

February 3, 2011

Re: House Bill 6249

Dear members of the energy and technology committee:

My name is Kristin Mow. I live at 12A Greenwoods Turnpike in Colebrook, CT. Our family has lived at this property since purchasing it in September 2006. I live at the property with my husband Benjamin and our 3 children. I have a 12 year old daughter Alyssa, 10 year old son Benjamin and 8 year old son Daniel. We have a little 4 acre hobby farm on this property.

I was informed by our neighbor in early December about the proposed windmill projects. I am one of the abutting property owners located in between the proposed windmills. Our property line is about 600 feet from one of the proposed turbines. Our house is located only 800 feet away from one of these proposed turbines, according to BNE maps.

I started doing research in early December. I wanted to find out what, if any risks have been previously reported on similar projects in the past. At that time I had not been familiar with wind energy projects. I wanted to educate myself on what was going to be happening in my surroundings. I immediately started to find articles in the US and in other countries reporting health issues with adults and especially children. This has caused a lot of alarm for me. I started to notice in all of the studies done several recurring symptoms were reported. I am personally concerned for my children and found this very alarming. I noticed symptoms such as sleep deprivation, stress, nausea, disorientation, chronic headaches, migraines, ringing in the ears, visceral vibratory vestibular disturbance and the most alarming to me is possible seizure for people who are predisposed to seizures. I am concerned for the health of all of my children. My main cause for concern is that my 8 year old son Daniel has had seizures in the past.

Daniel has sensory issues and is very affected by certain sounds and lighting. Daniel cannot be exposed to strobe lights, etc. due to past problems with seizures. The

Connecticut Children Hospital diagnosed Daniel with vertigo about 4 years ago. The vertigo causes dizziness, the sensation of spinning or the perception that surrounding objects are moving or spinning. Vertigo indicates a peripheral vestibular disorder (inner ear disturbance); this is also one of the symptoms that many researchers have stated will affect a person or child living in a close proximity to one of these turbines. In the time that I have researched this I have come to find a lot of information that points toward possible further health affects for Daniel, due to the close location of our house to the project.

I understand that the issue is still a developing field. I am aware of one expert, Dr. Michael Nissenbaum, a radiologist in Maine who has been studying this issue for years. He will be publishing an article in the New England Journal of Medicine soon, and the preliminary results that he has made public suggest residents living within 3500 feet of an industrial wind facility in Maine have a higher incidence of medical problems. These problems add to the previously listed symptoms such as weight changes and increase's blood pressure. This study contains a large control group of people living 15,000 to 16,000 feet away from the turbines, and is one of the first studies to contain a real control group. The turbines in the project Dr. Nissenbaum studied are smaller than the turbines proposed by BNE. All of the people living in the proximity to the turbines felt their quality of life decreased and most considered moving from their homes. Please keep in mind that our house is located only 800 feet away from one proposed turbine, so we are well within the area of concern identified in this study. I have attached a copy of Dr. Nissenbaum's preliminary findings to my written testimony.

I understand that this is an issue of debate because of the lack of peer reviewed studies on this issue, but I don't think that we should move forward with these projects until the legislature has at least considered the issues at hand. It is part of your job to protect us and especially our children. I am not just talking about my family but all of the families in Connecticut. All of the families in Connecticut will and can be affected simply because there are not regulations currently put in place for these projects.

I know that this is a difficult situation to be in. I am absolutely in favor of green energy. I am not opposed to wind projects in general. This is a health and safety issue for my family. I am requesting proper set backs from residential homes. I have found studies

reporting ice can be thrown 1600 feet during the winter from wind turbines. That is double the distance that our house is located from just one of these turbines. This is not about an inconvenience of our view being obstructed – this is about my family’s health and safety.

My family and all of the families in Connecticut are depending on the legislature to step up and protect us and our health. I believe that regulations need to be put in place. There needs to be a safe distance established for the health and safety of the public. Our communities cannot move toward a goal of green energy without the protection for all of our families to be healthy and safe. I ask that you please take this into consideration. I understand that the responsibility of considering these projects is very large. I pray that you can take all of this information into consideration before moving forward. The legislature has the responsibility of protecting the people and especially our children. There is too much information that has been presented for us to simply brush these concerns aside without further investigation. I think that all industries need regulation to establish safety zones for the residents of this state. I know our state needs to establish safe boundaries to ensure the good health and safety for all Connecticut residents.

