

COHASSET PLANNING BOARD MINUTES

DATE: WEDNESDAY, APRIL 8, 2009
TIME: 7:00 P.M.
PLACE: COHASSET TOWN HALL – AUDITORIUM
41 HIGHLAND AVENUE, COHASSET, MA 02025

Board Members Present: Alfred S. Moore, Jr. - Chairman
Stuart W. Ivimey, Vice Chair
Charles A. Samuelson, Clerk
Clark H. Brewer

Board Members Absent: Jean Healey-Dippold

Recording Secretary Present: Jo-Ann M. Pilczak

Meeting called to order at: 7:00 P.M.

7:00 P.M. 8 JAMES LANE, SITE PLAN REVIEW AND SPECIAL PERMIT PUBLIC HEARING, OWNER: STEPHEN CLEARY, APPLICANT: SOUTH COASTAL DEVELOPMENT GROUP, LLC filed on: March 5, 2009 Member Samuelson read public hearing advertisement. New member Jean Healey-Dippold not able to attend this meeting. Board would like to begin this special permit hearing with full board right from the beginning – continue to April 22 when full Board is in attendance.

MOTION: by Member Ivimey to continue public hearing to April 22, 2009 at 7:30 p.m.

SECOND: Member Brewer

VOTE: 4 – 0 MOTION CARRIES

7:01 P.M. ADMINISTRATION

- **VOTE TO APPROVE MARCH 30, 2009 MINUTES**

MOTION: by Member Samuelson to approve the March 30, 2009 minutes

SECOND: Member Brewer

VOTE: 4 – 0 MOTION CARRIES

- **SET MAY, JUNE MEETING DATES** May 6 and 20; June 10 and 24.

7:15 P.M. ZBA RECOMMENDATION, 25 RIPLEY ROAD – 40B COMPREHENSIVE PERMIT APPLICATION, APPL: ROBERT J. BARRETT, ESQ. ON BEHALF OF LAND OWNDER, WILMARC CHARLES, 247 FOREST AVENUE Attorney Barrett cancelled coming before the Planning Board explaining that after the hearing before the ZBA the night before, that they needed to go before the BOH and that there would be substantial changes to the plans. He felt it did not make sense to introduce and discuss plans with the Planning Board that were going to change. ZBA hearing has been continued to May 5, 2009.

8:15 P.M. 215 CJC HWY, WIND TURBINE SITE PLAN REVIEW AND SPECIAL PERMIT CONTINUED PUBLIC HEARING, APPL: JAMES SWEENEY, CCI ENERGY; OWNER: PAUL BARRY Attending for applicant: Appl. Jim Sweeney, CCI Energy; Richard Tabaczynski and Simon Thomas, Atlantic Design Group; Paul Barry, Land Owner; Gordon Deane, Palmer Capital Corp. Attending for Planning Board: John Modzelewski, Civil Designs Inc; Jim Barnes, Acentech Inc; Town Counsel Richard Hucksam. Meeting began with Town Counsel explanation of what occurs after public hearing is closed: Board enters deliberations; public may observe deliberations, but not participate; public hearing should not be closed if Board expects new information or expects to request new information; Board can ask for clarification of information. Jim Sweeney, CCI Energy: explained that they have submitted an alternate location for the turbine – this is not the applicant’s preferred location – applicant prefers the originally submitted location, but is submitting the alternate location in response to Member Ivimey’s comment that he could not approve a location with Hingham Lumber in the laydown area. If the Board wanted the turbine further away from Hingham Lumber, this would be the location. Applicant wanted to submit the alternate location before close of the public hearing.

