

## Hard lessons from the Fox Islands (ME) Wind Project

North Haven and Vinalhaven Schools were let out for the ribbon cutting ceremony on November 17. Students passed out colorful pinwheels and excitement was in the air. Governor John Baldacci joined the crowd. First District Congresswoman Chellie Pingree flew in from Washington, D.C. to join her daughter Hannah Pingree, Speaker of the House, in order to celebrate the completion of the Fox Islands Wind Project. As one speaker said, this was the largest group of North Haven and Vinalhaven residents together, ever! The turbines were running, the community had pulled together, and with the support of the Fox Islands Electric Cooperative Inc., the Island Institute, and George Baker, CEO of Fox Islands Wind LLC (FIW), remarkably, the dream of community-based wind power on Vinalhaven was a reality!

Amongst the participants were many of us who are neighbors of the turbines. Although our group overwhelmingly supported the project, we now live with the daily presence of turbine noise, 24/7. As one of the Fox Islands Wind Neighbors (FIWN) recently noted, "We support the windmills, but not the noise." The noise is as constant as the wind, building in intensity according to wind speed and direction. It can be a low rumbling, whooshing, grinding background noise that one can just hear above the sound of the trees or it can build to an in-your-face noise, like jet engines roaring combined with a grinding and pulsating sound that echoes in your head, keeps you awake at night, and beats on your house like a drum.

As neighbors of the wind turbines, we find ourselves in the midst of an unexpected, unwanted life crisis. When GE flipped the switch and the turbines began to turn, island life as we knew it evaporated.

As I watched the first rotation of the giant blades from our deck, my sense of wonder was replaced by disbelief and utter shock as the turbine noise revved up and up, past the sound of our babbling brook, to levels unimagined. It was not supposed to be this way! During informational meetings, on the Fox Islands Wind website, in private conversations, and with personal correspondence, we were all told that ambient noise from the surrounding area would cover the sound of the turbines. This was our expectation. The Fox Islands Wind August 31 cover letter to the state Department of Environmental Protection (DEP) explained, "When the turbines are generating higher sound levels, background noise will be higher as well, masking the sound of the turbines." On the Fox Islands Wind Web site FAQ we read, "The blades passing through the air can make a 'whooshing' sound and mechanical parts or unusual wind currents can produce a steady 'hum' or 'whine.' However, ambient noise is usually louder than any noise produced by wind turbines and modern wind turbines are significantly quieter than older models." Our immediate experience was the reverse.

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Since that moment of realization, we have been on a steep learning curve. Our days are filled with e-mail correspondence with neighbors and George Baker, of Fox Islands Wind, research on the noise pollution and health risks associated with turbine noise, research on the impact of low-frequency noise, research on technological solutions, research on the impact of turbine noise on domestic and wild animals, research on state sound regulations, conversations with the press, neighborhood meetings, meetings with the electric cooperative and FIW, a meeting with the DEP, multiple letters to our State Representative, Hannah Pingree, letters to Congresswoman Chellie Pingree, letters to the Vinalhaven Land Trust board members, e-mails to possible sound consultants, debates with neighbors as to how we will pay for a sound consultant, letters to the DEP where we are beginning to know everyone's name, and the list goes on.

We have been to the town office to copy tax maps and get the addresses of year-round and summer residents who live near the turbines. We have driven all over the island with sound meters, determining that the turbine sound can travel more than a mile in certain areas and noticing whose homes are impacted. We have spoken with people in town to spread the word. We have invited people to our homes to listen for themselves. We have learned and explained under which conditions the turbines are loudest and why. We have developed data sheets so we can keep daily noise observation records. We have worked to find the words and sounds to describe the noise, each perfecting our own imitation, some better than others. We have learned to count windmill rpm and discovered that above 15 rpm the noise is tough to take. We have read lengthy amendments and studied sound

protocols. We have learned about state sound regulations and found that the 45 decibel limit that is designated as "quiet" in Maine, is truly a cruel joke. On our quiet cove, we now know that 45 decibels is loud.

We have studied spreadsheets, yearly wind speed records, and have worked to determine how much Fox Islands Wind can slow the turbines down and still cover the cost of the windmills. We are scrambling. We do not want to leave the homes we have built with our own hands, the gardens we have planted, the memories that are so much a part us, and the dreams we hold for the future. We are not looking for financial gain. We are desperate to gain back what has been taken from us.

