

**PLANNING BOARD  
TOWN OF KNOX  
ALBANY COUNTY  
Established 1822**

**PLANNING BOARD MEETING MINUTES**

January 8, 2009

Present: Dan Driscoll, Bob Gwin, Betty Ketcham, Stuart Kidder, Bob Price, Brett Pulliam, Tom Wolfe

Meeting called to order at 1935.

**Minutes of the November meeting** were approved as written.

**The Board began by hearing a presentation from Helderberg Community Energy, LLC.** Present at the meeting were Amy Pokorny, Nelson Kent, Warren Willsey and Jane McLean. The members of Helderberg Community Energy (HCE) appeared before the Board to respond to concerns voiced by members of the Board in response to HCE's work regarding a local wind power generating project. Mrs. Pokorny made it clear that HCE's work is still in the early stages and they hope to make this a transparent process, sharing information with the Board as it is received. Mrs. Pokorny explained to the Board how in 2005, a small group of people applied to NYSERDA for a grant to study the potential for community wind development in the Helderbergs with the ultimate goal of developing a business plan that can be used by a community group to seek financing for a wind energy project. HCE was formed for the purpose of defining the ownership structure of such a project so that another entity can be formed to take over as owner to secure financing and develop a wind energy project. While HCE is not yet ready to present a clearly defined proposal for a potential ownership structure, they were able to give the Board members an idea of the size and location of the proposed project.

HCE is proposing three 1.5 megawatt turbines that would connect to existing distribution lines along Route 146 at the intersection of Knox Cave Road. The power would then be transmitted to the substation in Altamont provided that the lines and substation have the capacity to accept 4.5 MW, HCE is currently looking into this. The project would be a distributed power generating project similar to the one in the Town of Madison. The proposed towers would be in the range of 250 feet tall.

Mrs. Pokorny then turned to the list of concerns that the Board members had previously sent to HCE. The first concern was that given limited resources for energy development, those resources should go to

areas with the most potential and this is not such an area. HCE responded that, as part of the NYSERDA grant, a business plan is being developed including calculations of cost effectiveness of a project using three different ownership scenarios. Once the business plan has become available it will be presented to the Board so that a more informed discussion can ensue.

The second concern was the impacts of commercial wind turbines (CWT's). The Board members had pointed out that CWT's are an industrial use and allowing them would require agreeing to an industrial district where the impacts would be acceptable. HCE pointed out that access roads, buried cables and heavy equipment would be needed to build the towers but once they are constructed, they would have little impact since they can be taken down and the site graded over if they outlive their useful life. HCE further responded that a noise study has been planned for this project and a study on the impact on birds and bats is being done as part of the NYSERDA grant. The rates of shadow passage are very slow so the shadow flicker is similar to driving past shadows or telephone poles when the sun is low and the turbines can be sited so as not to interfere with television and radio transmission. The effect of wind turbines on property values is not definite although studies have suggested that values are not adversely affected.

The next concern was about who would control the profits of this project and how would the money be distributed to benefit the community. HCE responded that with a community wind project, the community can determine the size, placement, development and ownership of the project. The community could decide who would own a proposed wind energy project and how the money would go to benefit the community.

Another concern was whether it makes sense to commit to the technology at this time since a lot of Federal attention to energy development is expected soon and newer technology could be available as a result. HCE feels that it is better to use technologies that have the bugs worked out than to go with newer technologies that come with inherent risks until they are proven. If a turbine was no longer useful it could always be replaced by a newer turbine on the existing tower.

The fifth concern addressed was whether smaller, residential scale projects could contribute to the energy supply and be part of the solution. HCE agrees that individuals should be encouraged to do whatever they can to participate in this effort, but given the fact that wind is such an intermittent energy

source, a widely distributed system is better to mitigate this intermittence. Furthermore, large turbines (300 feet and higher) are more effective than smaller residential scale windmills because there is so much more wind at 300 feet than at 100 foot heights. This also addressed the next concern that a CWT has the same impact regardless of who owns it so why not develop small residential systems to substitute for the capacity of a large scale turbine. HCE estimated that it is more cost effective to build the three large turbines being proposed instead of approximately 900 smaller systems that would be needed to generate the same number of watts.

Finally, HCE addressed Dan Driscoll's comment that he is not certain there is a location suitable for this project in the Town and by allowing this project, we would be opening the door to other projects. HCE reiterated their request that the Board reserve the right to make a decision until the NYSERDA study is finalized and we have all the information needed to make this decision.