ICE THROW:

Richard Tabaczynski, Atlantic Design Group: Presented ice throw probability study (UMASS Study on ice Throw) prepared by Renewable Energy Research Laboratory (RERL). *Full Ice Throw Report was submitted to Planning Board Office today. John Modzelewski did not have time to review report.*

- One study initially cited 1.5 X the height of the turbine + the blade diameter as the “risk area” but then went on to say that there have not been any instances beyond 100 meters. Atlantic Design looked at about an 800' area for this filing's risk area potential.
- Ice falls predominantly downward of the rotor plane
- Ice fragments more often tend to shed off blade tips
- Large pieces tend to fragment in flight
- Fragments have been observed to be < 1 Kg (2.2 lbs)
- Threshold distance exists outside which there is no significant risk from ice throw. The threshold is relatively independent of the turbine size and configuration
- Within this threshold distance, the risk can be evaluated with suitable assumptions of ice shredding frequency and fragment size. Member Ivimey asked what would be defined as “significant risk” - Tabaczynski responded that definition of “allowable risk” is typically left up to Boards to define in terms of, for example, the comparison to chances of being hit by lightning. The worst case ice throw case they found was 140 meters while other studies indicated ice throw had not been found beyond 100 meters

UMASS recommendations included:

- Curtailing turbine operation during periods of icing
- Manual start-up following icing situations after confirmation that ice has melted
- Control of site access

Cohasset is characterized as a “light” icing environment - meaning that icing occurs for ≤ 1 day/year (based on NOAA Norfolk County data and reports for past 8 years taken at Bluer Hills Observatory which is 600' elevation and, probably worse weather than Cohasset experiences).

A 1,600 SF house located 1000' from the turbine has a 3 in 1,000 chance of being struck over a 20 yr. period. In the event of an icing event in an area categorized as “light”, the chances of hitting a 3 x 3 meter area 50 feet away from the turbine are between .1% (1 in 1,000) and .01%. Applying this to Hingham Lumber, there is a value of slightly more than 1 strike every two years, if an icing event occurs. The probability of a person standing to the NE of the turbine, 24 hrs./day for one year, being hit by ice is slightly < 2 in 10,000,000, or, once in more than 5,000,000 years. This is much less than the probabilities of other common accidents such as death by: motor vehicle, homicide, gun or electrocution etc.

In looking at other turbines: buildings were closer than those proposed with this application; Hull utilizes ice sensors that will automatically shutdown turbines (similar to this proposed filing); Jiminy Peak also utilizes ice sensors; Mass. Maritime (bldgs. are within 500' of turbine) turbines are manually shutdown when visual inspection shows icing. In a 30 yr. period (1970-2008) in Europe, only 22 incidents of ice throw occurred – no fatalities, only 1 injury. Hull, Jiminy Peak or Mass. Maritime did not give an indication of how many days/yr. icing occurred.

Jim Sweeney, CCI Energy:

- updated dBA levels increase based on Jim Barnes, Acentech report
- provided verification of where sound data came from

John Modzelewski: asked for Sweeney's flicker consultant to talk to Garrad Hassan consultant – Garrad Hassan is still saying that best practice is to consider “worst case” analysis. Sweeney noted that WindPro and WindFarmer (Garrad Hassan) are competitors for the same market share and Garrad Hassan is not willing to confirm accuracy of WindPro. Tabaczynski countered that UMASS RERL used WindPro and “expected values” not the “worst case” values (which are theoretical numbers that would never occur). Modzelewski clarified that Garrad Hassan agreed with the “worst case” figures, and only recommends that the “worst case” be considered.

SOUND:

Jim Barnes, Acentech Inc:

- methods used by applicant's consultants are valid and reasonable
- ambient sound measures that were taken during original long term study are reasonable
- additional measures that were taken during quiet, calm time were reasonable and conservative

Looked at and discussed with applicant's consultant:

- Issue of tone/no tone at Avalon location: Barnes could not replicate and thought consultant was misinterpreting the MA-DEP definition of tone. Looking at it again, they agree it is not “tone” under the MA-DEP definition of tone. This issue can be put to bed.
- Confirmed measurements at different locations
- How much conservatism is built into applicant’s model? For the long term, their measurements and comparisons are valid. Under the worst case conditions, the measurements will be higher. Barnes would like to see some margin of error
- Asked for documentation from applicant’s vendor to confirm model and source. Applicant’s model uses sound power from a Pfleiderer unit, not the proposed AAER unit. The vendor should provide a statement that the two units are of the same design and construction and just a different name.
- Asked that vendor supply information that presents the sound power levels for the 1.65 MW unit over the range of operation wind speeds or at least, at its maximum sound output and to verify that sound for the 1.65 MW unit is going to be the sounds tested on the 1.5 MW unit.
- The 2-3 dBA margin puts this right on the border of MA-DEP noise guidelines at noise sensitive receptors – Avalon. Going to be over some of the broadband at some of the property lines – Cohasset heights. DEP is not as concerned about commercial locations.

