

**From:** Annette Smith  
**Sent:** Monday, March 18, 2013 3:14 PM  
**Subject:** noise and the town of Sheffield

Attached is a copy of the letter sent by the attorney for the Town of Sheffield to the Therriens. The process described in the letter has meant that the Therriens have been complaining about noise since April 2012, the PSD has been fully aware of their situation, and the Therriens are desperate to leave their home of 16 years, with no solutions in sight.

Many of us are looking for a caretaker situation for the Therriens so Steve can work and the family can regain their health while they figure out a long term solution. They left their home for two days and stayed in a motel and reported a big change in their health simply by being away from the wind turbines. They are now sick every day, they get no relief when they are home. If you know of anyone who has a caretaker situation, please keep them in mind. Steve is mechanical and can fix things, Luann was a cook at the King George School.

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Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.

Begin forwarded message:

**From:** luann therrien  
**Date:** March 18, 2013 3:08:44 PM EDT  
**Subject:** Sheffield's lawyer

LAW OFFICES

**CHENEY SAUDEK & GRAYCK PC**

KIMBERLY B. CHENEY  
RICHARD H. SAUDEK  
DAVID L. GRAYCK

HEATHER N. JARVIS  
CHRISTOPHER J. SMART, COUNSEL

March 11, 2013

Kathy Newland, Town Clerk  
Town of Sheffield  
P. O. Box 165  
Sheffield, VT 05866

**Re: Request for Letter to First Wind Vermont**

Dear Kathy:

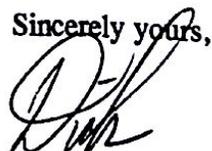
I understand that the Town wants guidance on the following: A resident of the Town has asked for a copy of a letter that he believes the Town has sent to First Wind concerning noise from the Sheffield wind project or compensation to him for noise at his home. Apparently, the Town has not written such a letter. I believe the Town would be ill-advised to do so.

As you know, the subject of noise and testing for noise has been covered by the Public Service Board in great detail in hearings on the Sheffield project. First Wind has conducted studies and made reports pursuant to the Board's orders. In addition, the Department of Public Service arranged for its own tests. They expect a report in about a month.

This attention to noise with studies by both the Department and the developer is an example of the regulatory process working the way it was intended to work. Once the Department study is complete, the Department will decide what action to take - whether to inform the Board that the project generates unacceptable levels of noise at certain distances or not. If the information warrants Board action, I'm sure it will be taken.

In light of the above, there is no reason for the Town to get involved in this matter. If the study shows the noise to be too great and, after hearings, the PSB agrees, the PSB has broad discretion to devise an appropriate remedy.

Sincerely yours,



Richard H. Saudek

**From:** Annette Smith

**Sent:** Monday, March 18, 2013 11:28 AM

**Subject:** a day in the life of neighbors of renewable energy projects in Vermont

Dear Siting Commission,

I have attached the PSB-approved Post-Construction Sound Monitoring Protocol for the Georgia Mountain wind project. The first round of quarterly monitoring is complete (and yes, the area has been generating noise complaints from neighbors, including health complaints). Neighbors are shocked to realize that the PSB approved a plan that does not require the wind company to issue a report to the PSB after each quarterly monitoring round. Apparently GMCW is interpreting this protocol to mean that they will submit their report to the PSB after one year of operation and all four quarterly monitoring rounds are complete. This is what happens when PSD does not adequately represent the public interest, and when neighbors attempt to participate in the proceedings without legal counsel.

Neighbors of both the Sheffield and Lowell projects are in a similar position. In all three cases, in order to adequately participate in the post-construction noise monitoring process approved by the PSB, neighbors will have to hire lawyers and experts. This gets into very technical areas where the combination of the byzantine PSB process and the complexity of the noise issues means that the lay person cannot adequately represent their interests. And since the PSB has no enforcement capabilities, the formal complaints that have been filed in the Sheffield and Lowell cases have received no response from the PSB.

Nearly every day I wake up to email complaints about noise and health issues as a result of these three wind projects. We have one case involving a medium sized wind turbine that has been before the PSB for months. The neighbor is sick, he has no ability to represent his interests, and the PSB process is going to take many more months to go through filings, assuming they move forward with hearings on the complaints.

The PSB's complaint resolution process is completely unworkable, and is resulting in Vermonters being exposed to unhealthy levels of complex noise. GMP's recent noise monitoring reports showed that some areas are being exposed to levels above the approved 45 dBA Leq, but the PSB issued an order saying that since GMP is doing another round of monitoring, public comment can wait until April after the next reporting is done.

Meanwhile, there is no reporting requirement in the Georgia Mountain case, and complaints to the PSB filed in the Sheffield case have received no response.

Even complaining is complicated. Sheffield neighbors who complained to Susan Hudson at the PSB who are not parties are advised to complain instead to PSD. Neighbors of the Lowell case who are parties must file more than 20 copies with all the other parties to file a complaint with the PSB.

And it seems the only way to effectively bring these issues before the PSB is going to cost neighbors tens of thousands of dollars in legal and expert witness fees.

In your deliberations, you seem to be trying to be global and not single out any technology, but if you do not grapple with the issues laid out in this letter, you will join the legislature, the Health Department and the PSB in allowing Vermonters to be harmed in their own homes. I am aware of three different homeowners in three different project areas who are actively looking for another place to live because they can no longer live in their homes, they are too sick.

Annette

-----  
Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.





Rebecca E. Boucher \* Eileen I. Elliott Andrew N. Raubvogel  
Elizabeth H. Catlin Geoffrey H. Hand Mark A. Saunders  
Brian S. Dunkiel \* Justin W. McCabe \* Karen L. Tyler  
Erik G. Nielsen \*

January 9, 2013

By First Class Mail



Re: Docket No. 7508 – Georgia Mountain Community Wind, LLC

Dear Mrs. Hudson:

Enclosed for filing please find Georgia Mountain Community Wind, LLC's ("GMCW") final, as-approved Post-Construction Sound Monitoring Protocol, in accordance with the Board's Order approving the Protocol dated October 31, 2012. In that Order the Board required one revision to the complaint procedure (section 6.c., on page 4), as follows:

If, on the other hand, the sound level is within 5 dB of the exterior sound limit, then GMCW will, at offer the homeowner's request, testing to determine the attenuation value of the affected structure. If the offer is accepted, testing will be conducted using the ASTM E966-10 standard, 10, *Standard Guide for Field Measurement of Airborne Sound Insulation of Building Facades and Façade Elements (2010)*. If no such request is made, a 15 dB value will be used.

Thank you in advance for the Board's consideration of the above, and please do not hesitate to contact me should you have any questions.

Sincerely,

Andrew Raubvogel  
DUNKIEL SAUNDERS ELLIOTT RAUBVOGEL & HAND PLLC

Encl.

cc: Service List

4821-8259-6114, v. 1

C. Daniel Hershenson, Esq.  
Nathan H. Stearns Esq.

Sanford Miller, Town Manager  
Town of Milton

Morris Silver, Esq.

Daniel P. Richardson, Esq.

Dated at Burlington, Vermont, this 9<sup>th</sup> day of January 2013.

by:

  
\_\_\_\_\_

Jenna Conklin



Environment, Energy &  
Acoustics

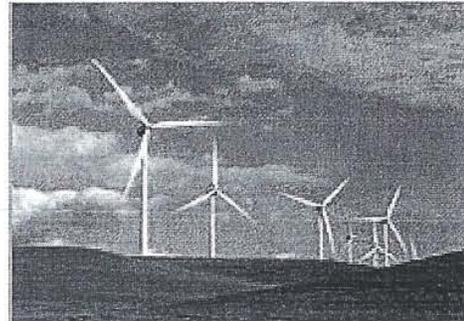
**Post-construction Sound  
Monitoring Protocol**  
**Georgia Mountain Community Wind**

**2 January 2013**

***Submitted by***  
**Resource Systems Group**

***For***

***Georgia Mountain Community Wind***



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## 1. INTRODUCTION

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The Certificate of Public Good (CPG) for Georgia Mountain Community Wind (GMCW) issued by the Vermont Public Service Board (PSB) on June 11, 2010, specifies the following requirements regarding noise:

23. GMCW shall construct and operate the Project so that it emits no prominent discrete tones pursuant to American National Standards Institute (ANSI) standards at the receptor locations; and Project- related sound levels at any existing surrounding residences do not exceed 45 dBA(exterior)(Leq)(1 hr) or 30 dBA (interior bedrooms)(Leq)(1 hr).
24. In the event noise from operation of the Project exceeds the maximum allowable levels, the Petitioner shall take all remedial steps necessary to bring the sound levels produced by the turbine(s) into compliance with allowable levels, including modification or cessation of turbine(s) operation.
25. GMCW shall submit, for Board approval, a noise monitoring plan to be implemented during the first full year of operation. The plan shall establish a monitoring program to confirm under a variety of seasonal and climatic conditions compliance with the maximum allowable sound levels described above. Parties will have three weeks, from the date this plan is filed with the Board, to comment on the plan. GMCW cannot commence operations until the plan is approved.

Subsequently, on October 31, 2012, the PSB clarified Condition 25 to require the Plan to describe how noise complaints and noise violations are handled.

This document represents the sound monitoring protocol and compliance plan to meet the requirements of Condition 25 under the CPG and the subsequent Order.

## 2. SOUND MONITORING PROTOCOL

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This goal of this first year monitoring protocol is to determine whether the sound levels generated by the GMCW wind farm exceed the standards set in the CPG.

The protocol is enumerated as follows:

- 1) The monitoring will take place over at least ten days, in each of the summer, winter, spring, and fall during the first full year of operation.
- 2) Monitors will be set up at each of the three stations that background data were collected previously (see Figure 1 ). If those stations are not available or better-suited locations become available, representative alternatives will be selected. During the first year, up to three additional locations may be selected if noise complaints are received and those complainants are not located in areas represented by the three primary monitors.
  - a. Sound level meters meeting the accuracy requirements of ANSI/IEC Type 1 or Type 2 will be used.



- b. Microphones will be placed outside at approximately 1.5 meters above ground and fitted with 7 inch waterproof windscreens. Microphones will not be placed such that any structure blocks the line of sight between the microphone and wind farm (if otherwise visible). Every effort shall be made to ensure that locations selected are representative of the noise exposure at subject homes.
  - c. Selected locations will be at least 7 meters from reflective surfaces such as buildings.
  - d. Anemometers will be set up at each location at microphone height.
  - e. Monitors will be set to record at 1-second time intervals over the entire period.
  - f. 1/3 octave band Leq will be recorded during each 1-second interval.
  - g. Sound level meters will be field calibrated before and after measurements, and calibration drift will be noted.
  - h. Temperature and rainfall will either be measured on site, or Burlington airport will be used as a proxy.
- 3) Wind speed and wind direction will be recorded for each 10-minute period, as measured at each turbine hub.
- 4) Power output at each turbine will be measured at 10-minute intervals, and will be converted to wind speed based on the power curve.
- 5) The wind farm will be shut down for 30 minutes on six occasions during the monitoring period. The periods will be selected during the night to cover a variety of meteorological conditions. In each case, however, the sound power of the turbines will be within 1 dB of its maximum. This 30-minute period will be representative of background noise.
- 6) The one-hour period before and after the turbine curtailment will be the "turbine plus background" sound level.
- 7) The resulting data will be analyzed as follows:
  - a. The outside to inside transmission loss is assumed to be 15 dB in accordance with the WHO Guidelines for Community Noise.
  - b. For nighttime periods which exceed 45 dBA outside, background levels from the turbine shut-off times will be subtracted. The turbine sound level will be determined by logarithmically subtracting the background sound level obtained when the turbines were not operating. Note that for this subtraction to be accurate, the turbine plus background sound levels must be at least 3 dB above the background sound level.
  - c. For both background and turbine monitoring periods, data that is contaminated by human activity, winds greater than the wind screen specification, temperatures outside of the sound level meter specification, and rain will be removed from the data set. These periods can be determined by using appropriate sound recordings, spectrogram analysis, and meteorological instrumentation, as the case may be. In addition, insect, bird, and leave rustling noise may further be eliminated by filtering the data using an "Ai" weighting, eliminating sound from frequencies above 1,250



- Hz. (consistent with that described in "Proposed 'Ai'-weighting; A weighting to remove insect noise from A-weighted field measurements", Paul D. Schomer, Ian M. Slauch, and George F. Hessler, InterNoise Proceedings, Volume 221, pp. 3991-4000 (2010).)
- d. If the resulting sound level exceeds 45 dBA outside/30 dBA inside,<sup>1</sup> recordings of the sound and other data will be used to determine whether the wind turbine contributed to the sound.
  - e. If the resulting hourly Leq exceeds 45 dBA/30 dBA inside, then these periods and levels will be highlighted.
  - f. 1/3 octave band data will be evaluated to identify periods with pure tone.
- 8) A report will be prepared that shows:
- a. Locations of all sound monitors and distance to the nearest turbine.
  - b. A summary of all data collected, including sound levels, meteorological data at the monitoring stations, and turbine operating conditions.<sup>2</sup>
  - c. Times of potential exceedances of the outdoor, indoor, or tonal standard, and the results of investigations into those exceedances.
  - d. Conclusions
  - e. An appendix containing 10-minute data for each turbine including wind speed, and power output
- 9) Raw data will be made available upon request. However, sound recordings will only be made available if they do not contain human speech or other human activities where there may be concerns over privacy.
- 10) Some portions of the report may have confidential information, in which case distribution would be limited by an appropriate protective agreement.

### 3. COMPLAINT RESOLUTION

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The following complaint resolution procedure will assure that concerns by neighbors regarding wind turbine noise are addressed in a timely manner while, at the same time, preventing abuse of the complaint process. The complaint resolution procedure shall be as follows:

- 1) The complaint process shall be in place for the life of the Project.
- 2) A complaint phone number and contact person shall be provided to the Town Clerks and Selectboards of Milton and Georgia.

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<sup>1</sup> Sound levels will not be rounded. For example, a background-adjusted measured value of 45.1 dBA will be considered to exceed the standard of 45 dBA.

<sup>2</sup> All available turbine operating parameters will be made available upon request. Some of these data may be confidential and will be released under an appropriate protective agreement.



- 3) GMCW will provide an initial acknowledgement to complaints within 1 to 2 business days.
- 4) Complainants will be requested to provide GMCW with the following information related to the complaint
  - a. Location of the observed sound
  - b. Time and date the sound occurred
  - c. Weather conditions (snow cover, cloud cover, wind direction and relative speed, etc)
  - d. Description of the sound.
- 5) GMCW shall record the complainant information, and weather, turbine operating status, and power output during the time of the complaint.
- 6) GMCW will investigate as described below if the complaint represents a permanent residence within 1.5 km (0.9 miles) of the turbine string, and, based on monitoring and/or modeling, there appears a reasonable possibility that the Project sound level is within 5 dBA of the CPG exterior noise limit at the complaint location, and not related to abnormal Project operation or maintenance.

- a. The A-weighted sound level from the closest monitoring location shall be extrapolated to the complaint location by means of the following formula to determine whether the sound level there is likely to be within 5 dBA of the exterior sound limit:

$$L_{pc} = L_{pm} + 20 \log (D_m/D_c), \text{ in dBA}$$

Where

$L_{pc}$  = Estimated sound level at the complainant location

$L_{pm}$  = Sound pressure level determined at the nearest monitoring location

$D_m$  = Distance from the turbine string to the relevant monitoring location

$D_c$  = Distance from the turbine string to the complainant location

- b. If the extrapolated sound level is not within 5 dB of the exterior sound limit, then the wind farm operator will respond to the complainant, but is not required to conduct additional sound testing. Similarly, if the complaint is a result of abnormal operation, the operator will respond to the complainant and make necessary repairs, but will not be required to conduct sound testing
  - c. If, on the other hand, the sound level is within 5 dB of the exterior sound limit, then GMCW will offer the homeowner testing to determine the attenuation value of the affected structure. If the offer is accepted, testing will be conducted using the ASTM E966-10 standard, 10, *Standard Guide for Field Measurement of Airborne Sound Insulation of Building Facades and Façade Elements (2010)*. If no such request is made, a 15 dB value will be used.
- 7) Sound monitoring will be conducted if (a) the sound level is within 5 dB of the exterior sound limit (based on the initial screening described above) and the attenuation value of



the structure (based on the outside-to-inside test) does not exceed 12 dB, or (b) the sound level is within 3 dB of the exterior sound limit (based on the initial screening described above).

