TO:

Energy Plan Comments
NYSERDA
17 Columbia Circle
Albany, NY 12203-6399

Greetings,

My home is located in a town that is probably going to be filled with industrial wind turbines. I will have turbines 1200 feet from my front door. Our town has gone through the DEIS study and is dealing with Horizon Wind.

I have thoroughly studied their DEIS and made comments about the risks and liability of locating turbines so close to many homes in our town.

I am enclosing a copy of my notes and comments on the DEIS (Draft Environmental Impact Statement) and would like to submit these notes and comments as my official comments on your draft scope for the 2009 N Y State Energy plan.

I am not totally against wind turbines, I just think that aggressive wind companies are putting turbines in towns that are too populated. Turbines on mountains or in wasteland are fine.

Please read my comments. The political, environmental, and safety issues I noted must all be considered when you finalize the State Energy Plan. If aggressive wind companies and greedy local politicians start putting dangerous turbines where they do not belong, it may ruin it for all. Many towns near me have already outlawed industrial turbines because of reasons I mention in my comments.

Thanks.

[Signature]

Dave Bencic
NOTES AND COMMENTS ON THE
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE
ALABAMA LEDGE WIND FARM, LLC
Town of Alabama, Genesee County, New York

By: David M. Bencic, Town of Alabama Resident for 21 years
March 23, 2008

Dear Neighbors, County residents, Town & County Government Officials,

I am NOT totally against generating power by industrial wind turbines, or wind “farms”. I have always been concerned with the environment and wildlife. Back in the 1970’s when Jimmy Carter was giving rebates for solar panels, I received a Federal grant to design solar panels for which I received a US patent. I had solar panels on my home until they needed repairs. It cost more to repair them than what I was saving so they were scrapped. As a mechanical design engineer, I design and build thermal processing equipment for the ceramic, metals, and carbon fiber industries. The new industry boom is carbon fibers, used in aircraft, recreation equipment, and wind turbine blades. Carbon fibers are basically spider webs made of pure carbon or graphite. They are stronger than steel, lighter, and when embedded in resins, much more rigid. Rigidity is needed in turbine blades for up-wind turbines so the blades do not flex and hit the tower.

I am concerned about locating turbines in populated areas. I see nothing wrong with wind farms in remote or isolated areas. I think wind companies are getting too aggressive by enticing towns to allow turbines so close to homes. There are known dangers and significant risks, as the DEIS mentions.

Aside from the danger and risks of having turbines so close to homes, I am against locating turbines in the Town of Alabama because of the political situation and the impact on wildlife: eagles, and thousands of migrating geese twice every year. It is just plain ignorant to have turbines in this area.

I have thoroughly read the DEIS, 372 pages, and compiled notes of my concerns. The DEIS does cover a lot of environmental issues during construction. If Horizon and their contractors follow their plans, I have no major concerns other than what I mention in my notes. If Alabama was a smart location for turbines, construction impacts and inconvenience would only be temporary and I would have no problem with that portion of the project. The permanent impacts are what concern me the most. I have compiled my notes and comments into 9 groups.
THE TOP 9 REASONS
WHY WIND TURBINES DO NOT BELONG IN THE TOWN OF ALABAMA

#9 The Poor Farmer Myth

#8 TV & satellite reception

#7 Effects on people: Sight, sound, flicker, water wells

#6 Property Values

#5 The Political Situation

#4 Wildlife and Ecology

#3 Danger to Drivers, Increased Traffic Accidents

#2 Producing Power by Wind is NOT Economical and Smart.

#1 The Safety of the People Living Near and Surrounded by the Turbines

Alabama Ledge Wind Farm, LLC is a corporation wholly owned by Horizon Wind who also paid for and is responsible for the contents of the DEIS. It is Horizon’s plan and attempt to justify the project with respect to the environment. When I refer to Horizon, it may mean them, their LLC, or the company that prepared the DEIS for them. The purpose of the DEIS is to describe the environmental impacts and what might be done to minimize impacts such as noise, reduced property values, construction dust, flicker, danger to traffic, loss of well water, killing of birds, destroying roads, deforestation, loss of crop land, lightning strikes, reduced TV or satellite reception, tower collapse, blade and ice throw, visual impact, etc. Part of the document is devoted to the alleged benefits of turbines and how they can save the world, solve our energy problems and provide free money to us.

Words in “quotes” are as stated in the DEIS, not from anti-wind web sites. Numbers (123) are reference page numbers of the DEIS.
#9 The Poor Farmer Myth

I have nothing against farmers. I built my home on land sold by a farmer. My father and both grandparents were farmers; our best friends are dairy farmers.

- This project will result in the permanent loss of 104 acres of vegetated land.
  (130)
- The DEIS states “The Town of Alabama workforce is largely employed in the manufacturing sector 23.8%; followed by educational, health, and social services 15.5%; and retail trade at 13.3%.” Agricultural employment is only “6.9%” (220 & 302)
- When the laws were changed by the Town Board to allow wind turbines, there were two persons on the town board, Joan Phelps and Samuel Scarborough, who will now be getting turbines on their land along with the supervisor who’s in-laws (Phelps family) will be getting turbines on their farms.
- “There are several reasons that wind energy helps preserve agricultural uses.” One of the reasons is “the presence of wind turbines on agricultural land discourages encroaching non-agricultural use such as residential suburban sprawl.” (306) I must agree with them. No one in their right mind would build a new home surrounded by turbines.
- “In fact, by supplementing the income of participating landowners, the Project would help keep farms in operation and the land in agricultural use.” (307) If a farmer is getting more money from Horizon than they ever got for working the farm, will they continue farming?
- Many of the turbine land owners are not farmers, they work in the city and may rent their land out to be farmed by others. The money from the turbines does not go to the farmer.
- “The presence of wind turbines may limit or prevent the conversion of agricultural land to seasonal or permanent residential use.” from page (307)
  o So now, Horizon is saying that the turbines will make people NOT want to build homes here. I wonder why? Could it be the noise, flicker, and safety? Horizon is implying that the turbines are BAD for residents just to say that it will be good for farmers. Tell the people what they want to hear even if it means lying to them.
- ON THE SAME PAGE (307) it states “There is no conflict between the proposed Project and the future residential developments.” They just said the turbines would prevent residential use! Logic like this should be spread on the fields.
#8 TV & satellite reception.