Barnes mentioned that there should be an agreed upon monitoring and measuring protocol to protect the Town and the applicant. Member Ivimey thought it important to have assurance that it will operate within the 10 dBA limits before the turbine is approved and constructed as it will be more difficult to shut down once it is operating – Ivimey is not sure they are hearing that this will operate within the 10 dBA threshold. Member Moore thought they were on target, but probably very close. Member Samuelson doesn’t want to put the Town into a position where they might have to spend a lot of money or take on responsibility to determine that there is a violation. Town Counsel clarified that the bylaw requires the Board to find that the turbine will conform to MA noise regulations in order to grant the special permit. The question is, can the Board make this finding based on the information they have received in the hearings. The question is not what the Board can do in terms of enforcement, the question is whether the Board can make the finding based on the information received during the hearing. Sweeney mentioned that all towns that have turbines have to meet MADEP guidelines whether the town has a 10 dBA regulation or not. If there are noise complaints that the levels are being exceeded, the DEP would get involved.

Jim Sweeney: alternate location is about 40-50 meters further away from Sunrise etc.

Open to Public:

Sandy Driscoll, 240 FairOaks: does applicant have to submit new studies for the new location? Modzelewski does think there will be some impact. If Modzelewski feels that new location will affect the data and will therefore request new data, Town Counsel advises getting the new location study data prior to closing the public hearing.

Lori Langenhagen, 24 Sanctuary pond Rd.: Asked if this isn’t a done deal if the sound levels exceed 10 dBA? Member Samuelson explained that point of measurement is at the nearest, permanently occupied, existing residence, not at the property line. Langenhagen cited Newburyport as real life experience, not model. She began to read article from a Nan Cook, who lives 1000’ from the Newburyport turbine and comments on sound, light, ice build up from her experiences. Member Ivimey interjected that he spoke to Sean Sullivan, Planning Director in Newburyport (although not at the time of the turbine approval). Ivimey highlighted that there was no peer review for the Newburyport turbine as Cohasset is doing; that the Newburyport turbine is in an industrial district that allows turbines up to 400’ in height to the nacelle with a variance; that Newburyport has a different permitting process than Cohasset; that the nearest abutters are 60’ higher than Cohasset so they are at eyelevel with the nacelle; that Newburyport is now trying to have experts determine if the turbine is working as the applicant said it would – the key is that Cohasset is trying to do this before the approval, not after the approval as Newburyport did.

Tim Chamberlain, 235 Pond St. and EDC member: read an EDC statement unanimously voted on and submitted to the board – asked that the size be reduced and that research be done to give the Town maximum economic benefits.

Paul Antico, 124 Atlantic Avenue: as a professional investor in wind power, he is aware that AAER has a high likelihood of going bankrupt – if this happens, there will not be parts available to build or repair. He also noted that these turbines are all individual machines – one cannot tell what the sound will be, if they will conform with regs. etc. so there is no way the Board can get comfort level that they will conform. He also stated that GE, Vestas, Siemens are quality companies and AAER is not. Member Ivimey responded that this is applicant’s risk and that he will be required to put up a bond so turbines can be dismantled if company fails – this is all the Planning Board

can do. Sweeney added that he is also aware of AAER's financial standing and, he is obtaining insurance from the manufacturer. AAER was chosen because the other companies will not enter projects with <10 or so turbines.

Paul Carlson, 18 Old Coach Rd.: asked if the 1.5 X cost to decommission covers inflation. Suggested that Board review every 5 years and require a higher bond if necessary to cover inflation. Asked if developer is responsible for damage (for example, from ice throw) to other properties - Sweeney indicated that they will have insurance to cover any damage that might be caused and, that turbine steel alone, is worth more than cost of decommissioning.