- 8) Sound monitoring will not be repeated in a representative area during any five year period unless operational or maintenance changes result in an reasonable assumption of higher turbine sound levels. Nothing in this paragraph removes the ability for a party to petition the PSB for additional testing nor does it exclude the PSB from requiring additional testing during this period to address extenuating circumstances.
- 9) Complainants may be asked to log sound events over a period of time to help identify influences that affect the sound. If the factors identified above demonstrate that follow-up sound monitoring is warranted, monitors will be set up by a noise control engineer no later than four weeks after the complaint. GMCW shall make all reasonable efforts to conduct such monitoring under conditions similar to those existing at the time the complaint arose.
- 10) If the complaint occurs within the first year of operation (or during any additional Board-ordered monitoring period), the monitoring will conform to the above criteria; otherwise it will be based on methods that will be developed in response to the type of complaint issued. The methods to be used will be developed based on information gained during the first year of operation and the entire monitoring database, and will be filed for review by the complainant and PSB. A resident may request that the Board, by order, require an additional round of monitoring at any time, and the request shall include an explanation of why the resident believes additional monitoring is needed. If the methodology described in Section 2.6(5) is used, the condition which corresponds to the operational status during the complaint should be accounted for.
- 11) Because of the complexity of complaint resolution, full cooperation of the complainant and the adherence to the above test procedures is necessary.
- 12) GMCW shall develop a protocol for informing a resident when it intends to conduct any exterior sound monitoring and work with the resident to determine an appropriate location for the monitoring equipment. GMCW will also provide information on turbine functionality during the monitoring period when it provides the results of the monitoring to the resident.
- 13) The official results of the monitoring shall be contained in a report that is submitted to the complainant, the Department of Public Service and the PSB. This report will contain specific information collected during the complaint monitoring, including wind speed and direction, operational status of the turbines, sound levels, and the raw sound level data collected by the noise control engineer conducting the tests.
- 14) If it is found that the project sound level at any permanent residence is above the allowable limit, GMCW shall take all remedial steps necessary to bring the sound levels produced by the turbine(s) into compliance with allowable levels, as required by the CPG



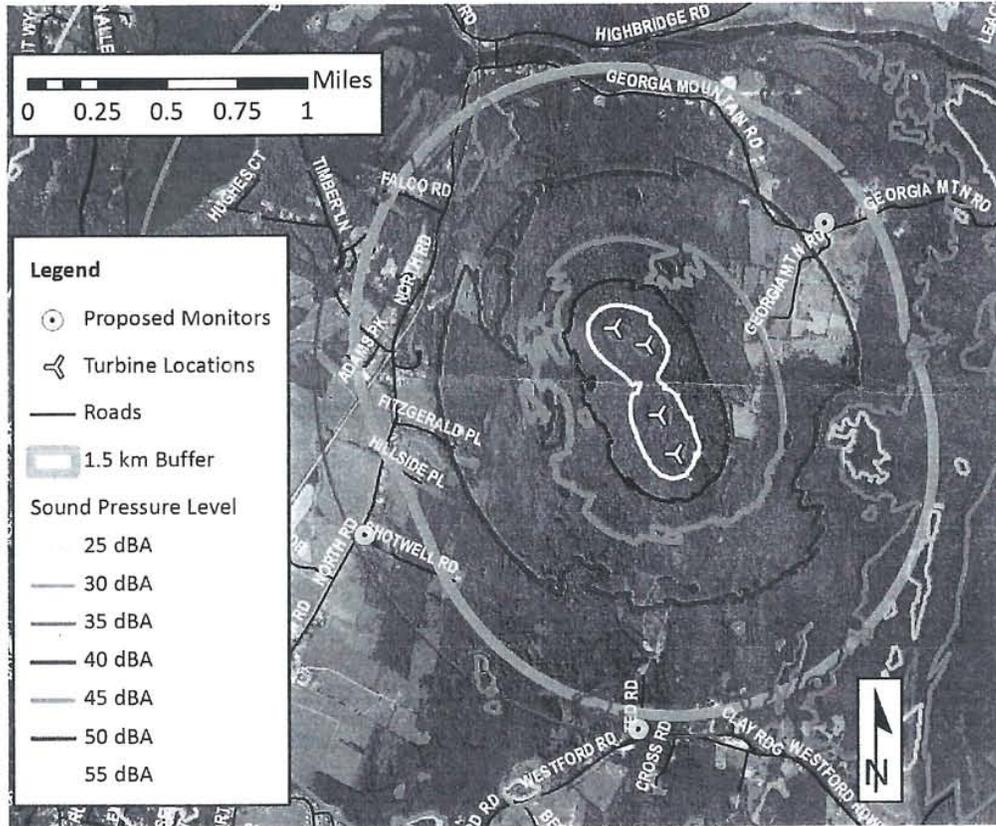


Figure 1: Monitoring locations from the pre-construction sound monitoring that are proposed to be monitored during post-construction and 1.5 km (0.9 mile) buffer from the turbines



**From:** Pam Arborio  
**Sent:** Sunday, March 17, 2013 3:58 PM

**Subject:** To: Lyndonville Electric Company,

FYI

To: Lyndonville Electric Company,  
From: Pam Arborio, Brighton Ridge Protectors  
Date: 3-17-13

As president of the Brighton Ridge Protectors we're concerned with our discoveries in the past two weeks, discoveries that leave a great many questions unanswered.

- 1.) As a ratepayers' public utility how are you (your trustees?) able to negotiate transmission/grid connection with a developer that has not even received met tower permits?
- 2.) The discovery of possible violations of the open meeting laws between Eolian and the United Towns and Gores/Board of Governors and apparently a similar issue with LED should send up flags, not only to your ratepayers, but the PSB, VELCO and ISO New England.  
Eolian crossed into Vermont with a history of disclosure problems in Antrim, N.H.  
Did LED bother to investigate the history of this company before entering into negotiations?
- 3.) Eolian has, on three separate occasions, failed to complete their applications to the PSB and now, after not only the Town of Newark but the State of Vt. spending both time and money on Docket #7867 (SMW Application for Met Towers) they have determined there is no need for data from new met towers to move ahead with a turbine project.  
Have they notified the PSB of this change? Suddenly their experts have "filled in" the necessary figures Eolian once adamantly said was required. Again, red flags should be going up to ANY entity doing business with them.
- 4.) Has LED done due diligence in revealing how a new source of generation can be moved into a grid already ramping down wind developments?
- 5.) Has LED been transparent in the communication that eminent domain may be used to connect a project in Ferdinand to Lyndonville? This issue goes beyond the borders of LED territory. Have you notified the towns that may be impacted by this project?

Although I'm not a rate payer of LED, this Industrial Wind Turbine project will affect the citizens of Brighton and many other towns. The LED Board of Trustees need to take a hard look at their dealings with Eolian and the domino effect a relationship with them will have on the NEK as a whole.

Please table further decisions until you've communicated with your ratepayers and your neighboring towns,

Respectfully,  
Pam Arborio, Brighton Ridge Protectors



**From:** Annette Smith  
**Sent:** Friday, February 01, 2013 8:40 PM  
**To:**  
**Subject:** Testimony on Wind Moratorium/text, audio, video

**Testimony to Vermont Senate Natural Resources and Energy Committee on proposed Wind Moratorium, S.30, Jan. 31, 2013**

Video of the testimony is being uploaded and will be here: <https://vimeo.com/vce/videos>

Audio of Part 1 in Room 11: [http://vce.org/VT\\_SNRE\\_013113\\_Part1\\_Rm11.mp3](http://vce.org/VT_SNRE_013113_Part1_Rm11.mp3)

Dr. Sandy Reider, health effects  
<http://www.vce.org/Dr.SandyReider.pdf>

Stephen Ambrose, noise  
<http://www.vce.org/StephenAmbrose31Jan2013.pdf>

Shirley Nelson, Lowell wind neighbor  
<http://www.vce.org/ShirleyNelson.pdf>

Luann Therrien, Sheffield wind neighbor  
<http://www.vce.org/LuannTherrien.pdf>  
Video at press conference  
<https://vimeo.com/58681174>

Erica Berl, Georgia Mountain wind neighbor  
<http://www.vce.org/EricaBerl.pdf>

Mary Boyer, Windham Selectboard chair  
<http://www.vce.org/MaryBoyer.pdf>

Lisa Wright Garcia, Grandpa's Knob neighbor  
<http://www.vce.org/LisaWrightGarcia.pdf>

Audio of Part 2 in Room 10 (after briefly being in Room 8): [http://vce.org/VT\\_SNRE\\_013113\\_Part2\\_Rm10.mp3](http://vce.org/VT_SNRE_013113_Part2_Rm10.mp3)

Steven Young, wildlife biologist  
<http://www.vce.org/StevenYoung.pdf>

Kim Fried (no written testimony)  
Newark Planning Commission chair

Andres Torizzo, hydrologist  
<http://www.vce.org/AndresTorizzo.pdf>

Joel Cope, administrator, Town of Brighton  
<http://www.vce.org/JoelCope.pdf>

Annette Smith, VCE  
[http://vce.org/VCE\\_SNRE\\_013113.pdf](http://vce.org/VCE_SNRE_013113.pdf)  
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Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



**From:** Rob Pforzheimer  
**Sent:** Friday, March 22, 2013 8:53 AM

**Subject:** The effect of wind energy development on bats

<http://www.windaction.org/documents/37812>

### **The effect of wind energy development on bats**

*March 21, 2013 by Jaclyn Aliperti & Morgan Nabhan*

#### **Summary:**

This report from Boston University is about a year old but well worth the read. "For such small animals, bats have unusually low reproductive rates, with an average mother producing only one or two young each year. At this rate, it could take decades to reverse dramatic losses to bat populations. The hoary bat, one of the most commonly killed species by wind turbines in North America, may not be able to sustain anticipated losses to its population within the next ten years."

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#### ***Is wind energy really as "green" as we think?***

Wind energy has gained widespread attention as a solution to reduce greenhouse gases. By 2020, it is expected that 12% of this country's energy will be produced by wind turbines.[1] While this may seem like a step in the right direction, there are environmental consequences. Bats, which play an enormous and often underappreciated role in our ecosystems, are being killed by wind turbines in alarming numbers. Researchers predict that up to 111,000 bats will die due to wind turbines in 2020 in just the Mid-Atlantic Highlands region of the US.<sup>2</sup> These deaths would not only pose an ecological problem, but would also prove to be an economic loss. In light of the economic and ecological value of bats and the growing popularity of wind energy, identifying ways to minimize bat fatalities on wind farms is essential.

#### **Why Should Humans Care?**

Although bats have a bad reputation for sucking blood, this misconception couldn't be farther from the truth. Out of approximately 1,100 bat species, only three are known to feed on blood. Bats exhibit enormous diversity in diet and consequently provide varied ecological services, such as pollination, seed dispersal, and pest control. Nectar-eating bats encourage floral reproduction by transporting pollen on their bodies. Fruit-eating bats consume fruit and excrete the seeds, playing a significant role in promoting plant dispersal. Should bats fail to promote plant dispersal and reproduction, animals of higher trophic levels would starve. Insect-eating bats, which are of particular interest to us, are essential in regulating crop pests.

#### **Bats**

Three of the most affected bat species by wind turbines, from left to right - the Silver-haired bat, Hoary bat, and Eastern Red bat. Photos by J. Scott Altenbach.

Farmers rely on these bats to help increase crop yields. Researchers in Texas estimated the economic value of the pest-control service that bats provide to these farmers. According to their study, a lactating female bat can consume up to two-thirds of her body weight in insects in a single night.[3] Considering that more than 100 million Brazilian free-tailed bats forage every night in Texas, the implications are enormous. Bats provide an economic service to farmers in two ways: first, they increase crop yield by reducing the number of pests, and second, they decrease the number of pesticide applications needed. Without these services, Texan farmers in the

eight-county Winter Garden area would lose 13.5% of their annual income from the lost cotton production (worth an estimated \$5.5 million/year).<sup>4</sup> Moreover, pesticide use not only costs money, but also has its own environmental impacts. Increased crop pests make the possibility of organic farming less attainable. This analysis only accounts for the losses to part of Texas. On a national level, the economic losses due to decreases in bat populations would be devastating.

### **Why are Wind Turbines Killing So Many Bats?**

Researchers currently do not understand why bat deaths occur in such large numbers near wind turbines. Hypotheses range from the poor placement of turbines to the idea that bats are attracted to wind turbines.<sup>[2]</sup> One hypothesis proposes that clearing land to construct turbines may create a favorable foraging environment for bats by attracting insects to open areas. Another suggests that as the wind energy industry develops, taller turbines will expand into airspace that was previously occupied only by high-flying species of bats. Bats may be evolutionarily wired to seek out the largest tree on the horizon to serve as a potential roost and mating location. Thus, it is possible that bats mistake the large turbines for roost trees and fly toward them, only to be killed by the rotating turbine blades or the negative pressure that they create, which causes their lungs to rupture. Additionally, scientists believe that bats find the heat or sounds produced by spinning turbines attractive or disorienting. Despite these hypotheses, there is an urgent need for further research into the factors that influence bat fatalities on wind farms.

For such small animals, bats have unusually low reproductive rates, with an average mother producing only one or two young each year. At this rate, it could take decades to reverse dramatic losses to bat populations.<sup>[4]</sup> The hoary bat, one of the most commonly killed species by wind turbines in North America, may not be able to sustain anticipated losses to its population within the next ten years.<sup>[2]</sup>

### **Finding a Solution**

All too often, people are excited by the prospect of a new source of "clean" energy that they fail to recognize its negative externalities. Extracting wind energy where wind turbines do not conflict with migratory habits of bats could prevent significant fatalities. Knowledge about which factors are associated with increased bat fatalities could make it possible to improve wind turbine design and operations.

Research has shown that bats are more active on autumn nights characterized by low wind speed, low barometric pressures, and high cloud cover.<sup>[5]</sup> During these nights, there are two methods that can be used to stop turbine rotation. First, turbines can be programmed to start moving once a threshold wind speed, or cut-in speed, has been passed. Second, in a method called feathering, the blades can be oriented so they don't catch the wind. One study suggests that increasing the cut-in speed of wind turbines or feathering the turbine blades under these conditions can reduce bat fatalities up to 60%, while causing only a small loss in electrical power generation.<sup>[6]</sup> The industry's primary objection to such operational mitigation is loss of revenue. However, in the long run, if the wind energy industry fails to make such adjustments in their operations, a large decline in bat populations could be far more devastating economically and ecologically.

Other research findings present the possibility for further reductions in bat fatalities. Capping the height of turbines could also help prevent the exponential increase in deaths associated with increasing height.<sup>[7]</sup> Another study suggests that painting turbines with non-UV-reflective paints could decrease turbine visibility at night and prevent bats from mistaking turbines for roost trees.<sup>[8]</sup> Additionally, bats may be less likely to travel through an area with an induced electromagnetic field.<sup>[9]</sup> Further research is needed to determine the effectiveness and feasibility of these potential mitigation methods.

In a major Federal court decision in December 2009, a judge in Maryland ruled to stop the expansion of a \$300 million wind farm on the basis that it would kill endangered Indiana bats.<sup>[10]</sup> This ruling would require the wind energy company to obtain a permit from the US Fish and Wildlife Service before constructing additional

turbines. The permit would restrict the operation of wind turbines during peak periods of migration. Rulings like this serve as a reminder that renewable energy is not always synonymous with environmental sustainability.

As ongoing research reveals new solutions to solve the ecological problems associated with wind energy facilities, they should be implemented. Scientists at universities and various non-government organizations, such as the Bats and Wind Energy Cooperative and Cornell University's Laboratory of Ornithology, are at the forefront of this research and are taking a stance by recommending changes in policies and operational mitigation. Bat fatalities caused by wind turbines will result in ecological discord and simultaneously harm the economic interests of farmers. We need policy changes to help realize the public benefit of bats. These changes need to ensure that wind energy is both environmentally and ecologically sustainable, while still being economically viable.

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- 9 Nicholls, B. and Racey, P.A. (2007). Bats avoid radar installations: could electromagnetic fields deter bats from colliding with wind turbines? *PloS ONE*, 2(3), e297.
- 10 Animal Welfare Institute, et al. v. Beech Ridge Energy LLC, et al. 63 F. Supp (MD 2009).

**Web link:** <http://www.bu.edu/synapse/2010/10/29/the-effect-of...>

**From:** Rob Pforzheimer  
**Sent:** Saturday, March 23, 2013 9:59 AM

**Subject:** FW: About | STOP THESE THINGS

<http://stopthesethings.com/about/>

About

We are not affiliated with any group, political party or industry.

We have not received any funding from any outside group or individual.

We are a kitchen table group of citizens concerned about what is happening across rural and regional Australia, by the harm being done by the wind industry, in partnership with governments.

We are surprised and alarmed by how the Green movement is now in bed with big industry.

We are dismayed that people have been forced from their homes or have been made unwell by a government-sanctioned, tax-payer funded industry.

We are not convinced at the efficacy or efficiency of wind energy.

We are not collectively climate-change “deniers”. We are not NIMBYs.

We are appalled by how wind industry supporters dismiss victims, ridicule those who have different opinions and vilify those who are opposed to industrial wind power generation.

We are appalled by the dishonesty of the wind industry, its supporters and those who operate within it.

We are disappointed that the many who claim to have been made sick are segregated and dismissed.



Neither we nor our homes are threatened by wind turbines. We do not live in proximity to industrial wind power generation plants.

We are independent but compassionate observers who have undertaken our own investigation. We think this issue is one of fairness and human rights.

We don't think the wind industry collectively is a good corporate citizen. We believe this is an industry fueled by the prospect of massive profits, hiding behind a veneer of "the common good".

We believe proponents seem hell-bent on destroying our environment to "save" it.

We believe the rampant installation of turbines across this country must be stopped or at least paused until a full examination of the facts is undertaken AND (most importantly) acted upon.

Comments

**1. Denise O'Keefe says:**

[March 21, 2013 at 11:39 pm](#)

Many thanks for this site and the information it contains

King Island Tasmania is currently looking at a proposal for 200 90 metre plus blade wind towers to be placed here on our Island

Yes the wind blows and yes not a lot of people live here but there is beginning to be real opposition to this proposal

The carrot of jobs and money and upgrades to services is being dangled in front of a community which recently lost it's abattoir

and consequently a lot of jobs so the proposal looks attractive to some as well as those who think wind farms will solve environmental problems

I for one hope this NEVER gets off the ground

So again thanks for the information and thank you to Martin Hayes for the heads up

[Reply](#)

**2. DrDRNa says:**

[March 13, 2013 at 8:45 pm](#)

I want to express my gratitude to STT.

I have been following this wind turbine saga for years and seething inside about how it damages communities everywhere, and for no benefit. Through your work, together with some other key generous and passionate souls out there, it is clear now that the tide is turning, and the days of this wind scam are numbered.

The people now know what to do. They are informed, connected and empowered. That is a great service, and STT has played a key role in delivering this.

Thank you all for giving up your personal time and expertise to help expose this scam, in all its complex horror, and connect those vulnerable people out there who were unlucky enough to be visited upon by wind energy greed.