From where we are sitting, it seems that the industry standard for turbine noise in rural areas is absolutely wrong! I cannot speak for all the Fox Islands Wind Neighbors on this, but my husband and I feel that, on a local level, well-meaning individuals made a critical miscalculation. Depending on wind speed, wind direction, etc., we estimate that households within a mile to a mile-and-a-half radius of the turbines are impacted by the sound. This is a very serious issue that affects many homeowners on Vinalhaven and could also, due to diminishing property values, affect the tax base of the town. In an island community, such as Vinalhaven, where people sincerely care about and support one another, we are in the position where economic gain in the form of reduced electrical rates/wind turbine debt could be pitted against community well-being. How willing will the Fox Islands Wind Cooperative and the community be to share the burden of this major miscalculation? Rather than bringing us together, the noise from the turbines has the potential to tear our community apart.

As I type, a computer is whirring away in our basement, sending wind speed data and noise level data to sound technicians in Boston. FIW is taking sound measurements, as required by the DEP, and it is our joint hope that they will be able to make adjustments to windmills in order to reduce the noise. Along with our neighbors, we are recording daily noise observations which sound specialists can use as a means to determine under which conditions the noise is most disturbing. We are eager participants in doing whatever we can to rectify the situation. We feel fortunate that Fox Islands Wind is controlled by the Fox Islands Electric Cooperative and that they are eager to work with us to find an answer.

However, it is very clear to us, that life as we know it on Vinalhaven has changed irrevocably. We understand that our best hope is to come to a reasonable compromise. We are working with FIW to find a balance between the level of noise that is tolerable and the turbine speed necessary to produce electricity. This is a far cry from what we were told and what we expected. One has to wonder if wind turbine technology is truly ready to be implemented in rural areas. Community based wind power is a very good idea, a smart answer to our energy dilemma. The numbers actually work. It is just that our life-for us, and for our neighbors-does not. Ironically, for households within earshot of the turbines, the GE windmills fly in the face of island sustainability. Some islanders who lived close to the turbines were given the choice of either selling their homes or land to FIW at the

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assessed value or living with the turbine noise. Most chose to sell rather than live with the noise. Others are trying to stay where they are with hopes that GE specialists and FIW sound specialists will find technological solutions. The Island Institute website states, "The Institute's perspective is fundamentally ecological. It understands that all life is intimately linked with its environment; that people are therefore an inextricable part of the ecosystem of the Gulf of Maine, that there is an interdependent web of existence more evident on islands than in other communities and landscapes." As is, there are some year-round families on Vinalhaven who feel their existence is being marginalized and the noise issue minimized.

Before any other island community takes the step towards wind power, come to Vinalhaven and see for yourselves the consequences of those actions. Come to our meetings. Come stand on our porches, listen to the nonstop roaring, thumping, whooshing, grinding sounds of the turbines, and compare it to the quiet you currently experience. Watch how our community struggles with this issue and see how we resolve it. Look at the compromises we make and decide if those trade-offs are worth it for you and your neighbors. For many islanders, a cohesive, caring community and good quality of life are of critical importance. Don't let the wind blow it away.

*Sally Wylie lives on Vinalhaven and in Rockland. She is part of the group Fox Island Wind Neighbors.*

<http://www.post-gazette.com/pg/10006/1026076-455.stm>

## Somerset wind turbines seen as aviation hazard

Wednesday, January 06, 2010

By Don Hopey, Pittsburgh Post-Gazette

The Federal Aviation Administration says that half of the 30 windmills proposed by Gamesa Energy USA for a controversial wind power project on an ecologically sensitive ridge area in Somerset County are a hazard to aviation.

Opponents of the wind turbine project hope the FAA's preliminary finding will shut it down, but FAA officials say even a final determination would not stop the development.

The project would be located in the watershed of two of the state's highest quality trout streams and along the Allegheny Front ridge, a major bird and bat migratory route, of Shaffer Mountain in the northeastern part of the county.

"It should be the end of the project, but I think Gamesa will call in some of its political clout to get the FAA to back off," said Jack Buchan, a member of Sensible Wind Solutions, which opposes the development.

Gamesa said the FAA findings won't affect the proposed project, which experienced delays in securing state permits for the 22,000-acre site. The state Department of Environmental Protection rejected Gamesa's first three permit applications as incomplete and is considering a fourth submission.

The FAA said that 15 of the 404-foot-tall wind turbines exceed "obstruction standards and/or would have an adverse physical or electromagnetic interference effect" on the airspace above ridge or nearby airports and flight routes.

But Laura Brown, an FAA spokeswoman, said the presumed hazard determination is the first step in a give-and-take process between the FAA and the developer that could alter the height and location of the turbines.

Even a final FAA determination that a project is a hazard to aviation doesn't mean it won't be built because **the FAA has no legal authority to stop any development, Ms. Brown said.** But such a determination can make it hard for a development to get insurance coverage.

Gamesa was invited to the state by Gov. Ed Rendell in 2004 as part of a green jobs initiative. The company manufactures turbines in Ebensburg, Cambria County.