Tucker Glavin, 107 Nichols Rd.: stresses that Board not close the public hearing tonight as he believes there are too many unanswered issues. Also, he implores the Board not to take the approach of allowing the turbine to be built, then having the DEP measure the noise. He asks the Board to contact the DEP Regional Director and specifically ask the questions they have been asking tonight and get an answer before the public hearings are closed. The Town does not have the money to fight a lawsuit if the Board has made the wrong decision.

Conrad Langenhagen, 24 Sanctuary Pond Rd.: Stated that there is a difference between model and actual. AAER is a new manufacturer and products are factually different from one another - when a Pfleiderer 1.5 unit is modeled, it is different than a 1.65 AAER turbine. Langenhagen stated that AAER says the 100 meter tower is concrete but the applicant has been referring to a steel tower - is the tower concrete? Sweeney indicated AAER proposed a steel tower to them. Langenhagen encourages Sweeney to check this. Last, Langenhagen asked what the ice throw force is - could it penetrate a building? Tabaczynski did not have this figure.

Charles Higginson, 159 Atlantic Ave. and ZBA member: is a proponent who commended Tom Callahan for the letter he submitted to the Cohasset Mariner. He finds the turbines attractive. Higginson also spoke with residents in the area of Hull2 and noted that the residents at Hull2 did not express problems with noise and had no idea what flicker was. He also noted that in Sweden turbines are mostly in farmland, in Denmark turbines are mostly installed offshore, but in other parts of Europe there is a lot of housing near the turbines.

Mark Babka, 258 Forest Ave.: at last meeting applicant made a statement that there was a rush to get this approved to be within the 1% cap to get maximum benefit for Cohasset but that in reading the lines 947-965 of the Green Communities Act, there is no 1% cap, there is in fact a generating minimum - he accused the applicant of making false statements. Babka said that what it in fact states is that, as of this year, there is 4.5% minimum which will increase by 1% a year after Dec. 31, 2009 going to 30% in 2030. Sweeney explained that this is referring to renewable energy credits that will go up every year, which is not the same as the cap on net metering. Under the Green Communities Act, 1% of the utilities peak level is allowed to be net metered. National Grid's peak level is 50 MW and, once the 50 MW is installed, then the net metering is no longer in effect. Member Ivimey replied to Babka that if his point is to show the applicant is presenting inaccurate information, that is one thing, but if the point is "what is the rush?" Member Ivimey would say there is no rush in the Board's point of view.

Jeffrey Patterson, 10 Sanctuary Pond Rd.: If hearing does close, burden for proving noise, flicker etc. is on the developer and he cannot just show that they "may" comply with the regulations and standards. The bylaw is not a "might" comply, it is a "shall" comply and if the applicant has not met the burden, the application must be rejected.

Andrew Willard, 37 Stockbridge St.: to Jim Barnes - atmospheric conditions can increase sound levels, given that turbines don't operate in calm wind conditions, has a wind speed been identified to define "calm" as in "calm evening"? Barnes answered that "calm" might be the cut-in speed.

Joe Carroll, 84 Beechwood St.: Concerned about tax revenues decrease - noted for sale signs going up on Sanctuary Pond. Also asked if Cohasset Fire Dept. is able to fight a fire at turbine site or, rescue someone from the turbines? Member Ivimey noted that State and Regional first responders will be contacted for a rescue and that the applicant will have to pay for additional training and equipment for Cohasset emergency personnel.

ALTERNATE LOCATION:

Jim Barnes, Acentech Inc.: Brief calculations based on sound model provided by CCI Energy's consultant (TE):

- A 0.2 dBA increase (less than 0.5 dBA increase) at the Cohasset Heights property line location
- A 1.3 dBA decrease (about a 1.5 dBA decrease) at the Graham Waste property line location (TE's report calls this Crocker Realty Property Line)
- A 0.8 dBA decrease (about a 1 dBA decrease) at the Avalon property line location

Overall, the alternate location is not a significant factor.