[Reply](#)

**3. The Callous Wind says:**

[February 24, 2013 at 7:04 pm](#)

I too would also like to thank the volunteers who created and maintain this site, the information posted here is invaluable. It already has been and will be a great help to us, in our battle to stop the Ceres Wind Turbine Project here on Yorke Peninsula.

<http://www.theceresproject.com.au/>

<http://stopthesethings.com/2013/02/12/stop-ceres-wind-farm-campaign/>

Unlike some of the other projects, we were told this was coming, but we were never asked what we thought about it, by the developers or the hosts, who just happen to be our neighbours, we were told it is going to happen.

At the so called information meeting at Curramulka, the developers refused to communicate with us as a group, refusing to answer our questions, saying that they didn't have to. Their idea of an information meeting was to split everyone up into groups of 25, take them inside and lock the doors, which is what happened eventually, after they called the police, because a few people became a bit vocal, but there was never any hint of violence.

<http://stopthesethings.com/2013/01/20/sit-down-and-shut-up-or-well-call-the-police/>

<http://stopthesethings.com/2013/02/02/so-what-went-wrong-with-the-ceres-wind-farm-information-meeting/>

At the moment, Suzlon/REpower have submitted their Development Application to the DAC and anyone can send in submissions. I am no expert, but their submission contains glaring miscalculations, lists procedures that will never happen and is totally non compliant. It is also blatantly obvious, that the consultants and the developers, have spent very little time in the area, to know how rural communities operate, working with the land, fighting fires etc. To receive Crown Development Status, there has to be total transparency to the community and the project is not to impact on any of its' neighbours. Firstly, there has been no transparency, there are approximately 1,300 houses within 2 to 4 kilometers of the turbines, including one large and two small holiday communities along the coast and the majority of those people have only found out about this project in the last few weeks.

Secondly, the turbines have been placed on all of the host's boundaries, which eliminates the use of aerial spraying and baiting by their neighbours, for a distance of 500 meters or 3 kilometers from the turbines, depending which way the planes have to fly. When the developers were asked why they did this, the reply was, "so we don't inconvenience the hosts". In my opinion, if this project is approved by the DAC and given the go ahead by John Rau, the minister for planning, then there is something terribly wrong with our system.

At the moment, there is a very isolated group of 36 hosts and a very angry community of 2-300 people and growing, which will only get worse if the Ceres Wind Turbine Project goes ahead.

#### [Reply](#)

#### 4. [Jim Hutson](#) says:

[February 21, 2013 at 7:46 pm](#)

Please remember, The Federal government cannot force these things on us, The State Government cannot force these things on us either, neither can Local government, the Wind Turbine Companies cannot either. The people that give us Wind Turbines are the Wind Turbine, so called hosts who sell out their communities and their neighbours for 30 pieces of silver, and then complain when their neighbour who cannot live in his or her home, due to noise and health sufference, has their property de-valued up to 50%, in some cases after buying their property with life long savings , gets upset. Orrrrr Deeerr. Maybe I am missing something.

#### [Reply](#)

#### o [Old Ranga from Victoria](#) says:

[February 22, 2013 at 11:21 am](#)

More importantly, those turbine hosts need a constant reminder that – longterm – their own properties will be devalued by the turbines they install. So what are they doing to their children's inheritance? Regular letters to local papers are invaluable here, and possibly the Weekly Times as well.

## [Reply](#)

### 5. [Jennifer](#) says:

[February 17, 2013 at 2:00 pm](#)

Thank you so much for this website. You are doing collectively what so many Australians were trying to do individually. With your understanding of the trauma caused by years of fighting proposed wind farms, (in our case, Mt Emerald Wind Farm), you give us, the individuals, just a little more hope.

## [Reply](#)

### o [stopthesethings](#) says:

[February 17, 2013 at 4:16 pm](#)

Thanks Jennifer. We see this issue as one of the most important affecting rural and regional Australia today. We also think it's vastly unreported by traditional media. This site is manned entirely by volunteers. We receive no funding from any individual, group or organisation. We certainly welcome your "pat on the back".

## [Reply](#)

### 6. [Jason](#) says:

[February 4, 2013 at 1:31 am](#)

This is a truly international blight! I am contacting you from N. Ireland where we are being spun a web of lies so that corporations and politicians can benefit from the building of these monstrosities!

Please check our [website-www.windwatch.co.uk](http://www.windwatch.co.uk)

We also have a facebook page and would love to have your support- it is accessible from links at the top of our site.

Good luck- wishing you the very best

## [Reply](#)

### 7. [Harley Keisch, Wind Wise Radio](#) says:

[January 10, 2013 at 2:01 pm](#)

Welcome to the fray!

Check <http://www.windwiseradio.org/australian-senate-inquiry/>which I am maintaining.

I've added Stop These Things to our list of friends!

Cheers.

## [Reply](#)

### 8. [Jackie Rovensky](#) says:

[January 4, 2013 at 12:12 pm](#)

Not only too SA, but across SA, today is a Catastrophic fire danger day in the Lower SE of SA, and in other parts, with the rest of the State on high alert. A fire could bring devastation, across Southern Australia even with the assistance of aerial water bombing. It would be a much more dangerous and fast moving process without water bombing.

A CFS spokesperson here in SA the other week said aerial water bombing wasn't that important because it's the people on the ground who put fires out – yes he is right about the people on the ground, but ask them if they would prefer to do it without the help of water bombing! The idiot was speaking after being asked if it was true turbines could interfere with the ability to fight fires.

[Reply](#)

**9. Bluey says:**

[January 4, 2013 at 10:48 am](#)

Extreme fire conditions in south west Victoria today. Look into the near future when all the approved wind farms are constructed -turbines from Geelong to South Australia and aerial fire control not an option – wind farm neighbours collateral damage.

[Reply](#)

**10. peter says:**

[January 3, 2013 at 9:48 pm](#)

A few years ago a wind energy company and its supporters tried to intimidate my family and others in our area, The wind company is now defunct and most of the fishy supporters are close to broke after thinking they were going to get a payout and then it all falling over when the majority of the community objected and fought them. The moral of the story is to fight anyone who supports this junk, intimidate them, and by no means do any business dealings with anyone who you know supports wind energy and let it be known. Their support will soon stop when they think they are losing money  
Its good to see a site dedicated to spreading the truth on this issue. Keep it up!

[Reply](#)

**11. Murray May says:**

[January 1, 2013 at 5:52 pm](#)

It is interesting that the Greens now regularly portray anyone with concerns about wind turbines as fronts for the coal industry. Chistine Milne did this recently in a speech in the Senate on the Madigan/Xenophon bill on excessive noise from wind farms. Perhaps it's time for the Greens to spend more time in wilderness listening to the sounds of nature and reflecting on John Muir's original question about the proper relations between humans and bears, mountains, clouds and rivers.

[Reply](#)

**12. Donna Quixote says:**

[December 31, 2012 at 12:59 pm](#)

Always great to see another new site come online. Welcome to the club. The more of us there are, the sooner our voices will be heard. One can only hope. I'll put a link to you on our site in Ontario. I try to include wind turbine news from all over the world, so I'll put a link to you on our home page. <http://www.quixoteslaststand.com>

[Reply](#)

- o [stopthesethings](#) says:

[December 31, 2012 at 1:28 pm](#)

Many thanks. And we have put your link on our Canada page. In the words of your esteemed namesake: "Thou hast seen nothing yet."

[Reply](#)

**13. Jackie Rovensky says:**

[December 29, 2012 at 4:23 pm](#)

Yes, I am referring to Richard. I think he should be recognised for his stance. And the way the Government has used him as a 'scape goat' and excuse to bring about Draconian changes to the Development Plans is a disgrace.

Their response to Richards win has shown them up for what they are, and being relatively polite I'll leave what they are to each of us to speculate on.

I am sure people would find a story on Richard enlightening.

[Reply](#)

**14. Jackie Rovensky says:**

[December 29, 2012 at 3:23 pm](#)

Good luck with this site and:

What would you call a Government that changed Development Plan regulations to ensure applications for wind energy installations could not be refused on grounds of Visual Amenity or anything else?

With the excuse given for changes being a single win in the ERD court by one farmer on grounds of Visual Amenity had apparently created so much uncertainty for developers the Government had to ensure it could not happen again.

They then made further amendments creating Zones where Visual Amenity can be used to stop projects.

Funnily enough the district where the farmer lives is NOT one of them!

[Reply](#)

- o [stopthesethings](#) says:

[December 29, 2012 at 3:54 pm](#)

Thanks for stopping by Jackie and for contributing to the debate. Are you talking about Richard Paltridge by any chance? We hope to feature Richard in a future post. A true wind warrior. He deserves recognition for his courage and determination to take on single-handedly a major overseas multinational.

[Reply](#)

**15. Bob in Castlemaine says:**

[December 29, 2012 at 2:28 pm](#)

I wish "Stop These Things" web site every success in exposing and publicising the many negative aspects of wind turbines.

Concerning the disclosure under the **About** tab that “We are not climate-change deniers.” I am a little surprised at the choice of such pejorative language, presumably intended to describe those who (though they certainly don’t “deny” that climate has always changed) remain sceptical about the dangerous man-made warming orthodoxy fundamentally because it is not supported by any direct scientific evidence. Also, be mindful that the tactics employed by wind developers to justify the wind industry, e.g. argument from authority, refusal to provide data, obfuscation, misinformation and intimidation of objectors, are the very same ones adopted by alarmist politicians, commentators, and other proponents of the warming orthodoxy.

### [Reply](#)

- o [stopthesethings](#) says:

[December 29, 2012 at 3:10 pm](#)

Thanks for your good wishes, Bob. And we welcome your comments re our *pejorative* language. Good point.

Accordingly, we have tweaked our “About” description to better reflect our group, the diversity of its interests and attitudes – and the ongoing human-induced climate change issue. We think some well-placed quotation marks in the above make a world of difference to meaning.

In our view, the term “climate change denier” is pejorative, like NIMBY. And used by the wind industry and its supporters to dismiss and diminish any opposition (i.e. anyone who opposes their extremist agenda is a *flat earther*).

The debate on this issue, of course, is not whether the climate is changing but the size of the impact of human activity. But this debate is separate to the wind issue, in our view, although it’s central to the justification for the wind sector’s rampant expansion promoted by its supporters.

Thanks for visiting our site. We welcome your ongoing feedback and input.

### [Reply](#)

- 16. Rosemary Howe** says:

[December 28, 2012 at 10:29 pm](#)

I agree with you.

I found Phineas Windbag –<https://www.facebook.com/phineas.windbag>

he speaks sense.

We are currently being invaded by the Gullen Range Wind Farm.

### [Reply](#)

- o [stopthesethings](#) says:

[December 29, 2012 at 10:57 pm](#)

Thanks for visiting us Rosemary. And thanks for making a comment. Phineas Windbag is a warrior we are certainly aware of. And you’re right. He does speak sense. Do come back and see us again.

### [Reply](#)

**From:** Pam Arborio  
**Sent:** Sunday, March 24, 2013 8:32 PM

**Subject:** Fwd: Eolian MOU

Re. SMW/Eolian, the most recent of the assaults before the met towers have been approved is their application for a MOU from Lyndonville Electric Dept.

Thanks,

Pam Arborio

Begin forwarded message:

**From:** Pam Arborio  
**Date:** March 24, 2013 8:19:38 PM EDT

**Subject:** Fwd: Eolian MOU

Begin forwarded message:

**From:** Pam Arborio  
**Date:** March 24, 2013 5:16:39 PM EDT

**Subject:** Eolian MOU

3/24/2012

Mr. Mason,

Although Brighton isn't a customer of LED, as, with so many areas of the Kingdom, we are our brothers keepers. The SMW project, if completed, will have a devastating effect on the economy of our small town. Because the 492' turbines will begin at Seneca Mountain and continue down the ridge line we will see their reflection day and night in our lake in Island Pond. Newark, Maidstone, even Charleston will be subject to a view certainly not of their choosing.

From your willingness to share information and the desire for transparency, it seems we may actually have an honorable man, with the concerns of his ratepayers and neighbors, in his sights. Please share our concerns with the trustees Mr. Mason. Most of us have sacrificed time and financial resources to stop the destruction of our mountains, wildlife, economy and health for a source of sustainable energy that, in the long run, will produce little generation at great cost both financial and environmentally.

It is our understanding the Board of Trustees can refuse this project. Please allow those of us with serious concerns to share our findings with the Board before an agreement is signed.

Respectfully,  
Pam Arborio  
President, Brighton Ridge Protectors

**From:** Pamela Arborio

**Sent:** Sunday, March 24, 2013 8:47 PM

**Subject:** Fwd: AG LETTER 3-22-2013

Please consider this complaint in addition to the audio tapes I sent regarding the issues in the communications between SMW/Eolian and the BOG/UTG.

Pam Arborio

■

PAM

**WILLIAM H. SORRELL**  
ATTORNEY GENERAL

**SUSANNE R. YOUNG**  
DEPUTY ATTORNEY GENERAL

**WILLIAM E. GRIFFIN**  
CHIEF ASST. ATTORNEY  
GENERAL



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FAX: (802) 828-3187  
TTY: (802) 828-3665

<http://www.atg.state.vt.us>

March 22, 2013

United Towns and Gores of Essex County  
Board of Governors



Dear Ms. Vigneault:

This Office received a complaint that the Board of Governors ("BOG") United Towns & Gores of Essex County, Vermont ("UTG") has allegedly violated the Open Meeting Law, 1 V.S.A. § 312 in connection with meeting warnings, agendas and minutes.

Under 1 V.S.A. § 314(b), the Office of Attorney General has authority to enforce compliance with the Open Meeting Law. We have reached no conclusion concerning the accuracy of this complaint and we would like to give you an opportunity to respond.

I respectfully request that you provide me with a written response to this complaint at the above address on or before April 8, 2013. For all regularly scheduled and special BOG-UTG meetings, including but not limited to, UTG Planning Commission and Development Review Board meetings, please send copies of meeting warnings, agendas and minutes for the months of: August 2012 through December 2012 and January 2013 through March 2013 with your written response.

Thank for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "William B. Reynolds".

William B. Reynolds  
Assistant Attorney General

Enc.  
cc: Complainant

WILLIAM H. SORRELL  
ATTORNEY GENERAL

SUSANNE R. YOUNG  
DEPUTY ATTORNEY GENERAL

WILLIAM E. GRIFFIN  
CHIEF ASST. ATTORNEY  
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<http://www.atg.state.vt.us>

March 22, 2013

Pam Arborio  


Dear Ms. Arborio,

Please see the enclosed copy of the letter to the Board of Governors, United Towns & Gores of Essex County requesting a written response regarding your complaint.

Please note that the Attorney General's Office has jurisdiction that is limited to violations regarding Open Meeting Law as indicated in 1 V.S.A. § 311(b) and 1 V.S.A. § 314(b). Therefore, we are only able to review the matters directly related to Open Meeting Law indicated in your complaint.

Thank you for bringing your concerns to the attention of this Office

Sincerely,

Peggy Lord  
Administrative Secretary  
General Counsel & Administrative  
Law Division

Enc.

Peggy Lord

2013-0678

**From:** [REDACTED]  
**Sent:** Friday, March 15, 2013 12:44 PM  
**To:** Peggy Lord  
**Subject:** Fwd: BOG-UTC 3/11/13 Complaint

To: State of Vermont Attorney General  
From: Pam Arborio, Brighton, VT.  
Date: 3/15/13

I wish to file a complaint regarding the Board of Governors that represent the UTG (United Towns and Gores) for Violations of the Open Meetings Law. I have seen discussion of business which should have been held during a warned meeting. Having prior knowledge of a proposal of enormous importance to their constituents, they failed to include it as part of the agenda. I believe you will find, after listening to the audio recordings, proof of the desire to hold off the record discussions pertaining to an Industrial Wind Turbine proposal by SMW/Eolian/Nordex. I also believe the proper process of Roberts Rules were abused by BOG members during the 3/11/13 meeting wherein the Chair was not given the appropriate time to discuss a motion properly. You may find additional violations in the recordings.

Please listen to both recordings carefully and completely. The first was done by the BOG themselves, the second I recorded myself when they voted to stop recording regular meetings.

As I receive additional documentation of impropriety I will forward that to you

Thank you for your attention to this time sensitive issue.  
Respectfully,  
Pam Arborio

[REDACTED]

**From:** Annette Smith

**Sent:** Monday, March 25, 2013 3:20 PM

**Subject:** Guidelines and national standards

When considering Guidelines and National Standards, please read this testimony which was filed in the Georgia Mountain Wind case. The expert scoured the country for ordinances about setbacks from property lines. The relevant conclusion from P.5 is attached. Despite presenting the PSB with a foot thick stack of ordinances, the PSB ignored the testimony and approved what the developer wanted, which is 188 feet from the neighboring property line. The PSB also ignored the PSD, which submitted testimony that the project setback should be 1.1x the total height of the turbines (the PSD ignored the fact that the 1.5x number is based on ice throw, which is a factor in Vermont). All the wind projects in Vermont were approved with setbacks from neighboring property lines of less than 200 feet. As a result, Vermont has one of the worst standards for setbacks from neighboring property lines in the country. This resulted in adjoiners to both the Lowell and Georgia Mountain wind projects being sued in Superior Court and kept off their land for 1000 feet with a Temporary Restraining Order. Developers have a condemnation process available to them through the PSB but chose not to use it in either case, and after the fact threw flyrock onto neighbors' properties. In the Georgia Mountain case, the developer lied to the PSB and in the press about throwing flyrock, denying that their project threw flyrock. The Department of Public Service did a site visit and determined that the flyrock was hazardous and did indeed exist. Had the PSB established appropriate setbacks for safety, none of those issues would have happened.