If all 30 turbines planned for the Shaffer Mountain project are built, they would have a maximum electric power generation capacity of 66 megawatts, enough to power 30,000 homes.

11/5/2009

**A letter to the people of Lowell and the surrounding communities:**

My name is Wendy Todd and I am from Mars Hill, Maine. I grew up in Mars Hill, on a farm that has been in my family for generations. After getting married, my husband Perrin and I moved to southern Maine. About five years ago we moved back to the County to raise our children and enjoy the rural living that we both grew up with. Shortly after moving into our new home at the base of Mars Hill Mountain, construction began on the Mars Hill Wind Farm. The entire project went on line in March of 2007.

The wind turbines have changed our lives forever...

There are 18 families who live under a mile and downwind of the Mars Hill wind project who have been negatively impacted by these massive turbines. We all want for people to understand what is at stake when turbines move into your community. The 28, GE 1.5 megawatt turbines here in Mars Hill have destroyed a way of life that many have cherished for generations. It is an industrial facility that covers over 3 miles. It has destroyed wildlife habitat, breathtaking views, and property values. It has forever scarred the mountain. It has disturbed streams, ponds and wetlands. Safety issues with ice throw, risks of fire and tower collapse are all things that neighbors have to consider.

The noise created by the turbines can be unbearable at times. It causes disruption to sleep patterns, stress and anxiety to most who live downwind of the project. For some it causes headaches, pressure or ringing in the ears, inability to concentrate, feelings of unease, and dizziness. Others who suffer from migraines are saying that their migraines are worse and that their medications are no longer as effective in relieving the pain. Some of my neighbors have turned to medications and other therapies to cope. Most of us have had to alter something, either in our homes or personal lives, to cope with how the turbines have changed the environment. I am not talking about a simple nuisance, this is about life altering changes to the environment that can literally make people sick and change the way you live in your home and use your land. A large number of the families affected have considered leaving their homes.

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Many in the Acoustic and Medical Communities are calling for a 1.5 kilometer or greater set back for industrial wind turbines from homes, schools, and medical facilities for reasons of health and well being. Proper setbacks are the only way to provide protection.

I truly believe it is only a matter of time before the scientific data will be there to force more stringent regulation on this industry, but for now you have to protect yourselves because no one else is able to do so. Your friends in Mars Hill are begging that you listen and heed our warnings before you too find yourself in this nightmare.

Many promises were made to our town through the information period before construction began. Talk of job creation, reductions in carbon emissions, and reductions in our taxes were all very appealing. Many inaccurate, false statements were given about the noise issue. We were told that

we would have to be within 500 feet of the project to hear anything at all from the turbines and that there would be no noise at all at the base of the mountain. Shadow flicker was never discussed.

The extent of how huge the construction phase would be or what kind of disruption we as citizens should expect was not discussed either. The Mars Hill project was supposed to reduce carbon emissions by 65 million tons, yet when asked to show confirmation of that, they cannot show where any regional power plants have stopped or slowed production that would realize any carbon reductions at all.

The promise of jobs went mostly to large corporations and their employees from mid to southern Maine. Most local crews did not have the expertise to meet the needs of the developer.

They told us that property values tend to go up when turbines move in, but appraisals show a 20 percent to 50 percent devaluation of property depending on proximity and visibility of the turbines. One appraiser even said that some of our properties might never sell.

Mars Hill was the first project of its kind in our state but there should be no excuse for how little the people of Mars Hill knew about this process. Maine DEP and the developer had a good understanding of what was going to take place but it was never communicated properly to the people of Mars Hill. One can only imagine how different things would be if the truth had been known. The state of Maine has not adopted rules that will protect its residents from this kind of project. At this point in time, individual communities must take action to protect their families

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because there are no wind industry guidelines that will. The developers hope that they can get in and operational before you understand the facts about wind. They make you feel that you would be a fool not support such a wonderful project. We were naïve and believed what the developer told us.

You are in a different place. So much new information is becoming available to communities who are considering wind. You are not alone. You have the chance and the responsibility to listen to all the information and choose wisely for your town. Any of the 18 families here in Mars Hill are willing to answer any questions or concerns that you may have regarding what life is like under industrial wind turbines. If you are not going to be affected personally ask yourself if a friend or neighbor will be. Protect each other. Ask lots of questions and use caution when listening to the developer. They are there to sell their project, not tell you all the negative things that can happen.

What can you do to learn more? Attend local meetings, listen, and visit a few Web sites on the impacts of industrial wind and wind turbine syndrome. Educate yourselves now before it is too late. Defend your ridgelines, your homes and your way of life. No one else will do it for you. Once the project is approved there is no hope and no turning back.

Sincerely,

Wendy Todd  
Mars Hill, Maine