John Modzelewski: while his sense is that the alternate location is not going to have a significant impact on ice throw or flicker issues, ***he would like applicant to provide new data for the alternate location for Modzelewski to review and respond to.***

Jim Sweeney: again reiterated that the only reason they provided an alternate location was to improve (lessen) the impact of noise, flicker, lay down area etc. and to provide the Board with the alternate location before the close of

the public hearing. Sweeney is not requesting a change of location – he prefers the same location discussed last week, but felt the need to have an alternate location should the Board want it.

Tucker Glavin, 107 Nichols Rd: asked why the Board would not want to speak to the DEP Regional Director about the noise issues before closing the public hearing and making a decision because that could be the crux of a future lawsuit. Jim Barnes did speak to several DEP regions in Mass. and they all had similar takes on it, with some differences – he would welcome Board to speak to SE Region Regional Director.

Town Counsel clearly stated the opinion that what Mr. Glavin is saying is not relevant. The bylaw has a standard which makes reference to the DEP sound regulation and policy which are written statements – like law. The Board and counsel read and interpret the law – no special permit granting board can delegate the determination on one of the standards to someone else – the Board has to make that determination. The Board has gotten a lot of objective prescription as to what that standard means and Town Counsel feels the Board has, at this point, a pretty good handle on what the standard is and have gotten testimony as to whether the standard is met. In Town Counsel's opinion that is what the decision is, not what someone at the DEP says.

John Modzelewski: *would like a statement from the engineers providing that the alternate location will or will not have a significant impact on the flicker and photosimulation data and conclusions previously drawn.*

Regarding ice throw, Modzelewski has not had time to review and report on the data submitted today – would like the public hearing to stay open so he can do so.

Member Samuelson: would like the public hearing to remain open until the 22nd so more data can be submitted. He does not think deliberations will be a quick process.

Member Ivimey: would like the public hearing to remain open until the 22nd but limiting discussion to new data.

Conrad Langenhagen, 24 Sanctuary Pond: the alternate location mitigates one problem, but increases the visual impact over Rose Hill. He also questions why location options are being debated. Member Moore reminded everyone that the reason for alternate location was to address Board's concerns about Hingham Lumber in the lay down area. Member Samuelson clarified that the alternate location is not a lateral move, but a move due west.

Peter Brown, 38 Atlantic Ave.: asked if the modeling has been on this unit or on a generic unit? Sweeney answered that all the studies have been based on a 1650 KW turbine which has 80 meter rotors so they are comfortable with the manufacturer's data. Brown also commented that if we go through all this trouble and cannot net meter, there is no benefit to Cohasset. Sweeney responded that the 1% cap is like a gold rush right now and that if the 1% cap is reached before this project is approved, then they cannot net meter to the town which will have a different financial impact on the Town which Sweeney cannot control.

Member Ivimey: asked for clarification that blades are a known commodity but that concern is what noise is coming out of the box on turbine itself because it is new. Sweeney noted that if manufacturer's data is not correct, applicant can return turbine to manufacturer – there are safeguards that will be in place. Langenhagen commented that AAER 1.65 turbine manufacturer has given data from a Pfleiderer 1.5 turbine. Modzelewski asked if it is on AAER letterhead? Ans. – yes. Member Ivimey restated Langenhagen's issue - the manufacturer is interpolating the data and modeling it up to a larger turbine because it is new and they don't have actual data samples on the new turbines yet and this is another cause why the Board should be concerned about whether they can count on this data.

John Modzelewski: *wants hard numbers or a letter from applicant's professionals stating the significance of the move. Tabaczynski will provide all data for new location. Modzelewski also wants manufacturer's data on turbine noise to clear that up. Sweeney will submit AAER data.*

MOTION: by Member Ivimey to continue to April 22, 2009 at 9:00 P.M.

SECOND: Member Samuelson

VOTE: 4 – 0 MOTION CARRIES

MOTION: by Member Ivimey to adjourn at 11:00 P.M.

SECOND: Member Samuelson

VOTE: 4 – 0 MOTION CARRIES

NEXT MEETING: WEDNESDAY, April 22, 2009 AT 7:00 P.M.

MINUTES APPROVED: Charles A. Samuelson, Clerk

DATE: April 22, 2009