At this point, Chairman Price asked if HCE had identified any potential sites. Mrs. Pokorny said the Bush farm on Middle Road is a potential site. It is all open field and farmland and is a large enough parcel that any towers could be set back 1000 feet from any property lines. Dan Driscoll then brought the discussion back to the environmental impacts of the turbines. He pointed out that there are several bat hibernacula in the Town of Knox including some that are home to endangered bat species, Mr Driscoll questioned why we would put a wind turbine in the middle of that. Studies have shown that bats are attracted to wind turbines and when they fly into the wake of the blades, their lungs explode. HCE responded that they are aware of the possible impact on bats and they are looking into this issue further as they are also concerned about the potential impact. Mr. Driscoll then asked about shadow flicker and the fact that people with epilepsy can be susceptible to shadow flicker and therefore CWT's should not be visible from roads where the shadow flicker could impact someone driving. HCE reiterated that the flicker is similar to what you get from trees in the late afternoon sun so if that does not bother someone, then shadow flicker shouldn't bother them either. Mr. Driscoll then stated that a CWT is so out of context with everything else that you see in town that there would be a significant visual impact but HCE countered that a CWT has no more visual impact than a development, for example.

The final environmental impact that Mr. Driscoll pointed out was the noise annoyance. Studies have shown that the sound from these turbines, which is a low frequency similar to helicopter rotors, can

carry more than a mile. If a residence is located in a valley where there would be no wind to mask the sound of the turbine, the sound from the turbines could be very annoying. HCE responded that the best thing to do is visit the turbines and see how quiet they are, but Mr. Driscoll pointed out that they really need to be evaluated at all atmospheric conditions to determine the complete effect. Mr. Driscoll also mentioned "wind turbine syndrome" where low frequency noise from the CWTs can actually cause health disturbances; the effects are similar to an urban problem where low frequency traffic noise resonates in buildings. This was the first HCE had heard of this so they agreed to look into it.

Another topic mentioned by the Board members was the fact that previous tower ordinances have required that heights be limited to less than 200 feet so that flashing lights would not be required, but this project would require towers approximately 80 m or 240 feet AGL with blades reaching as high as 500 feet AGL. HCE believed the height requirement for flashing lights was 500 AGL so, given this new information, HCE agreed to reconsider this.

The Board then discussed the Town's comprehensive plan that aims to preserve the rural quality of the Town of Knox and whether these CWT's would go against that rural character. HCE maintains that this project would benefit the rural farmers in the Town since having a wind turbine might prevent them from having to break up the farms and sell them off in pieces. The revenue back to the Town could also potentially lower taxes that would make it easier for the farmers to keep their land intact.

Dan Driscoll asked about reports of blades coming off the turbines and asked if HCE was aware of how far the blades would travel if this did happen. HCE was not certain. Bob Gwin then asked what the benefit is of having this owned by the community rather than a large company. He further pointed out that if we allow a community owned project like this, what would prevent a large company like Shell from coming in and doing the same thing. HCE pointed out that a company like Shell would want to do a much larger project than this but Mr. Gwin restated that if you allow one project how would you block the other? HCE suggested limiting the number of CWT's so that a larger company wouldn't be interested in a project that small. Chairman Price pointed out that whether the project is commercially owned or community owned, the Town would still be getting Payments in Lieu of Taxes (PILOT's) so the community would benefit either way.

Tom Wolfe suggested that a decision really needs to be made about whether to allow CWT's.

Chairman Price agreed adding that if the Board does nothing, HCE could sue or pursue a variance from the Zoning Board of Appeals.

The Board then turned their attention to a **regional landcover map** that was circulated to the Board members prior to the meeting. The map, upon further review, was determined to be very misleading since if one house was built last year and three were built this year it would show a 300% increase in landcover.

Finally, the Board discussed stormwater management and the fact that, while Knox is not an MS4, we could sit in on one of the working group meetings that are currently being encouraged by the New York State Department of Environmental Conservation. Chairman Price pointed out that in the past, we have put the burden on the developer when stormwater management needed to be addressed so there was no need to pursue this issue.

Upon a motion made and duly seconded, the meeting was adjourned at 2110.

---

The next meeting will be on February 12<sup>th</sup>, 2009 @ 1930.