With grounded steel towers about 400 feet high surrounding many homes, TV and satellite reception will be effected.

- "The placement of the turbines should produce very little affect to off-air reception in the communities to the north and south of the project. Communities east and west may experience some issues receiving all of the channels they now receive." (292)
- In reference to Wheatville Station (on Maple Road where the abandoned railroad crosses and near South Alabama) the DEIS states: "This community may be an area that receives degraded TV reception." (293)
- The DEIS does not mention the people totally surrounded by turbines.
- "..the entire area is serviced by cable television and programming provided is considered very good." (292) I may be wrong, but I do not think cable services the entire town or eastern portions of the town of Oakfield.
- Horizon states that if the project impacts off-air TV, residents could file a formal complaint and Horizon will address and resolve each individual problem and could upgrade antennas or provide cable or satellite systems. Is this in a contract?
#7 Effects on People: Water Wells, Flicker, Sound, Sight.

- Water Wells.
  - If Horizon is at fault for well water loss, they will “provide alternate water supply OR compensation equivalent to the value of the lost water production.” (113).
  - This is NOT enough. Most of the homes in the town depend on well water. If blasting, drilling, or digging causes our water to go bad or disappear, Horizon could say that the average water bill is $20 or so a month and we would be high and dry.
  - The Town Board must insist that Horizon pay for ALL expenses, maintenance, and equipment to provide normal water. This could mean drilling new wells, running city water lines, providing and taking care of water treatment equipment, and whatever is needed.
  - This is a good reason why NOT to put turbines so close to so many homes.

- Shadow flicker.
  - Horizon convinced the town to allow 30 hours per year of shadow flicker in homes.
  - If Horizon has been unable to negotiate (bribe) homeowners, Horizon “will curtail operation of specific turbines as needed to comply with the above legal standard.” (175) Legal standard? Who made that decision? It was nice of the Town Board to decide how much flicker I want in my windows.
  - Horizon offers to visit with homeowners and see what can be done to minimize flicker. Options are: trees, shrubs, curtains, blinds, shutters. (175)
  - I heat my home with passive solar during the spring, fall, and winter. I will not tolerate any shadow flicker inside my home. I will not close my shades or install shutters. I purposely built my home with the activity and major windows to the south to take advantage of the sun’s energy. I will get flicker from T-56 in the morning, T-43 in the winter noon, and 3 others in the afternoon and evening. Another reason to eliminate turbines.
Sound.

- The town has a noise ordinance that is limited to 50 dBA at any time. (190) Horizon intends to comply with this but maybe not during construction. (196)
- If you want to know what 50 dBA is, go in a quiet room, hold a cordless drill at arm’s length, turn it on the slowest speed. I measured it. It is not very loud but imagine hearing this annoying sound day and night.
- Wind studies generally do not include the low-frequency sounds of blades passing by the towers. These sounds can be most annoying and are not usually measured.
- “Project participants are less likely to be effected by noise than non-participants.” (197) How does that work? Do I take the money and stuff it in my ears?
- Horizon’s goal is to achieve sound levels of “no reaction although noise is noticeable.” (198) To reduce noise impact at non-participant locations, Horizon’s solutions may be: (199)
  - “Altering current site configuration which may include reducing the number and or location of turbines…” (I vote for this one)
  - Encouraging affected residences to become Project participants by signing these receptors to easements.” (I don’t think so)
  - “Offering to plant trees in areas where additional noise screening and masking could help reduce Project related noise impacts.”
- The report states the average receptor (a person at some location) would experience noise considered to be “unnoticed or tolerable” and no one would experience “very noticeable or objectionable noise impacts.” (317)
- Horizon plans to offer $1,000 per year to landowners within 2,500 feet of a turbine. This includes those “predicted to experience above average noise and shadow impacts.” After taxes, you might end up with $700. That is less than $2 per day. You must give Horizon your social security number and sign agreements waiving your rights. You must decide if being surrounded by 40 story high turbines is worth the money.

Sight.

- If you want to see what some of the areas of the town will look like with turbines, Horizon has made some visual simulations of selected areas.
- Sight and sound are the major contributors to the loss of home values.
- The DEIS “Summary of the Project’s Long-term Unavoidable Adverse Impacts” (313) lists “Visual impact on sensitive sites/viewers, Shadow-flicker impact on adjacent residents.” and operational noise impacts (315).
- Horizon’s mitigation factors are listed as “Siting the project away from population centers and areas of residential development.” Then why do they have so many turbines surrounding the homes on Townline Road and to the south (sunny side) of Ham Road?
  - The 3 Boards, (County planning, Town Planning, and Town) should all insist that the project be terminated or turbines be removed from the Townline Road and Ham road areas.
- The DEIS states that they reviewed health concerns, found no proof that turbines cause problems, but they state “However, this literature review could not rule out the possibility that the simple detection of wind turbine emissions could induce sufficient mental stress to trigger migraine headaches and associated symptoms in individuals predisposed to such ailments.” (245) What more can I say?
#6 Property Values.