<http://energizevermont.org/wp-content/uploads/2011/01/Scott-McLane-prefile-testimony.pdf>

5      A13. My conclusions are best shown on Exhibit SM1. Exhibit SM1 demonstrates that most  
6                    jurisdictions require property line setbacks of between 1.1 and 1.5 times the total height  
7                    of the turbine. I should clarify that whenever I use the term "total height" or "total height  
8                    of the turbine" in my testimony I am referring to the height of the tower plus the rotor  
9                    blades when a blade is extended vertically from the tower at its highest point above the  
10                  ground.

-----  
Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



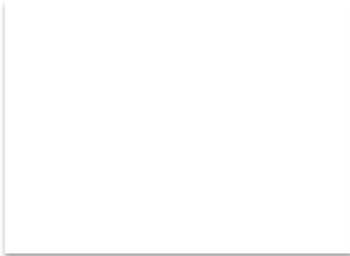
**From:** Annette Smith  
**Sent:** Monday, March 25, 2013 4:23 PM

**Subject:** efficiency for biomass

This is another issue that would work well moving the process to Act 250, since Act 250 could look at the regional resource issues as well as the heating and power issues.

But it may be a moot point, because if the state has enough wood for one project, the North Springfield Biomass project is currently in technical hearings at the PSB and if that project is approved, Vermont will have its one project.

-----  
Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



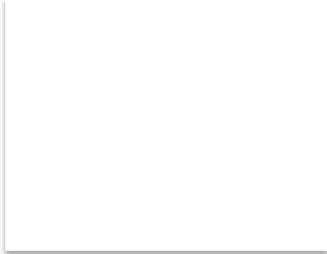
**From:** Annette Smith

**Sent:** Monday, March 25, 2013 4:49 PM

**Subject:** monitoring for birds and bats

I disagree that monitoring for birds and bats is strong. As far as I am aware, there is some sort of independent monitoring for bats at the Sheffield wind project, but ANR has had a report for a while and not released it so the information is not being made public in a timely manner. To the best of my knowledge, bird monitoring is done by experts chosen by the developer in all cases, and in most cases that is the situation with bat monitoring. The public has no confidence in how it's being done.

-----  
Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



**From:** Annette Smith

**Sent:** Monday, March 25, 2013 5:24 PM

**Subject:** blasting

Your perception that the issue with blasting is not natural resources but rather just property is incorrect. The applicants have not been required to disclose the total pounds of explosives used, nor have they been required (until VCE pushed the PSB for it) to disclose the MSDS sheets for the blasting compounds.

My rough calculations are that more than 1 million pounds of explosives were used to blast the Lowell Mountains for the GMP wind project. It may be more. But blasting compounds are ANFO -- Ammonium Nitrate and Fuel Oil. For every million pounds of explosives used, that means 9000 gallons of fuel oil was injected into the aquifer.

Injecting that much explosives into the ground raises the public trust for groundwater analysis requirement.

Act 250 permits also often require monitoring streams during blasting to make sure there is no contamination.

VCE provided the PSB with a memo from an Act 250 district coordinator. We also filed comments with the PSB and ANR about what is normal in Act 250 regarding blasting that is not being done in the PSB process.

From our observations on the Sheffield, Lowell and Georgia Mountain sites, the PSB has essentially approved a free-for-all. No limits on the total pounds of explosives, no limits on daytime blasting, there are many things that are normal in Act 250 that the PSB has not implemented, and seems to have no interest in.

Again, another good thing about Act 250 that the PSB process is not able to deal with.

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Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



**From:** Rob Pforzheimer

**Sent:** Tuesday, March 26, 2013 11:39 AM

**Subject:** foolish policies like wind farms that have no effect on the climate whatsoever

"foolish policies like wind farms that have no effect on the climate whatsoever. They are a waste of money and are not helping anyone other than the landowners making millions out of the subsidies."

[Chief scientist warns climate change will bring extremes in weather](#)

Posted on 25 March 2013 by Priyanka Shrestha



The UK Government's chief scientist has warned time delays in the climate system means that greenhouse gas emissions in the atmosphere now will determine the weather the world experiences for the next 25 years. Sir John Beddington (pictured) said climate change is one of the things he has been trying to bring to the Government's attention but believes it is not talked about enough. He also noted the climate and weather we're experiencing now comes from greenhouse gases that were in the atmosphere 25 years ago.

He said the international community's failure to agree binding targets for cutting carbon emissions meant problems were being stored up for the future. He told BBC Radio 4: "They may reach agreement and they may start to reduce greenhouse gases in the next five years, or it may be a little longer. But they are still climbing and when that increase is reversed, we will be left with the weather and the climate for the next 25 years from whenever that happens."

Sir Beddington added: "You can think about mechanisms... carbon dioxide, carbon capture and storage, those things are very withdoing. But I kind of emphasise more on the time delays. I think the key here is this is sort of a simplistic way of thinking about it, that's a nice indicator. But there are other things going on. For example, one of the results of the climate analyses is saying we do expect more variability and we are seeing more variability... The Arctic is likely to be warming more than other parts of the planet. So I think that the issue in a sense needs to be taken out of a very simple, simplistic thing."

He said the world faces huge problems of food, water and energy security as global population increases, which will be inevitable in the near future.

The head of the Global Warming Policy Foundation (GWPF), however, said he is sceptical about anyone being able to predict what the climate would be like in the future.

Director Benny Peiser said: “No one knows whether next winter will be warm or cold or average, no one knows whether next summer will be hot or wet or dry. It’s very, very difficult to make long-term predictions and therefore, I remain rather sceptical about the reliability and accuracy of these kind of speculation. They are pure speculation, they are not based on any hard facts, it’s an assumption.”

Mr Peiser added setting an international target would be the only way to limit emissions. However, he said that would not happen as it would mean countries like China and India would have to stop exploiting fossil fuels. “It would mean to stop their economic growth and development. They can’t afford that. The negotiations have been going on for 20 years and they have been against it. So just because John Beddington says Government should take action doesn’t mean anything for them. It’s business as usual... They are using cheap energy because it’s the only way to develop”, he said.

He suggested Governments need to spend more money on preparing for extreme weather conditions and be more resilient.

“The only realistic and pragmatic approach to the issue of climate change and extreme weather events like droughts or flooding is to make countries throughout the world more resilient so that they can cope better. If you can heat your home in the cold winter, then that’s not a big problem. If you can cool your home in a hot summer, then that’s not a problem. If you have houses that can withstand storms, then we don’t have a problem. “We need Governments to spend more money on real solutions and not foolish policies like wind farms that have no effect on the climate whatsoever. They are a waste of money and are not helping anyone other than the landowners making millions out of the subsidies. The real policy that has an effect and that will help people is to realise that whoever is right on CO<sub>2</sub>, there will always be flooding, there will always be drought and we need to prepare for these events and make our societies more resilient.”

**From:** Rebecca Ryan

**Sent:** Tuesday, March 26, 2013 10:33 AM

**Subject:** Re: Deadline for Public Comment

Dear Anne, I could not submit via form as comments exceed maximum characters. Please accept attached memo for public comment to the Siting Commission on behalf of the American Lung Association in Vermont. Thank you very much, Rebecca

Rebecca Ryan | Director, Health Education and Public Policy | Vermont  
American Lung Association of the Northeast  
Williston, VT | New York, NY | Waltham, MA

March 26, 2013

To: Governor's Energy Generating Siting Policy Commission

From: Rebecca Ryan, American Lung Association

Subject: Recommendations for Vermont's Approval of Siting for Electric Generation

With the influx of renewable energy projects seeking approval by the state's Public Service Board, the American Lung Association recommends that as the Governor's Energy Generation Siting Policy Commission considers best practices for siting approval of electric generation projects that the commission prioritizes public health above all else.

All means of generating electricity are not equal in their public health impacts, and this fact must be an essential element of recommendations made by the commission.

Everyone is impacted by air pollution, but people with heart and lung diseases, diabetics, older adults and children are even more vulnerable. The six most widespread pollutants are ozone, particulate matter (PM), nitrogen oxide, sulfur dioxide, carbon monoxide and lead. And these emissions are associated with all forms of combustion generated electricity. However, not all technologies for generating electricity rely upon combustion to generate electricity. For example, wind and solar energy produce no direct air emissions. A [report](#)<sup>1</sup> issued by the Environment Connecticut Research and Policy Center estimated that Vermont will avoid 50 tons of nitrogen oxide per year with wind energy projects under construction. Oil electricity generation releases PM, nitrogen oxide and sulfur dioxide, precursors to ozone. Biomass energy is a source of PM, nitrogen oxide, carbon monoxide, and volatile organic compounds. Scientific studies have linked all of these pollutants to adverse health effects. For example, fine particulate matter (PM<sub>2.5</sub>), a combination of fine solids and aerosols, are small enough to pass from the lung into the bloodstream, just like oxygen molecules, and therefore have the potential to adversely affect all organs of the human body. High levels of PM<sub>2.5</sub> are likely to cause many serious health effects, including death from respiratory and cardiovascular disease and increased severity of asthma. New England has some of the highest asthma rates in the country, and an estimated 55,277 adults and nearly 12,850<sup>2</sup> children in Vermont have asthma. In addition, breathing high levels of PM<sub>2.5</sub> over a long time may decrease the development of lung function as children grow and may cause cancer.

We recommend that Vermont incorporate two important actions in all energy planning that have already been recommended by the Department of Public Service in Vermont's

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<sup>1</sup> Environment Connecticut Research and Policy Center, Wind Power for a Cleaner America, November 2012.

<sup>2</sup> American Lung Association, Epidemiology and Statistics Unit, Estimated Prevalence and Incidence of Lung Disease, March 2012.

Comprehensive Energy Plan (CEP), and the Department of Health in a report required by Act 48, Vermont's Health Care Reform Law. Before issuing permits for new electricity production plants in Vermont, the American Lung Association urges the state to:

**1) Require life-cycle analyses in permitting process.** The American Lung Association recommends accounting for all pollutants harmful to health that are generated in the production, use, and disposal of each energy product. While Vermont attains the national ambient air quality standards (NAAQs), it does so by the slimmest of margins. The state is also challenged to attain certain state adopted standards to control airborne toxins. In Vermont's CEP, the Department of Public Safety (DPS) supports "efforts at the Agency of Natural Resources to build and use effective life-cycle analysis tools to evaluate net carbon emissions or sequestration for different forms of bioenergy usage in Vermont under different harvesting scenarios, and incorporate them into the Public Service Board 248 criteria once established." The American Lung Association agrees and supports life-cycle analyses of greenhouse gas emissions and recommends the same requirement for health-damaging pollutants including ozone, sulfur dioxide, nitrogen oxide, PM2.5, carbon monoxide and lead.

**2) Formally integrate health into energy policy planning processes by advancing Health Impact Assessment (HIA).** According to National Research Council<sup>3</sup>, the HIA is a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program or project on the health of a population and the distribution of those effects within the population. HIAs provide recommendations on monitoring and managing those effects.

Vermont's CEP recommends that HIAs be incorporated into the state's energy planning processes and policies, and when reviewing new and existing energy projects<sup>4</sup>. A similar recommendation was made at a symposium hosted by The University of Massachusetts Lowell entitled, "Wood Biomass for Heat and Power: Addressing Public Health Impacts." A broad array of disciplines, organizations [including the American Lung Association], and sectors from across the Northeast, strongly supported formal integration of health into energy planning processes by advancing HIAs.<sup>5</sup>

An HIA can be particularly useful in identifying increased risks to susceptible and vulnerable populations from specific energy sources, as well as how policies and projects may be modified

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<sup>3</sup> National Research Council, [Improving Health in the United States: the Role of Health Impact Assessment](#), 2011.

<sup>4</sup> Vermont Department of Public Service, [Comprehensive Energy Plan, Appendix 2 – Public Health Assessments and Energy Planning, 2011.](#)

<sup>5</sup> Hoppin, Polly, ScD., Jacobs, Molly, MPH, [Wood Biomass for Heat & Power, Addressing Public Health Impacts](#), Summary of a 2011 Symposium, University of Massachusetts Lowell, Lowell Center for Sustainable Production, November 2012, page 6.

to promote health. People with chronic disease, those living below the federal poverty limit and those without adequate health care are more likely to experience health problems when they are exposed to harm such as pollutants because of where they live, work or attend school.

As required by Act 48, Health Care Reform, the Vermont Department of Health (VDH) submitted a [report](#)<sup>6</sup> to the legislature that recommended four actions to enhance Vermont's ability to conduct and benefit from HIAs. All four actions represent work that VDH is prepared to do. Three of these recommendations are relevant to the electricity generation approval process:

1. VDH will support towns and Regional Planning Commissions to consider health when approving community development plans and initiatives.
2. VDH will post policies, tools and other information about the HIA process on its website.
3. VDH will continue to pursue funding streams to support HIAs in Vermont.

The U.S. Environmental Protection Agency (EPA) has estimated the annual health benefits for emissions reductions of \$380,000 to \$880,000<sup>7</sup> per ton of directly emitted PM2.5 reduced nationwide. These health care savings are based on national data, and they justify developing Vermont factors in consideration of new sources of energy that have associated health threatening emissions. For example, a power plant under consideration in Vermont would have allowable emissions of 39 tons per year of particulate matter,<sup>8</sup> even though fitted with a high degree of emissions control. If built, potential associated health care costs would be quite significant and demonstrate that HIAs are justified when considering electric power generation options.

Although HIAs have been implemented in Europe for many years, they are relatively new in the U.S. Many of the HIAs done in the United States to date have focused on aspects of urban land use planning, but here are two examples of HIAs related to power production:

1. An HIA of coal and clean energy options in Kentucky provides a health-based screening of the life cycle of coal from point of extraction to disposal of byproducts.
2. An HIA that will assess the potential health impacts of a proposed biomass power plant in Springfield, Massachusetts.

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<sup>6</sup> Vermont Department of Health, Unifying Vermont's Current Efforts around Health System Planning, Regulation and Public Health, January 15, 2012.

<sup>7</sup> U.S. Environmental Protection Agency, Outreach and Information Division, Office of Air Quality Planning and Standards, Annual Report, Fiscal Year 2010, Appendix A.

<sup>8</sup> [State of Vermont, Agency of Natural Resources, Department of Environmental Conservation, Air Pollution Control Permit to Construct, North Springfield Sustainable Energy Project LLC, Draft Permit, August 9, 2012](#), page 5.

According to the Vermont CEP, HIAs are conducted by the proponent of the policy or project to assure that potential health impacts have been considered in the design or development states. For example, a utility in Section 248 proceeding could submit the assessment as part of its filing to demonstrate that the project will not have a negative effect on public health and safety. We recommend that the energy developer cover the costs of the HIA.

HIAs can be done by private consultants and paid for by the project developer. HIAs can also be conducted by university researchers with technical assistance from public-health experts. HIAs can also be done by local or state agencies. For more information, including resources for policy makers, visit [the Health Impact Project](#), a collaboration between the Robert Wood Johnson Foundation and the Pew Charitable Trust.

In closing, the American Lung Association encourages you to prioritize public health in the process of siting energy projects through life-cycle analysis and health impact assessments, as recommended by the Vermont Departments of Public Service and Health. Thank you for your work on this important issue.

If you have questions, please contact Rebecca Ryan, Director, Health Education and Public Policy, American Lung Association, Vermont, 802-876-6862 or [rryan@lungne.org](mailto:rryan@lungne.org).

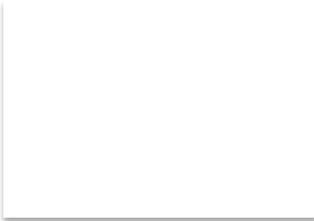
**From:** Annette Smith

**Sent:** Monday, March 25, 2013 4:46 PM

**Subject:** noise monitoring/statement by Ms. Grace

Whatever Ms. Grace said about what is happening with noise monitoring currently is not accurate. There is no case in which all the parties have agreed on anything. There are only complaints, the PSD hired their own expert (without consulting with any of the parties) and that whole thing has been gamed by the developer who knew when the monitoring was taking place, and then has been very slow to hand over data so PSD can finish its report. There is nothing but frustration, expense, and continuing illness for the neighbors of the project at issue.

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Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



[REDACTED]

In response to comment above, “noise monitoring/statement by Ms. Grace,” PSD Advocacy Director Geoff Commons provides the following information (also the attached):

In the Lowell wind (a/k/a Kingdom Community Wind) docket 7628 the parties including GMP agreed to an independent 3<sup>rd</sup> party expert to monitor GMP’s noise monitoring. See attached order at 2, fn 5. It is possible that not “ALL” parties agreed to the 3<sup>rd</sup> party monitor, but only b/c it’s not clear that all of them engaged in the conversation (e.g. the Nelsons may or may not have weighed in on selecting the 3<sup>rd</sup> part). I have never heard that anyone objected to the selection of Cavanaugh Tocci Associates, Inc..

FILE COPY

STATE OF VERMONT  
DEPT OF PUBLIC SERVICE  
MONTPELIER, VT.  
5620-2601

G. Commons  
J. DeLing

STATE OF VERMONT  
PUBLIC SERVICE BOARD  
MAY 17 A 9:11

Docket No. 7628

Joint Petition of Green Mountain Power Corporation, )  
Vermont Electric Cooperative, Inc., and Vermont )  
Electric Power Company, Inc. for a certificate of public )  
good, pursuant to 30 V.S.A. Section 248, to construct up )  
to a 63 MW wind electric generation facility and )  
associated facilities on Lowell Mountain in Lowell, )  
Vermont, and the installation or upgrade of )  
approximately 16.9 miles of transmission line and )  
associated substations in Lowell, Westfield and Jay, )  
Vermont )

Order entered: 5/16/2012

**ORDER RE NOISE MONITORING PLAN**

On May 31, 2011, the Public Service Board ("Board") issued an Order (the "Order") and Certificate of Public Good ("CPG") in this docket approving, subject to certain conditions, the construction and operation of the proposed wind electric generating facility. Among other things, the Order required the Petitioners to make a number of post-certification compliance filings. Condition 41 of the Order and CPG required Green Mountain Power Corporation ("GMP") to file with the Board a Noise Monitoring Plan (the "Plan") for comment by the parties and review and approval by the Board. Condition 41 required that the Plan be consistent with the noise monitoring plan approved by the Board in Docket 7156 (the "Sheffield Plan"),<sup>1</sup> that it extend from construction through the first two years of project operation, and that it address a number of specific items that were not addressed in the Sheffield Plan.<sup>2</sup>

On October 7, 2011, GMP filed a final revised version of the Plan that it contended complied with the Order and CPG. The revised Plan reflected a number of changes made by

1. Amended Petition of UPC Vermont Wind, Docket 7156, Order of 9/20/10 at 2-3.  
2. Docket 7628, Order of 5/31/11 at 165-66.