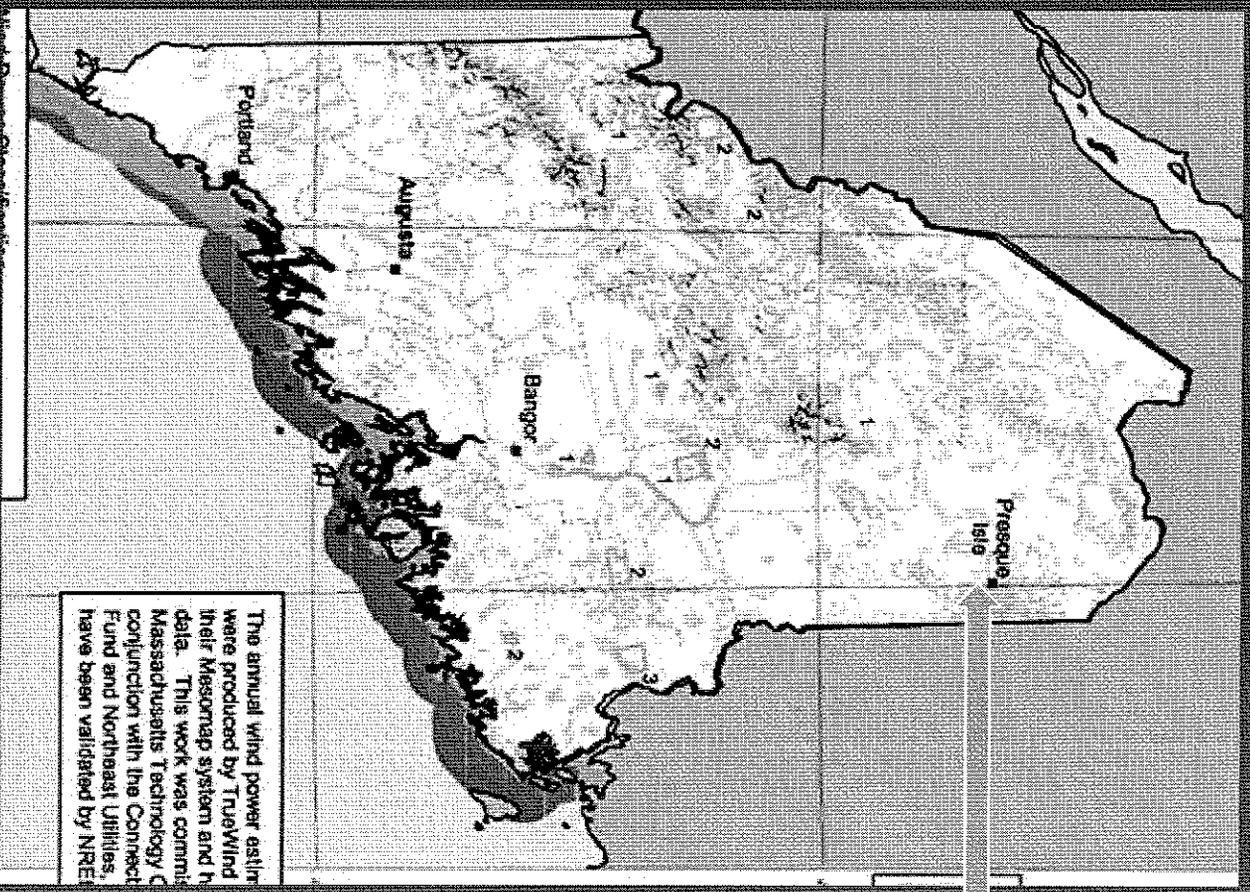
Sincerely,

Kristin M. Mow
Colebrook, CT

Mars Hill Wind Turbine Project Health Effects – Pilot Study

- 28 turbines, 389 ft tall
- Online Dec 06, Complete Mar 07
- ~30 adults, ~15 children live within 3500 feet (1km) within ~18 homes.

Mars Hill, Maine



Cross Sectional Controlled Study

Attempt made to capture all adults on the three roads – drastically reduces sampling bias

Subjects and controls approached by investigator – essentially all agreed – very low self selection bias

Controls well matched by age and sex

Initiated after media reports of complaints
and no government investigation

Pilot Study – not meant to evaluate full dose
response (distance versus symptoms
mapping), but to assess for relative risks of
sleep disturbance and health complaints

Goal: Collect preliminary data for Maine
Medical Association.

Mars Hill Wind Turbine Project Health Effects – Preliminary Findings

Population Sample - Demographics

- *22 subjects interviewed. 10 female, 12 male.*
- *Subjects: Distance to nearest turbine ranges 1200 – 3400 ft; Mean distance 2500 feet*
- *27 controls interviewed. 12 female, 13 male.*
- *Controls: Average distance 15,000-16,000 feet.*

AGE AND SEX MATCHED

Mars Hill Wind Turbine Project Health Effects – Pilot Study

Subjects and Controls: Sex, Age, Distance

F	67	3400
E	62	2400
F	65	2500
F	73	3000
F	66	3200
F	38	1200
F	41	2300
F	49	2500
F	41	1500
F	18	1500

Avg. Age: 52
Range: 18-73

M	65	3400
M	77	2400
M	75	3000
M	74	3200
M	52	1200
M	50	2100
M	51	2400
M	47	2300
M	58	2400
M	79	1500
M	56	1200
M	43	1500

Avg. Age: 61
Range: 43-79

F	31	~15,000
F	50	~15,000
F	33	~15,000
F	63	~15,000
F	28	~15,000
F	40	~15,000
F	77	~15,000
F	64	~15,000
F	73	~15,000
F	70	~15,000
F	19	~15,000
F	81	~15,000
F	56	~15,000