The report implies that property values will not go down, but we know better.

- Town taxes may not go down as suggested. Horizon will pay zero taxes to the town and Alabama Zoning Law states that cash payments in lieu of amenities are not to be used to pay general and ordinary town expenses. The town supervisor stated that they could make other deals that might reduce taxes but no deals have been made.

- Residents are misled to believe that their taxes will go down so their homes would be worth more. Not necessarily true.

- The area of Townline and Macomber is zoned as Agricultural-Residential. The DEIS describes “Suburban Residential Zone” as “...dominated by low to medium density residential neighborhood development that typically occurs along agricultural road frontages...” (145) This sure sounds like where I and many others live near Townline and Macomber Roads. So Horizon wants to put turbines in areas they describe as a Suburban Residential Zone? This is NOT a safe and wise thing to do.

- Horizon cites that the Town of Alabama population has decreased in the last 5 years. “This trend of population reduction is expected to continue over the next five to ten years as people continue to move from rural agricultural areas to more populated areas in search of advanced work opportunities.” (216)
  - Really? I wonder why? Could it be the turbines are coming?
  - I know of several people in the town who have sold or are trying to sell their homes specifically because of this turbine situation. There will be more for sure.
  - The DEIS states “The Town of Alabama workforce is largely employed in the manufacturing sector 23.8%; followed by educational, health, and social services 15.5%; and retail trade at 13.3%.” Agricultural employment is only “6.9%” (220)

- “...the median value of owner-occupied units in the Town of Alabama $76,500 was slightly lower $6,700 than the median value in Genesee County $83,200, and significantly lower than the median value for the State of New York $148,700.” (218)
  - If the turbines come, home values will go even lower for sure.
  - The DEIS goes implies that Alabama is generally poor and stagnant compared to Genesee County. Maybe that is why Horizon got their foot in the door.
• Horizon paid a consultant to do a study on property values near 2 other wind farms. "The results of these analyses showed no negative impact on property value from existing wind farms." (232) **There are problems with this study:**
  - The study included homes within 5 miles of turbines. 5 miles from the Alabama turbines will be: to the city limits of Batavia, 2 miles past Oakfield, north into Orleans county, half way to Akron, to the Village of Corfu, and past West Batavia. If you take an average or study of an area that large, it may not have much effect on property values. BUT what about us who are 1200 FEET from and surrounded by turbines?
  - The study **DID NOT consider any homes within ¼ mile (4,000 feet) of turbines!** (see page 8 of the study, this is not mentioned in the DEIS for obvious reasons)
  - The reason for not considering homes within 4,000 feet was that there were no sales to get values from. What does that tell you? That no one in their right mind would buy a home that close to a turbine.
  - The study was conducted in 2003 (5 years ago when home prices were good)
  - Page 9 of the study states "Residential values are most sensitive to aesthetic impact and that high-end residential development is more sensitive than low-end housing:" Bingo! Now we know why Horizon was able to con the town and its officials so easily. Alabama is a low-valued, depressed area so put turbines there.
  - The same page states "Such analysis can NOT be performed in sparsely populated rural areas:" Horizon failed to print this information in the DEIS, they only printed their side.

• "Perception of the remote or rural character of the area could be altered for some viewers due to the presence of the turbines, especially in locations where a number of turbines can be seen or where the turbines can be viewed from foreground distances, example under ½ mile." (307)
  - The group of homes on Townline Road will be surrounded by turbines, 9 turbines within about ½ mile.
#5 The Political Situation.

The DEIS does not address the political situation as such. It does mention the Town zoning laws and that Horizon intends to follow the rules. We all know who made the rules though.

- Prior to January of this year, there were two persons on the town council, Joan Phelps and Samuel Scarborough, who will now be getting turbines on their land. Mr. Scarborough is currently a member of the council.
- Current town supervisor Guy Hinkson's in-laws (Phelps family) will be getting turbines on their land.
- Council members Samuel Scarborough and Joan Phelps did not officially vote on wind related issues. Supervisor Hinkson has and continues to vote on them.
- In the election of 2007, Joan Phelps lost re-election and Joseph Cassidy quit.
- The town board appoints members to the Town Planning Board, who help change and make zoning laws, and deal with wind issues.
- The Genesee County Planning Board can make recommendations to the Town concerning safety and other aspects of the project. I hope the Town Planning Board members will abide by the County recommendations and not ignore them. Overriding or ignoring suggestions concerning safety of a project could leave the Town vulnerable to future lawsuits in the event of injury or damage claims.
- As of March 17 2008, none of the Planning board members have read through the DEIS report. I realize it is a large document, 372 pages, and they may not have had time but I hope they will read the entire report.
Horizon really tries to convince people that the turbines will not have any significant negative impact on birds, bats, or other wildlife. They refer to studies that are not even close to our situation. They say they studied the area but apparently have not even looked in my backyard in the spring or fall, or they chose to ignore facts.

- In reference to the Iroquois National Wildlife Refuge, the Oak Orchard and Tonawanda State Wildlife Management Areas and swamps located within the town 2-5 miles to the north of the turbines, the DEIS states “...the region receives periods of high seasonal use by waterfowl as they travel between these 3 management areas.” (117) The geese travel all over the town, not just between those areas.

