parts go. The smaller the part the further it goes. If the outer part of the blade broke the part would go an estimated distance of 1500 to 1600 feet. Ice fragments are difficult to analyze because it doesn't have uniform shape. An estimated distance for ice fragments would be 1500 to 1600 feet. He feels setbacks are in line with where they should be.

Measurement was not from residence but from wind turbine. The question of angle throws was asked and was directed to the research in his paper. Does the 1500 feet include bounce? It does not include bounce it is different in free flight.

Marcus Gingrich asked if there was actual physical verification of the data results in the paper. Dr. Rogers answered there was very little actual evidence that it even happens with the blade breaking. Is wind speed used in the calculation of throws? Yes and both questions are covered in his paper.

Dr. Rogers was asked if he was aware of any other organizations that might have data regarding blade and ice throws. He answered he is not aware of any; he has not looked at current data. He referred to the reference sources in his paper and it might give a direction to go in for more sources.

The Committee thanked Dr. Rogers for his time and sharing his research paper.

There was additional discussion on blade breakage and ice throws. There was a reminder that there is a coating on the blades to protect from breakage and ice throws. The turbines are monitored and adjusted if ice is detected on the blade.

Mimi Mehaffey feels that local people do not have enough input on the wind farm situation. She is worried about the continued use of fossil fuels vs. wind energy.

Martha Fischer stated that the wind energy was a "link in the big chain" and it is an accumulation of infrastructure. Michael Miles stated he doesn't think there is one fix for energy usage.

Marcus Gringch stated that Enfield law needs to be fixed. He showed a scale model of setbacks. Closest residence 1640 feet is potential for wind turbine placement and in Europe is 3280 feet setback from residences not for sure on residences or turbine.

1500 feet is probably not going to affect him personally but needs the law to change for longer setbacks. Why are they going back so far, it is usually because of infrasound.

Michael Miles feels the Committee has to make a recommendation to the Town Board. He asked each member what they thought.

**Action Items:**

- Peter Bardaglio will take proposal report to BOWF.
- Ask the Town Board what they need.
- Mimi Mehaffey felt the Committee was not going any further with concerns. She feels comfortable with Michael Miles and Mike Carpenter going back to the Town Board with recommendations.
- Jude Lemke agreed with Mimi Mehaffey. Wants to know if the Town Board will accept the proposals.
- Mike Carpenter stated he spoke with Guy Krogh and Frank Pavia regarding the process of the draft EIS and final EIS and what can go in the Finding Statement. There are legalities of the situation to consider. The Finding Statement goes back to BOWF and the Town Board states they have reviewed the EIS and gone through with their public hearings. In the Statement the Town can say what their needs are. The report only deals with current changes. Understanding everything written in the law is important. Monitoring can be asked for in the Statement. The process can encompass the Town Board and BOWF going back and forth so a moratorium is not necessary. The Finding Statement is an avenue to address issues.

Michael Miles stated that all the Town Board is struggling regarding the wind farm project and actions. He stated that the Committee can still handles changes of the law.

Sue Thompson asked if the documents presented to the Committee by Jude Lemke could be shared with the general public. Jude Lemke answered yes. It was suggested to note that the Hammond contract was just an “example”.

**Privilege of the Floor**

Dawn Drake, 105 Griffin Road. Stated they care about our overall planet, birds, deer, and future of their children. Town Board should care about us and the whole town. We may be a small poor community but don't want people coming in to run our town. Safety is a concern.

Henry Hansteen, 374 South Van Dorn Road – Said he did receive an e-mail regarding vested rights from the BOWF legal team. Thought that the ice throw based on the radius around the wind turbine blade was on the plane of the blade so could not be thrown to front or back. He was informed that the whole turbine rotates with the wind they are not fixed.

Cliff Newhart, 146 Griffin Road - Did not appreciate being called a “guinea pig”. He lives across the road from where the movie for the wind farm was made. He doesn’t feel people know what Connecticut Hill is all about. Dawn Drake agreed with Cliff Newhart regarding Connecticut Hill. She stated the whole environment is different.

Judith Rothenberg -Town of Caroline, asked how many residents Jude Lemke spoke with regarding the proposed compromise. Jude Lemke answered between 20-25 residents. The group has spoken to between 200 – 300 people on the wind farm project.

Mary Alice C\_\_\_\_\_ (?) - Town of Caroline, stated she would like the wind farm located in the Town of Caroline. Wondered if the noise level restrictions involved motorcycles, and all other noises. Is there a noise ordinance in the town? Michael Carpenter answered no there is no noise ordinance and the noise levels are only involved with the wind farm.

### **AGENDA MARCH 8**

Michael Miles asked what the Committee wanted on the agenda for March 8. Jude Lemke stated she wanted to hear from BOWF on the proposed compromise submitted at the meeting.

Mike Carpenter and Michael Miles said they will write a statement to the Town Board with their findings and suggestions based on their meetings of the Wind Farm Advisory Committee. They will bring in the statement for the Committee to review at the next meeting.

It was suggested that the Committee should finish going through the wind law for any suggested changes. It is unknown if the current Committee would like to continue working on the town wind law or new members will be added or changed.

Suggested additions to the law can be added also.

Michael Miles adjourned the meeting at 9:35 p.m.

Respectfully submitted, Sue Thompson, Recording Secretary