GMP as the result of input from other parties; however, disagreement remained among certain parties over a number of aspects of the Plan.<sup>3</sup>

On December 13, 2011, following the prefiling of written testimony by, and a period of discovery among, certain of the parties, the Board held a technical hearing on the revised proposed Plan.

On April 3, 2012, the Board issued an Order approving the revised Plan as filed by GMP on October 7, 2011, subject to a number of conditions.<sup>4</sup>

On May 3, 2012, GMP filed a newly-revised version of the Plan in response to the Board's April 3, 2012, Order. GMP states in its cover letter that it circulated the newly-revised Plan to the parties on April 24, 2012, asking that any comments on the Plan be provided to GMP by May 1, 2012. According to GMP, the Towns of Lowell and Albany (the "Towns") and Lowell Mountains Group, Inc. ("LMG") responded that they had no comments on the Plan, and no other parties replied. GMP also states that it, the Towns, LMG and the Department of Public Service have agreed to retain the firm of Cavanaugh Tocci Associates, Inc. to serve as the neutral third-party observer that is required by our April 3, 2012, Order.<sup>5</sup>

We have reviewed the Plan as filed May 3, 2012, and conclude that GMP has met the conditions of our April 3, 2012, Order by making the revisions to the Plan required by that Order. Accordingly, the Noise Monitoring Plan as filed May 3, 2012, is hereby approved.

**SO ORDERED.**

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3. See Docket 7628, Order of 4/3/12 at 2-10 for a more detailed discussion of the procedural history surrounding the Plan and the areas of disagreement among certain parties.

4. See Docket 7628, Order of 4/3/12 at 11-27.

5. Letter from Peter H. Zamore, Esq., to Susan M. Hudson, Clerk of the Board, dated May 3, 2012. We commend the parties for reaching agreement on the identity of the neutral third-party observer.

Dated at Montpelier, Vermont, this 16<sup>th</sup> day of May, 2012.

s/James Volz )

) PUBLIC SERVICE

\_\_\_\_\_ )

) BOARD

s/John D. Burke )

) OF VERMONT

A TRUE COPY

OFFICE OF THE CLERK

FILED: May 16, 2012

ATTEST: Susan Miller  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.*

**From:** Rob Pforzheimer  
**Sent:** Monday, March 25, 2013 10:49 PM

**Subject:** Wind turbines kill up to 39 million birds a year!

<http://www.cfact.org/2013/03/18/wind-turbines-kill-up-to-39-million-birds-a-year/>

**Wind turbines kill up to 39 million birds a year!**

Big Wind hides evidence of turbine bird kills – and gets rewarded. Here’s how they do it.  
You are here: [Home](#) > [All Posts](#) > **Wind turbines kill up to 39 million birds a year!**

March 18, 2013 by [Jim Wiegand](#)

In 1984 the California Energy Commission said “many institutional, engineering, environmental and economic issues must be resolved before the industry is secure and its growth can be assured.” Though it was not clearly stated, the primary environmental issue alluded to was the extreme hazard that wind turbines posed to raptors.

Since the early 1980s, the industry has known there is no way its propeller-style turbines could ever be safe for raptors. With exposed blade tips spinning in open space at speeds up to 200 mph, it was impossible. Wind developers also knew they would have a public relations nightmare if people ever learned how many eagles are actually being cut in half – or left with a smashed wing, to stumble around for days before dying.

To hide this awful truth, strict wind farm operating guidelines were established – including high security, gag orders in leases and other agreements, and the prevention of accurate, meaningful mortality studies.

For the industry this business plan has succeeded quite well in keeping a lid on the mortality problem. While the public has some understanding that birds are killed by wind turbines, it doesn’t have a clue about the real mortality numbers. And the industry gets rewarded with subsidies, and immunity from endangered species and other wildlife laws.

### **Early studies identified the extent of the problem**

To fully grasp the wind turbine mortality problem, one needs to examine the 2004 report from the **Altamont Pass Wind Resource Area** (APWRA). The study lasted five years (1998-2003), and researchers did not have full access to all the Altamont turbines.

This careful, honest effort analyzed turbine characteristics in relation to mortality and estimated mortality from body counts compiled in careful searches. Researchers then adjusted mortality numbers by examining statistical data based on searcher efficiency and other factors, such as carcass removal by predators and scavengers. The report even suggested that the mortality estimates probably erred on the low side, due to missed carcasses and other human errors.

This study stands in marked contrast to studies being conducted today, especially the **Wildlife Reporting Response System** that is currently the only analysis happening or permitted at most wind farms. The WRRS is the power companies’ own fatality reporting system, and allows paid personnel to collect and count carcasses. It explains why mortality numbers are always on the low side and why many high-profile species are disappearing near turbine installations.

Incredibly, the APWRA report actually admitted: “We found one raptor carcass buried under rocks and another stuffed in a ground squirrel burrow. One operator neglected to inform us when a golden eagle was removed as

part of the WRRS. Based on these experiences, it is possible that we missed other carcasses that were removed.” (Chap. 3, pg. 52) It’s easy to see how human “errors” keep bird mortality low.

The APWRA study also documented that raptor food sources, turbine sizes and turbine placement all directly affect raptor mortality. It was thus able to identify many of the most dangerous turbines or groups of turbines – those with a history of killing golden eagles, kestrels, burrowing owls and red-tailed hawks.

### **Studies worsen as turbines proliferate and increase in size**

The study also discussed how higher raptor mortality occurred when smaller towers were “upgraded” with larger turbines and proportionally longer blades. These wind turbines offered what raptors perceived as intermediate to very big windows of opportunity to fly through what looked like open spaces between towers, but were actually within the space occupied by much longer, rapidly moving rotor blades.

The result was significantly more fatalities of golden eagles, red-tailed hawks, American kestrels, burrowing owls, mallards, horned larks and western meadowlarks. Turbines with slower rotations per minute actually made it appear that there was more space and “greater windows of time.” This fooled birds, by giving them the illusion that they had open flight space between the rotating blades.

In fact, the illusion fools people, too. The newest turbines move their blades at 10-20 rotations per minute, which appears to be slow – but for their blade tips this translates into 100-200 mph!

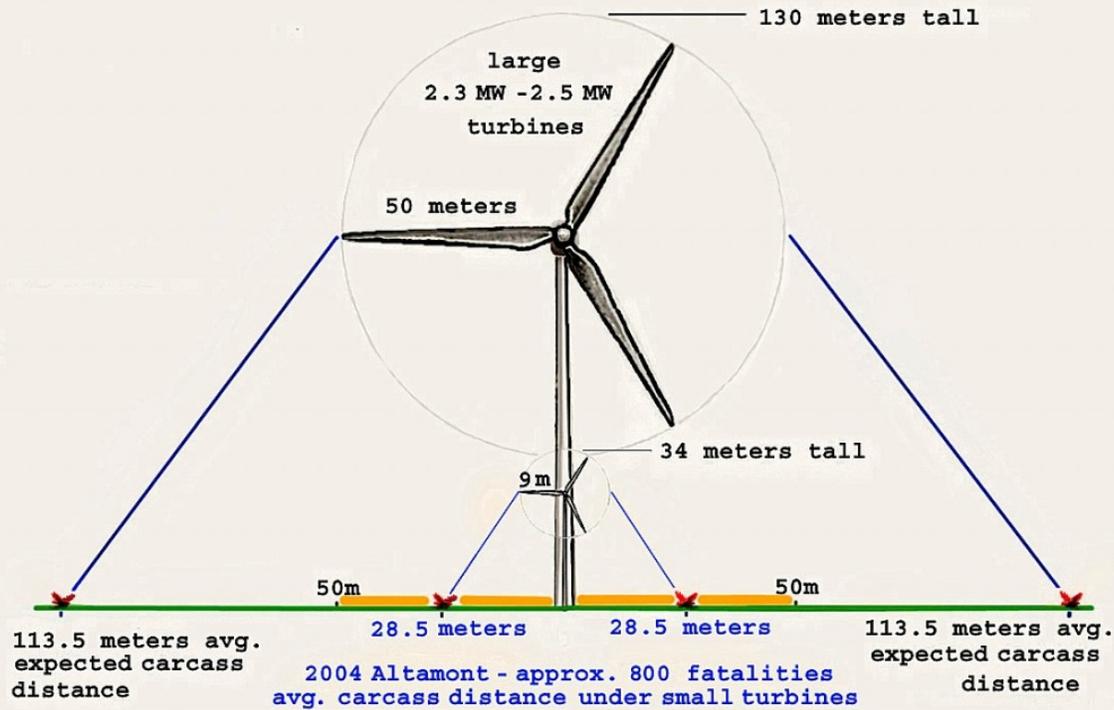
All this was very important, because the industry was moving away from smaller turbines and installing much larger turbines, with much longer blades. However, the industry not only ignored the APWRA findings and rapidly installed thousands of these much larger turbines across America, despite their far greater dangers for birds and raptors. It also kept the APWRA out of the public’s awareness, and focused attention on new study results that reflected far less accurate (and honest) searches and surveys.

### **How the wind industry hides raptor mortality**

The APWRA report also looked at the placement of carcasses in relation to turbine types. It documented that the distances carcasses were found from turbine towers increased significantly as turbine megawatt ratings and blade lengths increased. Based on sample of about 800 carcasses, the report revealed that birds were found an average of 94 feet (28.5) meters from 100-Kw turbines on towers 81 feet (24.6 meters) high. Obviously, taller turbines with longer blades and faster blade tip speeds will catapult stricken birds much further. Figure 1 shows how a turbine 2.5 times larger will result in an average carcass distance of 372 feet (113.5 meters) from the tower. The wind industry is acutely aware of this.

## HIDING WIND TURBINE MORTALITY

Wind industry studies deliberately use 50-60 meter mortality search areas on their large turbines so their studies will miss most of the fatalities



This is why search areas should be 200 meters

That is why it has restricted search areas to 165 feet (50 meters) around its bigger turbines. This ensures that far fewer bodies will be found – and turbine operators will not need to explain away as many carcasses.

Recent mortality studies like those conducted at the Wolfe Island wind project (2.3-MW turbines) and Criterion project in Maryland (2.5-MW turbines) should have used searches 655 feet (200 meters) from turbines, just to find the bulk (75%-85%) of the fatalities. Of course, they did not do so. Instead, they restricted their searches to 165 feet – ensuring that they missed most raptor carcasses, and could issue statements claiming that their turbines were having minimal or “acceptable” effects on bird populations.

APWRA mortality comparisons for the 1998-2003 and 2005-2010 study periods

Focal Species Mortality *	Total number carcasses located		Unadjusted mortality/MW/year		Adjusted mortality/MW/year	
	1998-2003	2005-2010	1998-2003	2005-2010	1998-2003	2005-2010
Golden eagle *	54	105	0.0380 - 0.1391	0.203	116.5	52.6
Red-tailed hawk	217	394	0.2953 - 0.2490	0.770	300.4	228.8
American kestrel	59	199	0.0614 - 0.1251	0.381	333.1	253.2
Burrowing owl	70	278	0.1674 - 0.1000	0.527	380	317.2
Other species						
Barn owl	50	160	0.662 - 0.0292	0.213	49.0	Not given
Horned owl	18	45	0.0245 - 0.040	0.058	10.1	Not given
Prairie falcon	0	6	0	0.008	0	Not given
Peregrine falcon	0	2	0	0.002	0	Not given
Western meadowlark	96	524	0.2078 - 0.1975	0.681	2557.4	Not given
Horned lark	23	59	0.0427 - 0.000	0.076	115.2	Not given
Rock dove	196	1125	0.4999 - 0.1132	1.466	2526.8	Not given
No. Bird species found	45	75				

\* Does not include 347 WRRS carcasses from 2005-2010 study period  
 \* Does not include 21 WRRS golden eagles fatalities from monitored turbines during 2005-2010 study period  
 \* Does not include any cripples found during 2005-2010 study period  
 \* Does not include any carcasses found outside 50 meter search areas

Other methods and biased formulas allow the industry to exclude or explain away carcasses. The latest Altamont Pass studies found far more bird carcasses, but Altamont operators still claim mortality declines by using new adjustment formulas and other exclusionary factors. (Figure 2) For example, industry analysts:

- Exclude certain carcasses. The 2005-2010 WRRS data show that 347 carcasses (primarily raptors) – plus 21 golden eagle carcasses – were excluded from mortality estimates, because industry personnel claimed they were found outside standard search procedures, said the “cause of death was unknown” (even when the birds’ heads had been sliced off), or removed carcasses ahead of a scheduled search.

- Exclude mortally wounded or crippled birds found during searches, even if they display turbine-related injuries. Even though many birds hit by turbine blades die within days, if they are still breathing when found, they are considered mobile – and thus not fatalities.

- Simply avoid searching near some of the most dangerous and lethal turbines. The industry justifies this exclusion by claiming that “the number of turbines monitored was reduced and spatially balanced for a randomized rolling panel design.” That this “reduction and balancing” excluded the most deadly portion of the Altamont facility was presented as coincidental or part of a proper scientific methodology.

**The cold reality is that honest, scientific, accurate mortality studies in the Altamont Pass area would result in death tolls that would shock Americans.** They would also raise serious questions about wind turbines throughout the United States, especially in major bird habitats like Oregon’s Shepherds Flat wind facility and the whooping cranes’ migratory corridor from Alberta, Canada, to Texas.

The techniques discussed here help ensure that “monitoring” studies match the facility operators’ desired conclusions, and mortality figures are kept at “acceptable” levels.

**The bird mortality disaster must no longer be hidden**

Not only has the wind industry never solved its environmental problem, it has been hiding at least 90% of this slaughter for decades. In fact, the universal problem of hiding bird (and bat) mortality goes from bad to intolerable beyond the Altamont Pass boundaries, because studies in other areas across North America are far less rigorous, or even nonexistent, and many new turbines are sited in prime bird and bat habitats. The real death toll, as reported by **Paul Driessen** and others, is thousands of raptors a year – and up to 39 million birds and bats of all species annually in the United States alone, year after year! This is intolerable, and unsustainable. It is leading to the inevitable extinction of many species, at least in many habitats, and perhaps in

the entire Lower 48 States.

Meanwhile, assorted “experts” continue to insist that the greatest threats to golden eagles are other factors like hikers getting too close to their nests, even when most abandoned nests in Southern California are nowhere near any hiking trails and wind turbines continue to slaughter eagles.

It is essential that people realize that no energy source comes anywhere close to killing as many raptors as wind energy does. No other energy companies are allowed to pick up bodies of rare and protected species from around their production sites on a day-to-day basis, year-in and year-out. No other energy producer has a several thousand mile mortality foot print (the highly endangered whooping cranes’ migratory corridor) like what wind energy has.

Once people understand all of this, they will rightfully demand that the wind industry obey the same environmental rules that all other industries must follow. This will require that wind turbines be sited only where the risk of bird deaths is minimal to zero; that turbines be replaced with new designs that birds recognize as obstacles and thus avoid; that fines be levied for every bird death, as is done with other industries; and that industrial wind facilities not be permitted where these requirements cannot be met.

America’s wildlife, and proper application of our environmental laws, require nothing less.

**About the Author:** [Jim Wiegand](#)



Jim Wiegand is an independent wildlife expert with decades of field observations and analytical work. He is vice president of the U.S. region of Save the Eagles International, an organization devoted to researching, protecting and preserving avian species threatened by human encroachment and development.

**From:** Annette Smith

**Sent:** Monday, March 25, 2013 5:57 PM

**Subject:** driving up the price of land

In trying to figure out where wind developers are looking for projects, one issue that I do not think is relevant is the idea of driving up the cost of land. As I detailed in a previous comment, the landowners of almost all of the wind project sites either built or proposed are out of state large landowners. And in every case, the landowner is leasing the land to the wind company and getting lease payments usually based on a lump sum and then an addition based on production. Wind companies are not out buying up land. A few examples:

Sheffield -- NH lumber co.

Lowell -- OK landowner

Northfield Ridge -- MA landowner

Ira project -- NH landowner

Glebe Mountain -- NJ landowner

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Annette Smith

Executive Director

Vermonters for a Clean Environment, Inc.



**From:** Annette Smith

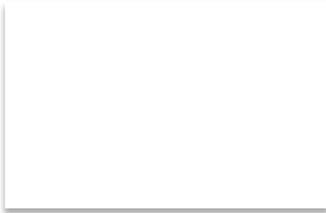
**Sent:** Monday, March 25, 2013 5:49 PM

**Subject:** mapping projects

When considering putting together a map that includes projects that have been dropped, keep in mind that it is normal for a second wind developer to come along and pursue a site that was dropped by a previous one. This is true with Glebe Mountain (has seen two developers) and Grandpa's Knob (has seen two developers).

In my experience, every site where a wind project has been proposed has left the people in the area living on edge, assuming that at any moment someone else could come along and pursue it. That may explain (at least one reason) why people continue fighting big wind even after the project in their community has apparently been dropped. People feel as though it is a limited resource and there are only x number of sites, and the developers will be back.