- Horizon says there is a buffer zone from the wildlife refuges and swamps. Do they think the geese stay in those areas? No way. Everyone knows that for 2 months in the spring and 2 months in the fall, there are geese all over the town. For 1/3 of the year we have high concentrations of Federally protected migrating birds all over the town. The geese feed in fields by the thousands. I have photos of geese flying into fields surrounding my home. Every morning and evening, they fly in from beyond Oakfield and land in the fields behind my home and across the road to feed. In the evenings, as it gets dark, they take off by the hundreds like the flying monkeys in The Wizard of Oz. I have photos of huge flocks of geese where turbines T-56, 55,38, 45, 43, 24, 29, 20, 22, and 28 will be.
  o “The Iroquois National Wildlife Refuge is located about 2 miles from the nearest turbine.” (273) I have seen geese flying just above my roof top or several hundred feet high.
  o Turbine T-56 will be 1600 feet from my home. There is a pond near the turbine that attracts geese and water fowl and wooded areas nearby. Sadly, the land owner has sided with Horizon and is not even a farmer.

- “..blade washing may likely be necessary to remove insect debris and grim..” (61) Turbines attract insects. Bats eat insects, that is why so many bats get killed by turbines.

- Horizon already knows what bats will be killed. “The species expected to be the most common fatalities would include eastern red bat, hoary bat, and eastern pipistrelle with fewer numbers of big browned bat, little brown bat, northern myotis, and silver bat.” (129)

- The DEIS did not mention this but wounded or dead birds and bats at the base of the turbines can cause other problems.
  o Birds such as eagles and turkey vultures will learn that there is free food under the turbines only to become food themselves.
  o Coyotes, foxes, and wild dogs will eat the wounded or dead birds and bats. Populations of coyotes and wild dogs can increase and cause agricultural and health safety concerns.
  o Wounded bats under turbines may transmit rabies to coyotes, foxes, wild or domestic dogs and cats and children. Imagine a child saying: Mommy, I found a hurt bat under the turbine and it bit me.
  o To minimize this impact, chain link fencing should be mandatory to encompass 1.5 times the rotor diameter, about 450 feet.
  o By requiring the elimination of turbines T-56 and others near groups of homes, the town and county boards can minimize health and safety risks mentioned above.
• The DEIS states that there will be a permanent impact to 1 acre of Federally Regulated wetland. (103)

• The DEIS states that we have the following birds: (115)
  o 1 state-listed endangered species.
  o 5 state-listed threatened species.
  o 10 state listed species of concern.
  o 3 Bald Eagle nests located within 3 to 5 miles of turbines.
  o Various other raptors including hawks, osprey, northern harrier, and vultures.

• A raptor bird survey on April 2005 observed up to 14 raptors per hour IN THE PROJECT AREA. (116).

• In reference to the endangered short eared owl, osprey, and bald eagle, the DEIS states “Potential impact to these species could include loss of eggs and young, displacement and disturbance due to noise, and direct habitat loss.” (126)
  o The Town of Alabama is famous for the wildlife areas and birds. I can not understand how Town Board members and citizens can allow Horizon to install 52 meat grinders in the sky. I guess money can make people do the wrong things.

• The towers will be 270 to 326 feet high, blades will be 269 to 295 feet diameter. (9)
• Blades could be as low as 121 to 193 feet off the ground.
• Blades could reach as high as 403 to 475 feet above ground.
• The towers and blades will be painted off-white so the motion will not be as annoying. (22) This means they will be harder for geese and eagles to see.

• Horizon’s study states “...the mean flight height for night migrating birds across the project area was 1,597 feet during the fall and 1,350 feet during the spring.” (128) They go on to state that 18.8% were below 480 feet in spring and 15.1% during fall migration and the maximum turbine tip height is 476 feet. And “...which suggests that most nocturnal migrants are not at risk of turbine collision.”
  o Like they say, figures don’t lie but liars can figure...
  o 480 feet is almost 476 feet so this means 18% of the spring nocturnal migrating birds and 15% of the fall migrating birds must dodge the 120 MPH blades in the dark and are likely to be killed in the area.
  o Horizon’s logic of saying “most” are not at risk may be true but for the unfortunate 18%, Horizon is their death sentence.

• “Onsite study results also indicate that the project site does not appear to occur within an area exhibiting any substantial migrant and resident bird use relative to other regional wind energy projects.”(128) Who are they trying to fool? This area has one of the highest concentrations of migrating birds in the state and is in the major flyway on the east coast.

• “Large numbers of Canada goose have been recorded during spring and fall surveys.” (128) OK, so we DON’T have substantial migrant birds and now we DO. Make up your mind.
• "While the proposed project would increase risk of collision related mortality to Canada goose, impacts are not expected to be significant due to the large numbers of this species in the region and the low occurrence of collision at wind projects." (128)
  o SO, now they are saying that there are so many geese that killing 15 to 18% of them won't matter.
  o What if the war was justified by saying that "most" of the soldiers who went were not killed, or that there were so many soldiers there that the number killed was "not significant"? Horizon's reasoning is for fools!

• "The project would also result in the direct loss of 35.46 acres of forested habitat.." (130)
• There are plans for another industrial wind turbine development, the GenWy Wind, LLC and Tonawanda Creek Wind, LLC in the towns of Pembroke and Batavia. (351) A chart on page (353) indicates that the Alabama project will kill 166 birds and 754 bats per year and the GenWy project will kill 512 to 1,021 birds and 2,320 to 4,626 bats per year. I do not know how they got these numbers but killing only 166 birds does not seem realistic, it will be much higher for sure. Why would turbines even further from the swamps kill 6 times as many birds? Something is wrong here. Based on my photos and observations over the last several years, turbines T-56 and others near Townline Road will kill much more than that during one foggy dark evening for sure.

• Page (353) mentions the kill rates of the Alabama and GenWy projects: "Cumulatively this additional mortality may result in an adverse effect on the regional populations of certain avian and bat species that are not able to reproductively compensate for such reductions." (353) This is in the DEIS and any agency that approves or allows this project to proceed is endorsing the possible total elimination of some bird & bat species in this region.