Avg. Age: 51
Range: 19-81

M	65	~15,000
M	60	~15,000
M	61	~15,000
M	40	~15,000
M	57	~15,000
M	40	~15,000
M	47	~15,000
M	39	~15,000
M	74	~15,000
M	81	~15,000
M	33	~15,000
M	47	~15,000
M	55	~15,000
M	43	~15,000

Avg. Age: 57
Range: 33-81

Troubled by Shadow Flicker

Exposed # 22

Non Exposed # 27

<i>Symptom</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Nausea	2	9%	0	0
Dizziness	4*	18%	0	0
Trigger Migraine	1	5%	0	0
Unease	2	9%	0	0
new Rx	0	0	0	0
Total # Affected	7	32%	0	0

*2 subjects had dizziness AND nausea

Unintentional **Weight Change**

Exposed # 22

Non Exposed # 27

<i>symptom</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Increase	6	27%	0	0
Decrease	2	9%	1	4%
new Rx	0	0	0	0
Total # Affected	8	36%	1	4%

New or worsened

Headaches

Exposed # 22

Non Exposed # 27

<i>symptom</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
New	7	32%	0	0
Worse	0	0	1	4%
↑ <i>migraine</i>	2	9%	0	0
New Rx	2	9%	0	0
↑ Rx	1	9%	0	0
Total Rx	3	14%	0	0%
Total # Affected	9	41%	1	4%

New or worsened

Auditory/Vestibular

Exposed # 22

Non Exposed # 27

<i>Symptom</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Dizziness	3	14%	0	0
Tinnitus	3	14%	0	0
Ear Pain	1	5%	0	0
Ear Pulse	3	14%	0	0
new Rx	0	0	0	0
Total # Affected	9	41%	0	0

New or worsened **Sleep Disturbance**

Exposed # 22

CONTROLS # 27

Symptom	Number	Percentage	Number	Percentage
Falling Asleep	10	45%	0	0
Waking	17	77%	1	4
1-2/wk	4	18%	0	0
3-4/wk	5	23%	0	0
5-7/wk	9	41%	0	0
New Rx	5	23%	0	0%
Total # Affected	18	82%	1	4%

Psychiatric Symptoms

New or worsened

Exposed # 22

Non Exposed # 27

<i>symptom</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
stress	13	59%	0	0
anger	17	77%	0	0
anxiety	7	32%	0	0
irritability	6	27%	0	0
hopelessness	12	55%	0	
Depression	10	45%	0	0
<i>new</i>	8	36		
<i>worsened</i>	2	9		
New or  	4	18%	0	0

Prescription Medication Use

Exposed # 22

Non Exposed # 27

<i>symptom</i>	<i>Number</i>	<i>Number</i>
Accepted new Rx	12	4
↑ Rx	3	0
Total New Or ↑ Rx	15	4

**15 New or increased prescriptions (12 people)
11 additional prescriptions offered and declined
in subject group**

Types of Medications

Subjects:

Cymbalta	Lexapro
Mirtazepine	Zoloft
Trazodone	Meloxicam
Hydrocodone	Tylenol III
Topamax	
Anxiolytics (2)	
BP meds (3)	

Controls

Antihypertensives: 3
Antiarthritic 1

Quality of Life Perception

Exposed # 22

Non Exposed # 27

<i>Symptom</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Increased	0	0	0	0
Decreased	21	95%	0	0
Considered moving away	19	86%	0	0

Quality of Life Perception

“No desire to go outside”

“Feel trapped”

“Dreams have been dashed”

“Was our dream home . . . it's all been stolen from us”

“My husband's (who has MS) only pleasure in life was to see the wild animals. They are gone.”

“Sinking feeling every night when I (come home) and see them.”

Anger

“ Absolute rage – you feel you want to kill someone, and don’t know who to kill ”
(67 y.o. woman)

“ So angry I could kill “
(65 y.o. man)

“ Makes my blood boil ”
(65 y.o. woman)

Hopelessness

“Nobody will help us ”

“This is an awful thing to have happen to you ”

“People don't believe us – (complaints) fall on deaf ears ”

“No one cares. No one listens.”

“They just tread on us.”

*“Daddy, I’m going to
sleep at the hotel with
Mom.”*

Mars Hill ME DEP Nighttime Noise Variance 45=>>50 dba

“There are 4 protected locations where the noise level would be above 45 dBA, but less than 50 dBA, which is approximately equivalent to the noise that songbirds make . . . the Department finds that the applicants’ project will not have an unreasonable adverse impact . . . and therefore grants a variance from the noise standards for the windpower farm.”

DONE AND DATED AT AUGUSTA, MAINE, THIS 1ST DAY OF JUNE, 2004.
DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: 
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES
Date of initial receipt of application January 12, 2004
Date of application acceptance January 22, 2004
Date filed with Board of Environmental Protection
RCL21635AN/BN