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Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



**From:** Gabrielle Stebbins | REV  
**Sent:** Monday, March 25, 2013 12:05 PM

**Subject:** Re: REV Comments regarding Energy Generation Siting Commission

This is very important -- I am sorry REV has not been at every meeting to show the level of import this has.

I failed to mention one other item.

With regards to the Wilderness Society Report - it mentions "cost" of renewable energy, including environmental costs. I failed to mention that there are other costs to society, too -- for example, increasing risk for Vermonters to be able to pay bills based on being overly reliant on traditional fuels which have a variable fuel cost, as opposed to renewables, which have a fixed fuel cost (with the exception being bioenergy).

If I should write this up additionally, please do let me know, otherwise I may save for next round of comments.

Very best to you both,

Gabrielle Stebbins  
Executive Director

Renewable Energy Vermont

March 19, 2013

Dear Energy Generation Siting Commission,

Renewable Energy Vermont (REV), respectfully provides the following comments regarding the most recent draft Recommendations from March 14<sup>th</sup>.

The March 14<sup>th</sup> Draft Recommendations document highlights the Commission Goals:

*“(First, do no harm!) “Provide recommendations for improving electric generation siting process with particular attention to (refer to Executive Order):*

- *Improving the role of public participation and representation in the process*
- *Improving process uniformity, transparency, and efficiency*
- *Adequate environmental and cultural protection*
- *Meeting State Energy goals, ensuring that the best, rather than easiest, sites are selected*
- *Avoiding unintended consequences and understanding financial resource constraints”*

With regards to these overall goals, REV provides the following thoughts:

**Bullet 1:** Any public participation *\*must\** be predicated on the public receiving significant education about how energy works, challenges in our current energy system, and our energy choices – as well as the degree of uncertainty in how our energy infrastructure will change in the coming years. REV provides this comment in light of the fact that, just in the last three months, several estimates of how to meet various Vermont clean energy goals have been proposed – yet these estimates have received neither a peer-reviewed scientific oversight process and have also shown considerable gaps with regards to energy planning. Nevertheless, these energy scenarios have been used by the public to make a

case about energy planning, such as “We propose this energy scenario, and therefore do not need a particular form of energy technology in our state”.<sup>1</sup>

To task the public with greater participation in assisting in “solving” our energy challenges means the public must understand the various challenges amongst different energy choices, as well as the total amount of energy required by Vermont, etc. Otherwise, the process of “bringing more cooks into the kitchen” will not result in a better product, but in more confusion and uncertainty as to who has real, factual information.

**Bullet 2:** REV supports processes that increase uniformity, transparency and consistency for multiple reasons including business planning, the ability for the public to see decision-making processes regarding projects, and the critical need to move towards a clean energy future as quickly as possible due to climate change.

**Bullet 3:** REV continues to support the majority of the results of the current Public Service Board process, as our perspective is that considerable mitigation, permitting and post-monitoring compliance is required for all large projects, thereby ensuring “adequate” if not more-than-adequate environmental protection.

REV also continues to review the impacts of renewable energy projects at the macro level scale; how do the impacts of a multi-megaWatt solar project compare to the energy generated from that of a coal plant? The answer is clear to REV which is of more concern – although this does not mean that REV is adverse to implementable measures that decrease environmental impact from renewable projects.

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<sup>1</sup> The organizations that have proposed energy scenarios are Energize Vermont and the Wilderness Society.

With regards to “cultural” protection – REV remains unclear as to how this is measured. Review of the definition of *culture* from the Oxford dictionary highlights two primary definitions for “culture” – one related to arts and societal values, the other related to biology<sup>2</sup>:

- (1) the arts and other manifestations of human intellectual achievement regarded collectively: *20th century popular culture*; a refined understanding or appreciation of this: *men of culture*; the customs, arts, social institutions, and achievements of a particular nation, people, or other social group: *Caribbean culture, people from many different cultures*; [with modifier] the attitudes and behavior characteristic of a particular social group: *the emerging drug culture*
- (2) the cultivation of bacteria, tissue cells, etc., in an artificial medium containing nutrients: *the cells proliferate readily in culture*; a preparation of cells obtained from a culture: *the bacterium was isolated in two blood cultures*; the cultivation of plants: *this variety of lettuce is popular for its ease of culture*

Both of these definitions reflect an on-going evolution, be it the (1) “manifestations of human intellectual achievement”, as presumably human intellectual achievement continues to evolve over time; or (2) the concept of biological culture – whereby cell growth continues “in culture”. REV raises this topic as a reminder that culture is neither static nor stagnant, and to highlight the challenge of this particular area of “protection”. An example is the frequent discussion about dam removal (returning a portion of a river to its historically changing meander and flow pattern) versus maintaining a dam (because it reflects human history during a particular century of growth).

Which is the appropriate path forward? How is the preservation of culture balanced with the ongoing need for culture to evolve to meet new challenges? If anything, author Jared Diamond, in *Collapse: How Societies Choose to Fail or Succeed* (2005) reveals the risk to human society (or “culture”) if we do not make changes to the way we live, if and when our daily life patterns threaten our long-term survival.

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<sup>2</sup> [http://oxforddictionaries.com/us/definition/american\\_english/culture](http://oxforddictionaries.com/us/definition/american_english/culture)

While this may appear to be tangential, it is not. It lies at the core of the questions surrounding how we site energy projects, and how to balance the pros and cons of these projects. It is REV's opinion, that the greatest challenge to life on this planet is climate change; hence we focus on the macro effects of siting and constructing clean, renewable energy projects.

**Bullet 4 and 5:** REV supports both of these endeavors, as exemplified by our repeated attempts through the Standard Offer program to gain informational access as to where the best locations for renewable projects are from utilities and VELCO. The challenge, again, will likely be that the "best" location for a project is not always the "best" location for all categories – this argues again for the Public Service Board to continue to be able to maintain balancing the multiple benefits and costs for projects, rather than outsourcing decisions to the RPCs or towns. An example of this can be seen with interconnection, where the "best" location for interconnection may not always be the "best" project with regards to providing energy closest to the source, or vice versa.

#### **Role of Regional Planning Commissions:**

REV supports having RPCs become more involved with energy issues. However, REV is significantly concerned that the RPCs do not have the energy expertise, nor likely the staff nor funding, to determine where and how projects can be sited appropriately. Will there be significant training and education for RPCs so that they can understand energy planning to the level of the Public Service Board and Public Service Department? Similarly, what if an expert is hired to provide the RPC with a slate of recommendations, such as increasing the number of wind farms to reach 120 MW in capacity, but then the RPC does not like the final suggestions? Does that mean the RPC just ignores the recommendations?

Unfortunately, simply providing RPCs with an overview from the Public Service Department as to how much energy, of which technology, and from where (in or out of state), via maps and numerical analyses does not ensure a better outcome, for they may not like what is suggested, or they may not understand the intricacies of ISO-NE integration, the Full System Impact Studies required by utilities, the role of capacity factor and related storage questions and



technological advancements, how peak load has and will likely continue to shift, etc.

### **Tiered Approach:**

REV strongly supports a tiered approach, but would suggest a different structure. Although it may not be as simplified, REV would suggest maintaining four tiers. Tier 1 up to 500 kW, Tier 2 from 500 kW to 5 MW (aligned with the 5 MW trigger that ISO-NE begins to review projects by – this would be an Application Form PLUS process), Tier 3 from 5 – 25 MW, and Tier 4 from 25 MW and above. There is little difference, for example, between a 10 MW wind project and a 20 MW wind project with regards to impact, etc., hence REV suggests project size triggers that are aligned more with potential project impacts. REV would suggest this tiered structure, and other changes to the permitting process, be reassessed in the future to ensure that tiers are still set at appropriate levels, etc.

### **Timing of notification to towns/RPCs:**

REV supports clearer time requirements and trigger dates. However, REV remains concerned that the request for increased notification for a project may be utilized by project objectors to develop further objection, rather than to work together to address concerns about a particular project. Can this be addressed in advance by the Siting Commission, given the suggestion for longer notification periods?

### **Filing Fee/Franchise Fee/Bill Back:**

REV strongly suggests there be a known amount for entering into a project application. To the extent that there are different fees that are reviewed by different entities, will there be one entity/individual that oversees the full financial ask (all funding requirements rolled up into one final amount) and will this amount have a cap? Will this cap be known to the developer, with estimates from various fee allocations? If not, this places considerable risk on behalf of developers, increasing the difficulty in developing project “pro formas”, thereby likely diminishing interest in assisting Vermont in reaching our clean energy goals.

**Cumulative Impact:**

REV remains concerned as to how this is developed, identified and quantified. Jinny Keitler, of Audubon Society, spoke before the Energy Generation Siting Commission, and raised this particular issue very clearly:

*“There really aren't any cookie  
·8· . . . cutter solutions out there that work in  
·9· . . . all situations and to get a good  
10· . . . solution for Vermont.” (p. 302, line 7 -11).*

Meanwhile, she raised concern with working on a project-by-project basis:

*“there definitely  
10· . . . is a short coming in trying to deal with  
11· . . . a project by project permitting process.” p. 301 (9-11).*

And it is suggested that “go, no-go” locations be identified. However, then there is testimony that states that some of the “no-go” locations were identified as actually being acceptable to build.

*“The no go planning, um, is a  
·6· . . . very important rule for you all to be  
·7· . . . talking on.  
·8· . . . . . . . . . . Um, let's see, on the other  
·9· . . . hand, I did want to say that some of the  
10· . . . no go zones that might be defined, based*

11. . . . on information we had a few years ago,

12. . . . have proven not to be an entire risk as

13. . . . we had thought they were..

The testimony sums up the important role of collecting and reviewing information, while recognizing that the field of “cumulative impact” is in its early stages:

“So there is

14. . . . still a need to develop new information.

15. . . . We are still learning and there can be

16. . . . some value in going into areas that we

17. . . . think are a higher risk but, um, mostly

18. . . . what I'm trying to articulate here is

19. . . . that there's still an emerging body of

20. . . . science that, um, needs to be apprized

21. . . . as it comes out, because we're always

22. . . . learning more all of the time. (p. 306, 5-22).

· So we're beginning to see

22. . . . patterns in the data that are in some

23. . . . cases consistent with what we expected

24. . . . but in other cases, different from what

25. . . . was expected.” (p. 309) 21- 25.

Given the testimony provided above, REV would suggest there be continued monitoring, as required by the PSB, of larger scale projects, and to have there be an individual (perhaps the Case Manager?) review compliance plans to determine that projects and aggregates of projects are not causing undue adverse impact. Similar to the “tiered” structure proposal, suggestions or recommendations regarding “cumulative impact” should be expected to evolve as science provides more data, either showing impact concerns, or showing that the benefits of these projects cause limited impact and therefore should be supported strongly.

The question of undue adverse impact will still require a balancing of the costs and benefits of specific and aggregate projects. For example, to what degree are short-term or exceedingly localized impacts balanced to the overall benefit of generating clean energy? And are these impacts also compared to our current energy portfolio, e.g. the impacts of traditional fuels?

On the same day as the testimony provided above, William Koster, from Agency of Natural Resources, also provided comments:

*“I think of*

*22. . . . Vermont beyond habitat and natural*

*23. . . . resources to esthetic, obviously and*

*24. . . . there's recreational resources which are*

*25. . . . often very linear and site specific that...*

*.1. . . . some of these projects have an impact on*

*.2. . . . and there may be some cultural and*

*.3. . . . social that we may want to look at, both*

*.4. . . . planning now and modeling, but also*

*.5. . . . trying to do a better job of monitoring*

*.6. . . . impacts and adding them together and*

·7· · · · *making sure the Board has that*

·8· · · · *information when making them. (p. 310 – 311, lines 21 – line 8).*

Certainly, the Board should have as much scientifically-based, peer-reviewed information as possible to conduct analyses regarding project impacts. However, for REV, there is a significant degree of uncertainty in the statement provided directly above. As described in pages 2 – 4 of this document, societal and cultural values are continually shifting, and what is considered aesthetically pleasing is equally subjective. What is not subjective, are the volumes of data collected regarding climate change, primarily resulting from our use (and abuse) of energy.

Continuing along the theme of cumulative impact, some of the land owners on which large scale utility wind projects have been developed or may be developed, are looking at wind projects as a means to ensure that they can continue to keep their larger tracts of land intact. What does it mean when a cumulative impact study (which is still in the early stages of development – and for which scientific findings have come back years later and found “no go” areas can actually be “go” – as based on Ms. Keitler’s testimony above), tells a private property land owner they cannot lease land to a large wind project, and ultimately the landowner sells their land because they cannot maintain the larger tract without additional financial income? Will there be a cumulative impact study of the condominiums that are built on the tracts of land that are sold? What will be the aesthetics of what IS built on the property?

There are significant areas of unknown implications (referring to Bullet 5 above) with a cumulative impact study, with not allowing private property land owners to determine how to maintain several hundreds of acres of land, with choosing now what holds societal and cultural value, when ultimately, there is a ticking clock counting down to when climate changes drastically – ultimately impacting all of our ecosystems, at the macro, micro and “cumulative” scale.

Given that at this point, there are four wind farms in Vermont, 2 biomass plants, and less than fifty multi-MW solar projects (that REV is aware of), perhaps the first step to this process is to ensure that some entity is reviewing the data and

compliance results of energy projects and other development projects (like ski resorts, shopping centers, etc.), from a broader, multi-project perspective.

### **Wilderness Society: Cumulative Landscape Impacts of Renewable Energy Alternatives for Northern New England**

With regards to the January 2013 Wilderness Society Report, REV has multiple concerns.

- The report highlights the degree from which solar on rooftops can be sited with minimal impact. REV represents all renewable energy technologies, and certainly supports the advancement of solar. However it appears that the Wilderness study is unaware of many of the issues with solar on roofs, for example new code that states no solar panels can be within three feet of the roof line or drip line. Similarly, did the Wilderness Society assess the slope, age, direction, and shading of roofs in Northern Vermont, New Hampshire and Maine? If not, this leaves a gaping hole for our energy future.
- Is there a reason why Wilderness Society only looks at geothermal? A new advancing technology is hybrid air-to-air heat pumps (not considered renewable unless powered by renewables) – but this could potentially shift peak (as assumed by the Wilderness report) more towards winter. Does the report place any findings for this?
- Is there a reason the report only highlights transmission and not distribution upgrades? The report highlights the need to focus on siting energy closer to the demand (which REV supports), but fails to recognize that that too requires significant distribution upgrades, with potential challenges for implementation. Similarly, there is inconsistency with regards to transmission costs resulting from different technologies (p. 32).
- The report states: “The full costs of new energy generation, including environmental costs, should be considered when balancing the benefits and costs of new supply”. Certainly, REV agrees. Will this cost analysis be comprehensive, looking at financial and economic costs and subsidies

across all energy sectors, and including other development types? If it's not the latter, then the conversation is not level.

Where REV agrees strongly with the report is that we *should* be using impervious surfaces, roof tops, brownfields, etc., in expanding our renewable energy projects, and that we do need to focus on conservation, efficiency and demand-side management. But focusing on these alone will not transfer Vermont away from traditional fuels for heating, transportation and power. We need to maintain a diversified energy portfolio, particularly as we are just beginning the work of transforming our energy infrastructure.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gabrielle Stebbins', with a stylized flourish at the end.

Gabrielle Stebbins

Executive Director

**From:** James Sawhill

**Sent:** Wednesday, March 27, 2013 5:28 AM

**Subject:** wind turbines

I want to hear facts from wind energy proponents. I want you to show that it is clean and renewable. It's not. I want you to show that it is affordable and cost effective. It's not. I want you to show that it is safe for human health. It's not. I want you to show that it is constructive for Vermont. It's not.

IWTs are driven by fossil fuel sources for significant portions of their lives and whenever the wind is not just right. This energy use is not even metered. On paper, a perfect turbine in perfect conditions over a 20 year lifespan could generate 65% of its original 100% carbon based investment. It's dirty, not renewable, and not even new energy. It's already been spent and sorry, our bank account just lost 35%.

At best, a turbine can operate at 30% of its rated capacity. A 2 MW turbine is optimally a 0.6 MW turbine. Great – 30% capacity with a maximum 65% return. In this second decade of industrial wind, the technology is still massively subsidized because it is very expensive and the industry can't make it pay for itself. Any other technology would have been trashed long ago.

IWTs broadcast pressure pulses that decades of studies at Wright Patterson Air Force Base have demonstrated damage health by vibrating human body organs and their homes. These waves have a wavelength over 3.5 miles long. The industry says their noise measures are within standards. We're not playing by the same rules.

I heard someone say on VPR that "wind is hope". No, wind is big money, wasted energy, political propaganda, and environmental devastation. I can't wait 20 years for the politicians, lobbyists, and industrialists to return our ridgelines. Oh, they're not? Thankfully it is in our "Public Good".

**From:** Ann Ingerson

**Sent:** Tuesday, March 26, 2013 10:16 AM

**Subject:** comments on draft recommendations v2

Please accept the attached comments on the Vermont Energy Generation Siting Policy Commission Draft Recommendations, v2, dated 3-14-13. We are sending as a pdf because the length exceeds the character limit for the open comment form. Thank you,

**Ann Ingerson**

Economist

**The Wilderness Society**

*We protect wilderness and inspire Americans to care for our wild places*



## Comments on Energy Generation Siting Policy Commission Draft Recommendations v2, 3-14-13

1. Draft recommendation 1 states: “DPS shall develop a Road Map for achieving State clean energy goals related to renewables as a share of **electricity** generation goals.”

Ideally the DPS Road Map will include **all** energy sources, not just electricity in isolation. Goals for transport and heating affect electricity needs and some energy resources (such as biomass and natural gas) may be used across all energy sectors.

1.a. Draft recommendation 1.a states: “Incorporate scenario development to determine potential technology mix and projected needs, as well as broad parameters for cumulative impact. Show positive benefits (reduced GHGs, jobs, etc.) along with costs (including out of state environmental costs), incorporate EROEI where possible.”