• More twisting of facts: "As previously mentioned, despite the occurrence of certain state-listed species as well as bald eagles the project area does not include sensitive or unique habitat that would attract these species." (353) Who are they trying to kid? The people at the wildlife refuges are doing all they can to attract the Bald Eagles to the town of Alabama. Horizon knows that technically it is not in the project area but only a few miles away. More misleading statements by Horizon.

• To minimize the impact to waterfowl from the refuge and wildlife areas, Horizon states that they have already or may use: "Turbine relocation (depending on topography, wind resource, and access to land) or removal from the proposed Project layout if suitable alternative locations cannot be found." (288) This sounds good to me, remove T-56 for sure or better yet, remove them all.

• The 2005 Oakfield-Alabama Comprehensive Plan Identifies the Town of Alabama’s goals, one of which is “Protect the environmental features and resources of the Town.” (301) Killing of geese, eagles, raptors, bats, and threatened and endangered birds is not protecting the environment at all. Oakfield kept their part of the deal, they said no to turbines.

• The DEIS “Summary of the Project's Long-term Unavoidable Adverse Impacts” (313) lists "Incidental wildlife injury and mortality." Horizon’s solution to this is “Funding of post-construction studies to monitor potential impacts on birds and bats.” (314) So, the only thing they plan to do about killing Federally protected wildlife is to “study” it after the turbines are up. If their study is anything like their other studies, it may be tailored to suit themselves. But it will be too late.
#3 Danger to Drivers, Increased Traffic Accidents.

This is another area where I think they put on the blinders and said there will be no negative impact.

- Horizon says: “Commuters and through travelers are typically moving, have a relatively narrow field of view, and are destination oriented .. generally would be focused on the road and traffic conditions.” (147)
  - Who are they trying to kid? Maybe a person right out of driver ed might stare at the road all the time but be real! Drivers are always looking around, especially in the flat countryside, for deer, birds, geese.
  - If someone is driving west on Townline approaching Macomber and there is a flock of geese headed for turbine T-56 or T-28 or there is flicker from the evening sun, or they are just watching the turbines turn, chances are good that they will NOT see the stop sign and run right through the intersection. The cross traffic does not have to stop. Even a 4-way stop will not prevent accidents there. In the last several years, there were several serious accidents at this intersection even without turbine distractions. Mercy Flight was there just last year.
  - If you do not believe drivers will be distracted by turbines, get the DEIS supplemental information from Horizon and watch the video simulation as viewed from the new Oakfield cemetery on Maple St. The turbines stick up in the sky like sore thumbs. You will be amazed at how your eyes can NOT stay fixed on the road with the many turbines spinning in the distance. The view at the cemetery will be forever ruined.
  - Another dangerous intersection will be Rt 77 and Ledge Road. This is a highly traveled road due to the reservation traffic and trucks. There is already a set of crosses where people were recently killed there. As drivers come from the reservation to Rt 77, they will have full view of T-46 and 5 others. If they have flicker in their eyes or are watching the turbines, they will not be watching for trucks and cross traffic.
  - Horizon says they will not have advertising on turbines. Good, we don't want them painted like Coke cans. I hope the town board keeps it this way. (174)
- The DEIS has cited studies that...”did not indicate any definable accident clusters or patterns within the main Project area that warrant avoidance or safety mitigations.” (201) (Mitigate means to make something less severe.)
  - “NYS Route 77 had reported a large number of accidents between I-90 and Ledge Road. Many of those accidents were caused by adverse winter conditions, aggressive driving, and impaired drivers.” (201) If the turbines are allowed near Ledge Road & Rt 77, they can add: distracted or sun-flickered drivers to the causes.
- Horizon’s justification is that there have not been a lot of accidents so it is safe to put up towering spinning flickering turbines. **There is NO mention that the turbines could very well cause more accidents.** This is a serious fault of the DEIS and another reason why industrial turbines do not belong in populated areas.
- There are about 20 road intersections within or near the Project area. Some are quite heavily traveled, especially Townline, Ledge, Rt 77, Judge Rd.
#2 Producing Power by Wind is NOT Economical and Smart.

Horizon advertises green energy and free money to the people. But guess who pays and who gets rich. The DEIS is full of suggestions that this project is good for all and will “save the farmers” and provide free money to all of us. If you do the math on the facts Horizon gives, you will see that this is no free dinner for the taxpayers.

- The Alabama Ledge Wind Farm LLC is wholly owned by Horizon Wind.
- The average annual capacity is “30% of the installed capacity”.
- At 30% efficiency, Horizon can produce 225,000 to 314,000 MW-hours per year.
  Federal tax credits will give Horizon $19/MWh for the first 10 years. NY State will allow Horizon to sell REC energy credits worth $15/MWh. Consumers ultimately pay for the REC credits. So, $19 plus $15 times 314,000 equals $10.6 million per year going into Horizon’s pockets. Add on the estimated $10 million per year for power sold and you see why they are so eager to destroy our towns. Horizon might be giving the people and community about $1 million a year but they fail to say that the people are giving them $10.6 million each year! (see page 70)
- Horizon says electricity rates will go down. Not if conventional generating plants are forced to buy RECs and pay wind companies. Ethanol did not lower gas prices and it drove up prices of food.
  - A note about REC or Renewable Energy Credits. The government requires all electric utility companies to sell a specific percentage of renewable or green energy. Some do. Those that don’t, and buy power from coal or fuel fired plants, must purchase RECs from the companies that have them. The state allows Horizon to make and then sell or auction off RECs based on how much green power they put in the grid. So, Horizon gets paid twice for their power, once for selling the power and again by who buys their RECs.
  - This process does NOT significantly reduce pollution or shut down coal plants, it drives up the cost of electricity for consumers by forcing power suppliers to pay wind companies for RECs AND pay for the power, a double hit on us consumers. As long as coal fired plants in NY City can buy RECs, they can burn all the coal they want. We get the ugly dangerous turbines, they get to say they use green energy while burning coal.
  - You, as a consumer, can buy green electricity from the power company. You will have to pay maybe $15 more per month. You are getting the same power as me but you are contributing money to the power company so they can buy green power credits on paper. If consumers do not pay the extra $15 per month, everyone’s rates must go up.
  - At a recent town meeting, a board member noted that when a future turbine land owner was asked if he would pay extra each month for green power, the owner said no way. What does that tell you?
  - The Federal tax credits are NOT just deductions, they are bottom line cash paid to the wind companies by us taxpayers.
If you still think Horizon is concerned about green energy, page 70 states: "Based upon prevailing electricity prices, the Applicant does not anticipate initiating constructing of the project until it wins a REC award or secures an alternative contract for the offtake of electricity and RECs." (70)

- This means that generating power by wind is not economical or justifiable unless there are huge government subsidies.
- In the first 10 years, Horizon will get $106 million from us plus what they get for the power sold. Say what you want, it is all about money, not clean economical energy. No wonder wind company developers are spending so much money to push the projects on gullible towns.

What kind of energy policy will we have if it is based on the government (taxpayers) giving hundreds of millions of dollars to foreign corporations to produce unreliable intermittent power? When we can no longer afford the subsidies and credits to the wind turbine companies, they will close down, walk away, and leave us with rusted abandoned outdated towers of scrap because without government cash, it will not be profitable for them to operate and maintain thousands of turbines. When the taxpayers wake up and the subsidies stop, you will not see any more turbines going up. The power plant in Niagara falls has been operating for over 50 years. The predicted life of a turbine is 20 years.

Horizon states that if the project does not proceed, "the lack of economic development activity in the project area could result in undesirable impacts in the following areas of the affected environment: Loss of increased revenues to local municipalities; Loss of lease revenues for participating landowners; and loss of income from construction jobs." (321)

- Logic like this belongs in the Presidential campaign speeches. You cannot loose what you do not have. Horizon wants people to think they have something they don't have so Horizon can say that it will be gone if you do not do what they want. That is like saying: You don’t have any money, I might give you some, but if you do not do as I say, I will not give it to you and you will be loosing money. Twisted logic for sure.

On page (360) they try to convince ignorant readers that wind turbines are better than nuclear or other generating facilities by saying that "Wind generating facilities do not present a good target for terrorist attacks." More twisted logic and fear factor by Horizon. If a terrorist was stupid enough to blow up a turbine, or even blow all 52 of them up, the impact on the power grid would be ZERO. No one would even miss the power since it is unreliable and intermittent and cannot be depended on. We will still need reliable and continuous power from nuclear, coal, gas, hydro plants even with thousands of turbines. This is one of the more comical reasons I have heard to attempt to justify the project.

And just when I thought it could not get any more comical, page (362) states that it would take 79,830 pounds of coal to equal the power produced by one turbine for 20 years. Get the calculator. That is 40 tons and if I bought it in small bags from the local coal dealer at $200 per ton that is $8,000 divided by 20 years equals $400 per year! You cannot tell me that it is economical to put up a $3 million turbine to save $400 of coal per year. Something is wrong here, maybe they meant 79,830 tons? Even so, it is not worth it.
And the number ONE concern I have with the DEIS and this project is

#1 The **Safety** of the People Living Under and Surrounded by the Turbines.