It would be helpful to suggest more detailed impact parameters to include in scenarios. Scenarios should ideally include implications for all relevant Section 248 criteria, to the extent that information is available. Not all scenarios will have benefits or costs in every category. Listing these ahead of time will facilitate choices among scenarios, or combinations of scenarios, that increase benefits and decrease costs (e.g. by specifying appropriate locations or choosing less damaging technologies). Suggested benefits and costs include:

- Benefits:
  - Greenhouse gas reductions. The Public Service Department should define, with public input, a consistent procedure for assessing greenhouse gas reductions (including consistent treatment of direct and indirect emissions), to avoid the “dueling numbers” phenomenon;
  - Reductions in water use, air and water pollution, and landscape disruption due to reduced use of fossil/nuclear sources (both in-state and out-of-state, likely to be similar for all scenarios);
  - Manufacturing/construction/installation jobs and operations/maintenance jobs including directly-related ongoing off-site jobs (e.g. logging contractors and truckers for biomass scenarios);
  - Long-term cost savings and related resource savings for efficiency and energy conservation measures (see Efficiency Vermont annual reports);
  - Projected energy prices for current supply mix vs. renewable alternatives - may indicate long-term cost savings even when initial costs are higher.
- Costs:
  - Direct energy costs (see benefits – change in projected energy costs could be either a cost or a benefit over time);
  - Transmission
    - costs of upgrades and new lines included in scenario (to the extent that these are shared grid-wide rather than reflected in energy costs – avoid double-counting);
    - line losses (if different from current average);

- assumptions about electricity delivered should account for congestion-related curtailment if upgrades included in the scenario are not sufficient to fully address transmission limits;
  - Increase in balancing reserves if needed for projected scenario build-out;
  - Environmental impacts (indicate likely cumulative impacts when combined with effects of other types of development and climate change, list in-state and out-of-state):
    - Direct impacts on rare or uncommon species or natural communities, and on species of greatest conservation need identified in state wildlife action plan (e.g. collisions, destruction of habitat or natural communities)
    - Indirect impacts on species and natural communities described above (e.g. behavioral changes and energy losses resulting from noise or traffic, improved predator access, introduction of invasives);
    - Fragmentation of core habitat or restriction of key linkages (use VT Biofinder priority habitat blocks);
    - Water quality and quantity (e.g. effects on headwater streams and flood control, consumptive water use, stream flow effects);
    - Changes in terrestrial carbon stocks due to land clearing, intensive timber removals or changes in agricultural practices;
    - Impacts on a defined set of scenic resources (see Maine example);
    - Impacts on quantity and quality of recreation opportunities (direct interference with trails or water-based recreation - views from trails, campgrounds, scenic vistas likely included in scenic impacts);
    - Public health effects;
    - Property value effects;
    - Conversion of prime farmland or restriction of agricultural activity under and around energy structures.
- At least one scenario should incorporate all technically feasible demand reduction measures (not limited to cost-effective measures, as many renewable supply scenarios will also cost more than current energy supplies).
- In order to describe or measure these impacts, scenarios will need to specify most likely locations. (See below for suggested joint DPS/RPC process.)
- Ideally DPS would develop a scenario assessment tool that would allow users to assess impacts based on explicit spatial development patterns, modify locations, and rerun to minimize overall negative impacts. See California's RPS Calculator Tool at <http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/2012+LTPP+Tools+and+Spreadsheets.htm> for a possible model that could be modified to provide more detail about each scenario.

*2. Draft recommendation 2 states: "RPCs shall undertake geographical planning to identify high potential/low potential electric generation zones."*

- The order and wording of recommendations 1 and 2 suggest that the PSD will develop the road map and that RPCs will be responsible for carrying it out. Both will need to work together. PSD has the technical capability to develop realistic scenarios, ideally using a flexible decision-support tool that allows users to vary scenarios and understand resulting impacts. RPCs should be intimately involved in using the scenarios/tool to define a desired energy future for their regions and the state as a whole. There are many value judgments involved with choosing an energy path and Vermont citizens need to be involved in choosing among competing values, ideally through a process that

educates and informs stakeholders and the general public about priorities, technical limitations, and trade-offs.

- Third bullet under 2.b. - We would like to see a separate bullet for defining sensitive areas where development should not occur. Currently this requirement is buried in an “as well as” phrase as if it is an afterthought. Renewable energy build-out has the potential to dramatically transform Vermont’s landscape, and new development needs to be accompanied by meaningful protection if the state’s natural communities are to adapt to coming climate stresses. The public needs to be involved in defining these areas, since “sensitivity” encompasses public values as well as scientific data.
- Third bullet under 2.b. - We strongly support the idea of highlighting opportunities at brownfields, public buildings, etc. You might add parking lots and roofs of large commercial and industrial buildings.
- Fourth bullet under 2.b. - If DPS and RPCs work together to build the roadmap, as opposed to a sequential DPS-RPC process, cumulative impact scenarios will not need to be built into regional plans as a separate process. As we envision the process, regional plans would reflect the decisions made *with* DPS about appropriate types, amounts, and locations of development – taking cumulative impacts into account. The scenario tool could be used to summarize cumulative impacts of the final roadmap – which will be made up of the selected energy mix together with appropriate general spatial locations for each technology identified by each RPC. Once completed, and as revised over time, RPC energy plans should be posted on VT Biofinder for easy access for developers and the general public.
- 2.d. - It should not be a foregone conclusion that communities cannot say no to a particular technology. There will be some places, perhaps entire regions, where energy resources are limited and/or impacts are simply too high. The process of building the roadmap should encourage creative community engagement. The suggestion later in this draft that communities might avoid some types of development by meeting stringent efficiency goals is an interesting one. It may also be possible for communities to select more expensive, but less environmentally or aesthetically harmful, supply options while voluntarily paying higher energy costs (individual net-metered project owners and green energy consumers do this today).

*5.d. Draft recommendation 5.d states: “Require concurrent timing of ANR Permit filing and CPG: Applicants would be required to have filed all the necessary ANR permits as part of the CPG application that is ‘deemed complete’. Use rebuttable presumption: if applicant obtains permit from ANR prior to completing the CPG process, the PSB will accept.”*

Not all Section 248 or Act 250 criteria require permits from ANR. Even regarding resources subject to formal permits, information may emerge during PSB review that was not available previously to ANR. Hence the PSB may properly impose conditions that are more stringent than those specified in ANR permits. Likewise, mitigation proposed as a CPG permit condition may supplement or efficiently combine mitigation proposed in separate ANR permits. Because of the likelihood of new information emerging and the need to adapt projects to minimize the full suite of impacts, a concurrent process would be preferable to requiring that an applicant obtain all ANR permits **prior to** submitting an

application for a CPG. Concurrent permitting would also avoid petitioners sinking substantial funds into a proposed project to obtain their ANR permits, only to be denied a CPG on the basis of other criteria. If the current recommendation stands, then it would be critical to make the ANR permit process much more transparent and open to public input. Currently ANR permitting occurs in something of a black box, which promotes public suspicion that political pressure has been applied to approve projects.

*Other Points Not Directly Related to Charges – Bullet 2 states “Board membership or separate siting board (No change to PSB composition, no separate siting board)”.*

*Further down the page, Process Improvements questions include:*

*2. Should a staff person with siting experience/knowledge be added to PSB? (not discussed)*

*3. Should there be a separate siting commission for larger projects? (Tier 3 only or also Tier 2) (no)*

The Commission is apparently leaning toward no change in PSB membership and no specialized siting commission, but the question remains open whether PSB staff with such expertise would be helpful. For most other states, the entities that make siting decisions include parties with considerable natural resource expertise. It is critical to have someone with such expertise at the table because value judgments must be made that trade off environmental versus financial costs and benefits. Whether that expertise is provided by PSB members or by staff without voting privileges, that party should participate in all PSB deliberations. We believe the public would have more faith in the process if a voting member has recognized natural resource credentials. The same may be said for proposals to add local representation.

*Update Environmental Protection Standards/Cumulative Impact (CI)*

*3. Should CI be applied only to energy when it is not currently applied to other infrastructure (eg. highways)? (not discussed)*

We believe the assumption behind this question is unfounded. It may be true that secondary and cumulative impacts receive little attention in environmental review for highway projects. However, this type of analysis is clearly required by NEPA for projects with federal involvement. In 1992 guidance ([http://www.environment.fhwa.dot.gov/projdev/tdm2\\_c\\_imp.asp](http://www.environment.fhwa.dot.gov/projdev/tdm2_c_imp.asp)), the Federal Highway Administration discusses the need for improved cumulative impacts assessments. FHWA statements from this guidance include:

“We cannot assume necessarily that impacts which are difficult to recognize and evaluate have no bearing on our decisions. Since we are making decisions that shape the future, we must consider the ramifications of those determinations beyond their immediate effects on the existing environment.”

“The FHWA and the SHAs must produce systematic analyses of environmental, social and economic impacts of sponsored projects that include coverage of secondary and cumulative effects. Otherwise, the analyses most likely will be incomplete under the FHWA commitment to comprehensive environmental and public interest decisionmaking.”

*Update Environmental Protection Standards/Cumulative Impact (CI)*

*6. Are there other areas that cumulative impact should cover? (e.g., wildlife impact, aesthetics, or health issues) (yes, but no final conclusion)*

It is not clear what the “other” in this question refers to, but we suggest that cumulative impacts should be considered under all Section 248 criteria, including the examples listed here.

The state is embarking on an unprecedented economic transformation, and each piecemeal decision needs to lead toward the desired future goal without creating unintended negative consequences when all individual actions are combined. A clear energy roadmap based on information from comprehensive scenarios should help minimize negative cumulative impacts over time. (Please see our suggestions under scenario definition in 1.a.) Having a detailed energy roadmap in place would reduce the burden of analyzing cumulative impacts separately for each project. Since the roadmap will be based on the state of knowledge at one point in time, however, permitting will need to consider more recent information. Projects should demonstrate that no recent developments unanticipated by the roadmap, or resource information from more detailed site-specific surveys, indicate that a critical cumulative impact threshold will be crossed due to the proposed project.

Thank you again for the opportunity to comment, and for the Commission’s extraordinary efforts to maintain an open and transparent process.

**From:** Ann Ingerson  
**Sent:** Wednesday, March 27, 2013 1:39 PM

**Subject:** RE: comments on draft recommendations v2

Hello Anne,

I have continued thinking about cumulative impacts, scenario analysis and how Vermont can take our Comprehensive Energy Plan to the next level of detail, while considering cumulative impacts as part of that process. I found a helpful OECD Development Assistance Committee reference at <http://www.oecd.org/environment/environment-development/37353858.pdf>. Though written in the international development context, it is very applicable to Vermont.

This reference introduces “strategic environmental assessment” (SEA) as an environmental impact assessment taken up a level in the policy hierarchy to consider plan-wide or program-wide impacts. (I guess we might call it a programmatic EIS in this country at the federal level.) An SEA ideally occurs in advance of project proposals/evaluations so that projects are guided by the overall plan and approvals can be more streamlined. The authors classify cumulative impacts assessment as a subset of SEA, as it is almost impossible to assess cumulative impacts at the project level. And they explain how the SEA process helps identify mitigation needs and opportunities that also help guide project approvals. They provide examples of tools, including scenario analysis and various ways to engage stakeholders. And also cite examples of policies that went astray because high-level assessments were not conducted first.

I know the Commission members are very busy and under a tight deadline, but Chapters 2 and 4 of this reference might help members conceptualize next steps to get from Vermont’s Comprehensive Energy Plan to what they are calling a “road map”.

**Ann Ingerson**  
Economist  
**The Wilderness Society**

*We protect wilderness and inspire Americans to care for our wild places*

**From:** Karen Horn [redacted]  
**Sent:** Thursday, March 28, 2013 5:17 PM

**Subject:** Letter to Siting Commission

Hello Anne,

It was a fascinating discussion this morning at the Siting Commission. As I mentioned to Scott and to Jan, we think the Commission is moving in the wrong direction with respect to municipal plans. Attached please find a letter to the Commission that elaborates on that. Thank you for providing it to the members and for posting.

*Karen B. Horn*  
Director, Public Policy & Advocacy, VLCT

[redacted]



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Montpelier, VT 05602

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Email... info@vlct.org  
Web ..... www.vlct.org

March 28, 2013

Jan Eastman, Chair  
Energy Siting Policy Commission  
Department of Public Service  
112 State Street  
Montpelier VT 05620-2601

Dear Jan:

I found your discussion this morning at the Energy Siting Policy Commission to be most interesting and more than a little disappointing.

Under current law, the Public Service Board (PSB) needs only to give “due consideration” to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. (30 V.S.A. § 248 (b) (1). As well, the PSB needs to find that an in-state facility will not have an undue adverse effect on esthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and the public health and safety, having given “due consideration” to criteria 1 through 9 of Act 250 and greenhouse gas impacts.

Once municipal officials, representing their community’s interests, have experienced the PSB process, we hear from them. Our members find the standard of “due consideration” – or at least the application of this standard – to be wholly inadequate. This is because: (1) the PSB is now considering a far more diverse variety of projects – small and large, with significant land use impacts – than it has ever done before; (2) the impacts on host municipalities are considerably more apparent than they may have been before; (3) the PSB does not necessarily address the issues either municipalities or the public raise; and (4) because “due consideration,” we often hear, means very little. The controversy around the process has not abated at all this year. The extended and heated discussion on the Senate floor on Tuesday clearly demonstrated that reality. We believe the conversation has only begun and that it is long overdue.

In January, the VLCT Board voted to urge the legislature to:

1. require the PSB to give “substantial consideration” to municipalities by at least holding hearings in the municipalities potentially affected by the projects at issue;
2. include all local decisions concerning the project within the PSB docket;
3. require the PSB to formulate areas of inquiry based on concerns raised in the local hearing process; and

*Sponsor of:*

VLCT Health Trust, Inc.

VLCT Municipal Assistance  
Center

VLCT Property and Casualty  
Intermunicipal Fund, Inc.

VLCT Unemployment  
Insurance Trust, Inc.

4. require any decision on the project to address local concerns raised in the local decisions.

They reserved the right to re-visit that position as the need arose.

At its March meeting, the VLCT Board voted to support the requirements in S.30 for the PSB to find that an electric generation project of more than 500 kilowatts that is not designed to remediate a constraint in the electric transmission or distribution system complies with the first nine Act 250 criteria, and that it conforms with any duly adopted local or regional plan. S.30 would have also incorporated the case law from Act 250 decisions surrounding those findings. An adopted plan may be entirely consistent with a proposed project – or it may not. The fact is that a municipality has taken the time and not inconsiderable effort to address the issues in a comprehensive and – yes – local manner. Those efforts and determinations need to be respected in the PSB process. We also commend to you the testimony of attorney Dick Saudek on this issue.

Your second “Options Paper” and your discussion this morning outlined a host of issues and possible strategies to address them. I would like to focus on a few of them.

***Increase emphasis on planning at state, regional, and town levels, allowing regional plans to carry greater weight in the siting process.***

Regional commissions are not towns and cities. In providing more weight to regional plans in the siting process, as is suggested by the language and discussion, you have not automatically incorporated town or city plans. We believe it is imperative to give more weight to municipal plans as well. Where the regional and municipal plans agree, as is frequently the case, the job of the PSB would be made easier. Where the regional and local plans do not agree, the PSB would have a decision to make and that would take some time. And where municipal plans do not address the issue, the regional plan would be the only plan considered. These scenarios have been addressed before in other forums, notably Act 250, and could be accomplished here. As well, the incentive to reach some kind of accord before entering the PSB process would be strong. We oppose the concept of regional plans being dispositive, or given significant weight, to the exclusion of town plans.

If DPS authorizes the Public Service Department to approve energy elements of regional plans, to plan for future renewable energy generation at the state level, and to ensure that the regional plan conforms to the state plan, you will essentially turn the concept of locally based planning, embodied in Act 200, on its head. We urge you to write that authority very narrowly and make clear that a municipal and regional plan might have legitimate reasons for deviating from the state plan. There has been much discussion of the “public good” around the siting of energy generation facilities. Clearly the public good of the state and the planet is not the same as the public good of the municipality in which a facility is sited or of the neighboring municipalities. At the very least, one is general and one is particular. Those differences need to be recognized and addressed in the certificate of public good (CPG) process.

Municipalities are now writing land use plans to incorporate standards for protection from large and sometimes intrusive projects that impose significant costs, both on the host municipality and

its neighbors. They are also incorporating language to support the kinds of projects they would like to encourage within their borders. They are doing so largely with volunteer labor and few resources to write language that meets the PSB standards, to present that language to the PSB, or to press their point at the PSB.

Municipalities and not only regions need to be properly resourced to hire the help needed to conduct each of these tasks. However this planning is not solely the responsibility of the PSB, but rather an unfulfilled obligation of the legislature and executive office. In the fiscal year 2014 budget, allocations from the property transfer tax to the state's 11 regional commissions total \$2,758,884 and to the state's 246 cities and towns total \$449,570 (via a municipal planning grant program).

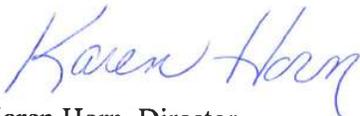
***Implement a simplified tiered approach to siting and modifications to increase the opportunity for public participation.***

We endorse the effort to encourage more community and distributed projects. A tiered process that allows for adequate notice to the public and potential host municipalities, public participation and response from the PSB, and even a preference for community sized and based projects would provide that encouragement.

The Options Paper does not in any way mention creating a PSB obligation to respond to issues raised by municipalities or regions in defending their plans or by the public. We refer you back to the January policy adopted by the VLCT Board, noted above. We urge you to include in any recommendations, ***a PSB obligation to address the issues raised and to respond to them in the CPG process.***

Thank you for the opportunity to comment and for your commitment to improving the process for siting electric generation facilities.