- They mention the danger of possible hazardous materials and aircraft impact. (247)
- The DEIS states that they are minimizing the impact on the population. If so, then why do they have turbine T-56 and T-28 so close to so many homes?
- "..defects in the project’s collection system could result in low voltage/nuisance shocks detectable by humans within close range of the alternate/stray voltage pathway." (251) They go on to say that if it could harm a human, it would trip a circuit breaker. I don’t think so. A 15 amp home breaker has killed many people without tripping.
- They plan to install ice detectors to “allow for turbine shutdown and/or notification of area residents.” (261) Is this like what they do at the nuclear power plants when there is a leak? Horizon says ice throw is not a concern to neighbors, so why notify us?
  - We have had several major ice storms in recent years some with high winds.
  - The DEIS states: “New York, and particularly the areas closest to the great lakes receive the highest number of freezing rain days in the country – an annual average of 5 – 7 freezing rain days.” (248)
  - Ice throw will be a serious concern for residents living north or south of turbines due to the prevailing winds aligning the blades towards them. Homes near Townline, Ham, and Judge Roads will be most vulnerable.
  - Page (248) also states “However, occasional ice shedding does occur, and remains a potential safety concern.”
- The turbines are designed for 90+ MPH winds. What happens at 100 MPH? Do they fall over, will blades go flying into homes? Horizon has had blades break and fall but were they in high winds? We have had several storms recently with 70 MPH winds, 100 could happen so why have turbines so close to groups of homes?
- A turbine tower collapsed in Oklahoma in 2005 and another in Japan in 2007. “Although these incidents are rare, they are potentially dangerous for project personnel and the general public.”(250) “.these incidents have generally been the result of design defects during manufacturing, poor maintenance, wind gusts that exceed the maximum design load of the engineered turbine structure, or lightning strikes.” (250) But they did and can happen.
- "..the risk of catastrophic tower collapse or blade failure is minimal.” (262) Minimal means it CAN happen. **Is it prudent to expose persons to minimal hazards when the other choice can be NO hazards at all?**
• **Turbines will be protected from lightning but homes nearby will not be.**
  - "Due to their height and metal/carbon components, wind turbine blades are highly susceptible to lightning strikes. It is reasonable to assume that the addition of a tall structure such as a wind turbine will increase the possibility of a lightning strike occurring at the turbine location." (252)
  - It suggests that turbines may act as lightning rods and reduce strikes nearby. However, "...lightning is responsible for 4 to 8 damage events per 100 turbine-years in northern Europe." (253) Does this mean that for the 52 Alabama turbines, we will have 2 to 4 turbines hit by lightning every year?
  - "Other wind operating systems owned and operated by Horizon Wind Energy routinely experience lightning events during storms." (253) They go on to say "...the incidence of lightning strikes may increase over natural conditions due to the presence of Project facilities."
  - High voltages, like lightning, causes carbon fibers to explode, where metal would melt.
  - "Blade or blade fragment throw would most likely be the result of lightning strike, equipment failure, improper assembly..." (249)
  - A falling blade is one thing, but to have a composite blade 500 feet in the sky with a tip velocity of 120 MPH get hit by lightning is dangerous when there are homes so close. Turbine T-56 will have 11 homes within 1600 feet.
    - When we get our occasional hurricane force winds, the blades of T-56 may be aimed at 7 residences within about 1,000 to 1,700 feet.
  - "Beyond the turbine lightning protection system, and the fire/emergency response plan described previously, no additional measures to mitigate the effects of lightning strikes are proposed." (267)
  - When mentioning general wind facility concerns, the DEIS states "This greater accessibility carries with it certain risks to public safety. Examples of such safety concerns include ice shedding, tower collapse, blade throw, stray voltage, fire in the nacelle (gear box-generator on top), and lightning strikes." (244)
• If someone gets hurt, maybe they will sue the landowner, Town, and Genesee County. After all, the DEIS does state there is danger of lightning and if the town grants permits in spite of this, there is negligence by the Town and County Planning boards for sure. That is why wind farms are normally in the middle of nowhere, far away from developed areas. There are about 229 homes within or near the Horizon project area. Horizon says there are 159 within the area but they do not count homes across the roads in adjoining towns or those on the other side of the imaginary line.
• The plan map shows 45 homes in the Townline-Macomber area that are about 2,500 feet or closer to 12 turbines. Some of these turbines are on land owned by Alabama town board member Samuel Scarborough. The town board and zoning boards have been convinced by Horizon that turbines can be as close as 1,200 feet to homes. I believe this is dangerous, and grossly negligent considering all the known risks.
• The average number of housing units per square mile in Alabama is 16. (219)
• The number of homes around turbine T-56 will be 24 per square mile.
• Page (281) states: "Nevertheless, operation of the proposed project could result in accidents that result in personal injury/or property damage, as discussed in Section 3.10 Public Safety."
• Horizon states that "Relocation of any turbine at this point would have a ripple effect, in that other turbines would have to be reexamined and possibly changed to maintain an efficient/workable project design." (234)
  o Turbine T-56 appears to be the last turbine added, possibly added to buy the influence of another landowner in the Townline Road area who recently started an organization to promote turbines.
  o T-56 does not share any access roads or power lines with other turbines.
  o T-56 has the access road almost in the center of a 1,000 foot fronted plot of farmland, not on the sides as preferred by the town zoning law. There are 2 homes on each side.
  o Removing T-56 will not effect any other turbine since it is last in the prevailing wind direction and at the end of the power line.
  o The land owner of T-56 is NOT a farmer.

• Two turbines, T-38 & T-56, are within 200 feet of existing gas pipelines. (258) "The presence of gas infrastructure within the project area represents the major additional construction-related risk to public health and safety." (246)
  o What if a turbine collapses and a blade goes into the soft ground and cuts a gas line? There are several homes within 1200 feet of T-56 which is located right next to a gas pipeline as shown on Figure 8 Gas Facilities map of the DEIS.
  o The DEIS does mention a possibility of a backhoe hooking into a gas line and pulling it which could pull fittings out some distance away. (275)

• Page (255) states: "It is logical to assume that sensitive receptors (persons) may experience elevated levels of anxiety that could potentially complicate existing health conditions." Page (257) states: "As with audible noise, however, the annoyance of turbine-related shadow flicker could induce second-order health problems due to anxiety." If the Town and County Planning boards allow turbines so close to homes after Horizon openly admitted it may cause health problems, then those boards are surely negligent in their official duties.

• "The selection of wind turbine locations is constrained by several factors.." (321) It mentions: Wind, Proximity to transmission lines, Land resources, Land use, Land lease & participants, ecological issues, and "Sufficient distance from major metropolitan areas."
  o If turbines are so safe and harmless to people, why is distance from metropolitan areas even a concern? Because Horizon knows there are risks, there is danger, the turbines are noisy and ugly, will impact property, and will cause traffic accidents.
  o Look on the internet for wind farm photos. You will see that most of them are in the middle of nowhere, not a home in sight, on a mountain, in the badlands, in the ocean, on the prairie, on undeveloped farmland.
  o With all the money to be made by wind companies, they are buying their way into communities and putting turbines as close as 1200 feet to homes. This is dangerous. We will find out the hard way when people start to get hurt or killed and then start to restrict turbine locations on a Federal or State level. European countries have been in the wind farm business longer and now they are finding out setbacks should have been much further.
  o The main reason Horizon is not putting turbines in other towns like Oakfield is not because of the wind or other requirements, it is because other town are smart enough to say NO.
Horizon will give “good” neighbors who sign their lives away $1,000 a year as a token electric bill payment. That will be taxable income. If you end up with $700 you will be lucky. As the TV adds go.. Payment for electric bills: $700 per year. Subsidies for Horizon: $10.6 million per year. Reliable power, peace and quiet, a nice view, a safe home: Priceless.

I sincerely hope that the Town and County government officials have enough common sense to realize that wind turbines do not belong here. Horizon found a vulnerable town, told them how to re-write zoning laws, and promised money to all. With 3 town officials or their families getting cash in their pockets, it was easy to do. The purpose of the DEIS is to evaluate the impact on everything and determine if it is wise and safe to proceed.

As the DEIS report states:

“Nevertheless, operation of the proposed project could result in accidents that result in personal injury/or property damage, as discussed in Section 3.10 Public Safety.” (281)

The DEIS is full of reasons why this entire project should be terminated.
NOTES:
1. PROJECT LAYOUT VERSION 13 (6-12-2007)
2. CONCEPTUAL LAYOUT ONLY. NOT FOR DESIGN PURPOSES
3. LAYOUT SUBJECT TO CHANGE
4. ELECTRICAL COLLECTION SYSTEM 34.5 KV
5. TURBINE RADIUS SHOWN AT 200 FEET
6. ACCESS ROAD WIDTH SHOWN AT 34 FEET

SOURCE INFORMATION:
1. MAPTECH
   - OAKFIELD USGS QUADRANGLE, 1942
   - AKRON USGS QUADRANGLE, 1981
2. CORNELL UNIVERSITY GEOSPATIAL INFORMATION REPOSITORY 2006
   - EXISTING TRANSMISSION LINE
   - PUBLIC ROADS
   - MUNICIPAL BOUNDARIES
3. GENESEE COUNTY REAL PROPERTY DATA 2006
   - PARCEL BOUNDARIES

FIGURE 3
PROJECT LAYOUT V.13
QUAD MAP WITH SETBACK CONSTRAINTS
SEPTEMBER 2007
SCALE: AS SH
GAS PIPELINE MAP FROM D.E.I.S.
PHOTOS TAKEN NEAR TOWNLINE & MACOMBER ROADS
SPRING AND FALL 2007

4/3/07 LOOKING South West TOWARD TURBINES T38 & T45

4/6/07 WHERE TURBINE T56 WILL BE FROM 2422 TOWNLINE RD

ALL PHOTOS OF GEESE BY D. BENCIC
4-14-07 LOOKING SOUTH EAST
WHERE TURBINE T56 WILL BE

4-17-07 LOOKING N E
TOWARD OAKFIELD
4-22-07 LOOKING SOUTH TOWARD TURBINE T43
GEESE CAME FROM T38 & T45 AREA
HEADED TO T56 AREA
NY Power Authority tower on Townline Road.
11-4-07 LOOKING NORTH WHERE T-24, T-29, T-22, T-28 WILL BE LOCATED
These are the homes surrounding just one block where 5 turbines will be located. 10 more turbines will be to the north. It is not exactly a remote rural isolated area.

HOMES AROUND THE BLOCK OF TOWNLINE, MACCOMBER, GALLOWAY, MAPLE RD. WHERE 5 TURBINES WILL BE LOCATED, TURBINES T38, T45, T43, T55, T56

SOME OF THE HOMES PICTURED HERE ARE LOCATED IN TOWNS OF OAKFIELD, BATAVIA AND PEMBROKE BUT WILL BE FACING TURBINES ACROSS THE ROAD.

PHOTOS BY D. BENCIC
PHOTO FROM D.E.I.S. VIDEO SIMULATION

AS VIEWED FROM OAKFIELD
Welcome to the rural town of Alabama in Genesee County, New York. The town was settled in 1812 and originally called "Gerrysville." Alabama was officially formed in 1825 and is primarily a farming community. The population, as of the 1990 census, is 1,998.

Our town consists of four hamlets. Alabama Center, South Alabama, Wheatville and Basom. During the 1800's there was also a community called West Alabama, located in the northwest corner of the town. Alabama shared much of its early history with the Town of Royalton in Niagara County, and the Town of Shelby in Orleans County.

Alabama has three major areas. Agricultural and residential is the largest section. The Tonawanda Indian Reservation, home of the Seneca Nation, covers the land on the west side of the town. To the north is the Iroquois National Wildlife Refuge. This refuge covers 10,818 acres and extends into Orleans County. It is the largest federal wildlife refuge in New York State.

Explore our town, its people, our wildlife and history.
Western New York lies along the Atlantic Flyway, a major north-south corridor traveled by migrating birds. This area has historically been a key staging, resting, nesting and feeding area for ducks, geese and other migratory birds. In 1952 the federal government established the Oak Orchard National Wildlife Refuge under the authority of the Migratory Bird Conservation Act.

In cooperation with the neighboring Oak Orchard State Wildlife Management Area, the refuge has increased its brookchickaqua National Wildlife Refuge; in 1954, the home of the rare arctic Nation. Many more of the refuge's wildlife are now in the early, mid or late stages of their migration. At least 265 species of birds have been identified on the refuge, with approximately 60 species being year-round residents. Mammals, including muskrat, opossum, beaver, mink, raccoon, bobcat, raccoon, weasel and gray fox and the mule deer are common in frequent sightings or scents, have been reported.

Shorebird migration peaks are in May and again in July and August. Common species are yellowlegs, dowitchers, sandpipers, stillets, American woodcock and snipes.

The refuge has one of the largest heron rookeries in the state of New York, where great blue herons nest and raise their young through the summer.

Peregrine falcons have maintained an active nest on the refuge since 1980, the result of a cooperative state and federal program to restore falcons to New York. The adults stay or depart the nest for most of the year, leaving only to find locusts in winter or move to their new roost or home.

Refuge managers judge the best approach is to attract breeding ducks to the area annually.