Sincerely,



Karen Horn, Director  
Public Policy and Advocacy

**From:** Rob Pforzheimer  
**Sent:** Friday, March 29, 2013 11:34 AM

**Subject:** FW: US support for wind projects could be wasting federal funds: GAO

Date: Fri, 29 Mar 2013 08:26:03 -0700

Subject: US support for wind projects could be wasting federal funds: GAO

To:

US support for wind projects could be wasting federal funds: GAO

Washington (Platts)--28Mar2013/606 pm EDT/2206 GMT

The US government has not justified its financial support of wind energy and that failure could lead to unnecessary federal spending to boost the wind industry, the Government Accountability Office said Thursday.

"Federal support in excess of what is needed to induce projects to be built could instead be used to induce other projects to be built or simply withheld, thereby reducing federal expenditures," GAO said in a report. "In the current fiscally constrained environment, effective allocation of resources is especially important." GAO said that despite the fact that the departments of Energy and Agriculture acknowledged they should assess a project's need for financing when deciding whether to award funding, neither agency documented that was done.

The Treasury Department, on the other hand, does not consider need, only eligibility, when awarding tax credits for wind projects. While GAO identified 82 different federal initiatives across nine different agencies to support wind power, Treasury tax credits accounted for 93% of the \$2.9 billion in federal support for wind power in 2011, the year GAO examined.

Treasury provided a cash-in-lieu of tax credits program under the 2009 American Recovery and Reinvestment Act, and offers a production tax credit for wind power projects that commence construction before the end of 2013. In a response to GAO included in the report, DOE said it would continue to bar its loan guarantee recipients from receiving other federal funds, and formally document its assessment of the applicant's financial need.

DOE has about \$3.5 billion in loan guarantee authority remaining that could go to wind-related projects. But the agency has not issued a loan guarantee since controversy erupted over failed solar-panel manufacturer Solyndra in 2011. The company received a \$550 million loan guarantee, but shut down operations that year after filing for bankruptcy.

As a policy, DOE does not discuss current loan-guarantee applications, but has said it is considering a loan guarantee for the \$2.6 billion Cape Wind offshore wind project in Massachusetts. DOE has not said how much it is considering providing the project. Under the Recovery Act, DOE awarded about \$1.5 billion in loan guarantees to wind-related projects. DOE also provides other wind-power related grants, including research and development funding.

GAO said that of the nine agencies and 82 initiatives that provide support for wind, only half were formally coordinated, and among the others there was fragmentation, overlap and some duplicative financial support.

--Derek Sands, [derek\\_sands@platts.com](mailto:derek_sands@platts.com) --Edited by Jeff Barber, [jeff\\_barber@platts.com](mailto:jeff_barber@platts.com)

<http://www.platts.com/RSSFeedDetailedNews/RSSFeed/ElectricPower/21886656>



**Anonymous comment from a neighbor of the Georgia Mountain Wind Project:**

“There are at least four Georgia Mountain residents who are experiencing noise from the turbines both outside and inside their homes. We are all dreading the day that it's warm enough to open our windows for obvious reasons.”

## **Siting Commission comment**

Twenty years ago when we designed and built our house, before "green energy" was a fad; we situated our house on our lot to take advantage of the southwesterly exposure to the sun. We invested heavily in oversized windows on the south and west side in order to let that sun in to warm our home. We strategically left deciduous trees on those sides in order to shade our house in the summer. Over the years we have had hundreds of cozy winter days with the sun streaming in and warming our home without a lick of oil being burned in our furnace. In the summer the shade took care of cooling.

Today I'm spending almost \$1000 on Bali insulating shades to cover those same windows; to block the sun flickering into our home, through those trees, caused by the rotation of turbine blades. We are hoping that the shades will help to insulate us from the noise of the turbines as well. Our windows will be thoroughly covered, thus no more solar heat.

All because of a "green energy" project being built practically in our faces, on the southwesterly side of our home.

Ironic isn't it?

Melodie McLane  
Georgia Mountain

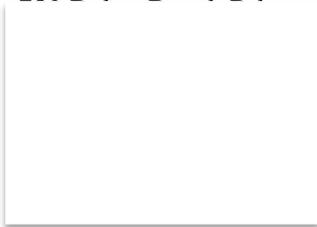
**From:** Annette Smith  
**Sent:** Thursday, March 28, 2013 8:25 PM

**Subject:** Public Hearing Observation

Vermont Public Television is live streaming the deer management hearing, and I am noting a substantive difference between this public hearing and any others I have attended recently. There is no time limit. People are speaking an appropriate amount of time and it is a much different dynamic. Please consider trying that format at the Rutland public hearing. I hope you can watch an archived version of the F&W board hearing, I am enjoying seeing how it becomes a sharing of information rather than a race against the clock.

<http://live.vpt.org/oj.html>

-----  
Annette Smith  
Executive Director  
Vermonters for a Clean Environment, Inc.



**Name:** Cathy Kinney

**Town:** Brighton

**Organization:** Brighton Ridge Protectors

2) Energy Sources and/or Facilities: Please check the type of energy generation you wish to comment upon: Wind

3) Comment : I do not understand how desecrating mountain tops and crippling the small towns that nestle below them is good for the environment. Our family are 4th generation residents of Brighton;(near the Seneca Ridge)and our livelihood depends on the influx of seasonal residents or visitors. They will not be here looking at a mountain view of turbines nor will they enjoy any lands destroyed or posted by wind developers. The way I'm looking at this now is, if the government is willing to bank roll this mockery of green energy, then the government can bank roll my husband and I when we are unemployed. This might be as green as it gets for us and our neighbors. Seriously, the means do not justify the end.

The results of this submission may be viewed at:

<http://sitingcommission.vermont.gov/node/7/submission/876>

**Name:** James F. Palmer

**Town:** Burlington

2) Energy Sources and/or Facilities: Please check the type of energy generation you wish to comment upon:  
Other Energy Sources, Facilities or General Comment

3) Comment :

I am reading the Draft EGSPC Recs 3-14-13 and would like to make a few comments.

1. Presented with the Tiering thresholds, as a developer I would break my project into smaller parts. This is particularly useful if more than one town is involved. This could contribute to "sprawl." Not only would a project be in an easier Tier, but the environment would already be degraded from the existing project. This lowers the impact baseline for the next project. The problem is that we permit the incremental change, not the carrying capacity for an area.

2. What is an "affected town" when considering scenic impacts? It is common that more people in a neighboring town will see a project than in a host town.

3. The last bullet in Tier 3 seems to be incomplete.

4. The Act 250 Quechee evaluation was created for normal developments--literally it dealt with the facade of a condo project. While the procedure has been widely used, it is not at all clear that the three criteria to determine if an Adverse impact is Undue are appropriate for large energy projects.

The results of this submission may be viewed at:

<http://sitingcommission.vermont.gov/node/7/submission/893>

**Name:** Joseph Tymecki  
**Town:** Colchester  
**Organization:** Vermont Public Television  
**Title:** Chief Technology Officer



2) Energy Sources and/or Facilities: Please check the type of energy generation you wish to comment upon:  
Wind

3) Comment :

The notification portion of the wind power application process should be revised requiring that “45-day letters” are publicly posted or available electronically in a central spot, such as on a PSB web site. This would allow parties beyond the scope of the physically mailed letters but who may still be affected by the project to know about upcoming activities. The addition of this step could allow television broadcasters to evaluate potential interference areas caused by the operation of large wind turbines.

Respectfully submitted,  
Joseph Tymecki  
Chief Technology Officer,  
Vermont Public Television

The results of this submission may be viewed at:  
<http://sitingcommission.vermont.gov/node/7/submission/898>

**Name:** Kathy Leonard

**Town:** Randolph

2) Energy Sources and/or Facilities: Please check the type of energy generation you wish to comment upon:  
Wind

3) Comment :

Dear Commission members:

I have attended a number of your sessions and found that that while there was some discussion of turbine noise as it affects people, no attention at all has been directed toward the effect of the various types of wind noise have

on the wildlife living within wind farm 'umbrellas.' Animals and invertebrates large and small depend on hearing vital cues for mating, predation and other behaviors. I've been in touch with scientists working in this field, including Dr. Clinton Francis of the National Evolutionary Synthesis Center who wrote me:

"I understand your worries involving noise surrounding turbines and know that there are many folks that share your worries. Most wildlife related research on turbines has focused on direct mortalities, but there is a possibility that noise could displace animals. In general, turbine noise does overlap the frequencies used by many animals to communicate. Thus, if loud enough, it could interfere with their ability to dispatch and receive important signals.

So, I would be inclined to say that the effects I've documented in my research on noise from natural gas extraction may also be applied to noise from turbines, which has similar noise profiles with respect to frequency or pitch."

Dr. Francis' work on this subject was featured in a New York Times Article last year titled: "Noise Pollution is Changing the Forest," found at [http://www.nytimes.com/2012/03/27/science/noise-pollution-is-changing-forests.html?\\_r=3&](http://www.nytimes.com/2012/03/27/science/noise-pollution-is-changing-forests.html?_r=3&)

Especially when looked at cumulatively, it appears wind farms are disturbing essential communication among large amounts of our wild birds, mammals as well as invertebrates. I see this as a problem too big not to be considered as we proceed with this technology. While I am concerned about this as a birder and conservationist, it should be noted that "Nature Watching" is big business in Vermont, and proceeding with this form of renewable energy may be harming the golden-egg laying goose.

In addition, as climatic changes progress, more migration of animals from the south is expected, and Vermont may have by then "cashed in" what would serve as wildlife refugee camps, as it were. We have a responsibility to avoid damaging wildlife species in this, the sixth round of extinctions on this earth. Thank you for giving this topic some room in your thoughts and voice in your deliberations. March 28, 2013

The results of this submission may be viewed at:

<http://sitingcommission.vermont.gov/node/7/submission/900>

**From:** Rob Pforzheimer  
**Sent:** Thursday, March 28, 2013 10:43 AM

**Subject:** Mexico wind farm draws protests, injuring 22 people

<http://www.windaction.org/news/37879>

**Mexico wind farm draws protests, injuring 22 people, AFP Says**

*Twenty-two people were injured yesterday following protests over the construction of a wind farm owned by Spain's Gas Natural Fenosa in Mexico's southern state of Oaxaca, Agence France-Presse reported, citing local prosecutor Manuel de Jesus Lopez.*

*March 26, 2013 by Stephan Nielsen in Bloomberg News*

Twenty-two people were injured yesterday following protests over the construction of a wind farm owned by Spain's Gas Natural Fenosa in Mexico's southern state of Oaxaca, Agence France-Presse reported, citing local prosecutor Manuel de Jesus Lopez.

Eleven police officers were hurt and one taken prisoner after trying to reclaim equipment from the Bii Yoxho wind project, AFP said.

The gear was taken by local protesters on Feb. 25, AFP said. Locals say construction of the plant is affecting their fishing and farming activities, AFP said.

To contact the reporter on this story: Stephan Nielsen in Sao Paulo at [snielsen8@bloomberg.net](mailto:snielsen8@bloomberg.net)

**Web link:** <http://www.businessweek.com/news/2013-03-27/mexico...>

From:

Sent: Wednesday, March 27, 2013 9:17 PM

Subject: Life Cycle CO2 Emissions REduction Claimed by GMP Less Than Assumed?

All,

The building of 459-ft tall industrial wind turbines on ridge lines has nothing to do with quickly grabbing federal and state subsidies while the getting is good to build RE businesses. It is all about CO2 emission reduction to save the world from climate change and global warming. Let us see how much are these reductions.

Keep these numbers in mind: Total world CO2 emissions in 2011 was 33,990 million metric tons; China increased its CO2 emissions by 550 million metric ton in 2011, about  $550/8.1 = 68$  times all of Vermont's CO2 emissions. Vermont a leader/important? Trust me, no one talked about Vermont's leadership during the COP-18 meeting in Doha, Qatar, in 2012.

Note: The Sun's energy intercepted by the Earth is about 12,000 times greater per year than all energy used by man per year. So, who is the 800-lb gorilla?

Here are some extravagant life cycle CO2 emission reduction numbers claimed by GMP, and the more likely numbers, based on real-world experience.

CO2 Emission Reduction:

GMP claimed 25-yr CO2 emission reduction =  $185,570 \text{ MWh/yr} \times 0.5 \text{ metric ton CO}_2/\text{MWh}$ , NE grid intensity  $\times 25 \text{ yr} = 2,319,625$  metric ton to get PSB approvals and convince the lay public and legislators of the "Pubic Good" of the project.

Realistic 18-yr production = 2,296,805 MWh, accounting for aging at 0.75%/yr, lesser CF of 0.25, and shorter life of 18 years.

Realistic 18-yr net CO2 emission reduction = 1,148,403 - 100,000, pre-production = 1,048,403 metric ton, not adjusted for wind energy-induced grid inefficiencies, because New England annual wind energy is only 1%.

At future higher annual wind energy percent on the NE grid, CO2 emission reduction effectiveness declines, as confirmed by a study of the Irish grid which shows at 17% annual wind energy, effectiveness is 0.526, which would reduce the above 1,048,403 to 504,060 metric ton.

Conclusion:

The GMP CO2 emission reduction claim is  $2,319,625/1,048,403 = 2.213$  higher than the more likely results. In the future, with 17% annual wind energy on the grid, that claim will be even more extravagant, i.e.,  $2,319,625/504,060 = 4.602$  higher than the more likely result.

<http://theenergycollective.com/willem-post/89476/wind-energy-co2-emissions-are-overstated>

<http://docs.wind-watch.org/Wheatley-Ireland-CO2.pdf>

<http://www.clepair.net/Udo201303payback.html>

**From:**

**Sent:** Saturday, March 30, 2013 8:11 AM

**Subject:** Watersheds & Wind

Hi Gaye-

I was thinking about what you wrote to me about there being a lot more at stake than one watershed. That is so true.

I wonder how many local watersheds are threatened if we do a Ridge-line Wind buildout all over VT. There must be 20 or 30 or more.

I hope some calculation of this sort goes into the Siting Commission report.

I also hope that public health and other considerations are taken into account.

For instance, if the storm water runoff calculations are off, as I understand they were at Lowell, what is the downstream risk to our roads and bridges? With the up front costs for developing our ridge-lines already so high, adding a few washed out bridges into the calculation could really make this a starkly negative venture. If we really have to eventually use our mountains for power, I would suggest waiting until we have other, less destructive methods of installing wind machines. These are coming.

Also, I'm wondering if neither Act 248 nor 250 are appropriate for such a large scale development of our mountains.

I appreciate the idealism that is behind the push for ridge-line wind; I am concerned that this idealism is overshadowing logic.

Thanks,

Bill Butler

From: Robbin Clark



To: Siting Commission

I am writing to you to let you know that siting these projects in rural communities is wrong. It is a travesty what has happened in Lowell and Sheffield. We participated in the technical hearings for the Lowell project through the Lowell Mountains Group and the Ridge Protectors. Two noise experts testified on behalf of the interveners both recommended noise levels way below what the service board has approved and now we have noise levels that are not bearable. We have a project with turbines so large that if they run at capacity neighbors are driven from their homes due to the noise. Set backs for these projects are way to close. The developer under estimated the amount of noise that these turbines make; we live 1 ½ miles from this project to the north and we were told that we would not hear it past 1000 ft; we can hear it loud and clear. I am not looking forward to summer months when we have our windows open and want to enjoy our front yard.

The other problem is placing them in the wilderness; where critical wildlife habitat is lost. We learned through the technical hearings that Lowell Mountain had critical bear habitat and deep wooded nesting areas for birds. Mitigation was the word we heard a lot. The problem with this is that the wildlife is not aware of this word. They just know that their habitat is gone. We heard almost every night on the news or in the news paper about bear sightings and the state is going to spend thousands to do a study on why we have a bear problem. Just look what has happened in the Kingdom; bears have lost acres and acres of habitat between construction at Jay Peak, Lowell and Sheffield and now you are considering Newark and Brighton.

It is unfortunate that you visited these sites during the winter with a nice blanket of snow. This softens what has happened when 700,000-100,000lbs of explosives are used to level and clear the ridge not to mention that 150 acres have been clear cut and grubbed. You can't see the mounds and mounds of fly rock with a sprinkle of mulch on it to produce greenery. You can't see that the vernal pools have been filled in and wet lands lost, you can't see that the head water streams are gone. We were up there this past summer and it felt desert like. Seven miles of exposed rock, cuts in the mountain more than fifty feet high. I thought for sure that we would find them playing in the mud but it was the opposite, the water was gone, it was hot and very dry. On May 29<sup>th</sup>, 2012 Lowell experienced the worst flooding on record; in more than one hundred years. I truly believe that these projects **do** more harm than good and **do** very much contribute to global warming. This is no longer a mountain, it is an industrial park.

Lastly I find it quite sad that these projects tare communities apart; you have neighbor against neighbor, family members not speaking to one another and towns against towns. Our legislature has such a lack of empathy and compassion for those who are affected by these projects.

Please keep these words in your thoughts when making your decision.

THESE GREEN MOUNTAINS  
THESE GREEN HILLS AND SILVER WATERS  
ARE MY HOME-THEY BELONG TO ME  
AND TO ALL HER SONS AND DAUGHTERS  
MAY THEY BE STRONG AND FOREVER FREE  
LET US LIVE TO PROTECT HER BEAUTY  
AND LOOK WITH PRIDE ON THE GOLDEN DOME  
THEY SAY HOME IS WHERE THE HEART IS  
THESE GREEN MOUNTAINS ARE MY HOME  
THESE GREEN MOUNTAINS ARE MY HOME

PLEASE LET LOWELL BE THE LAST!!!!!!!

Restore my faith in the Golden dome.

Sincerely,  
Robbin Clark

To the Siting Committee:

At this time people of Lowell, Albany, Craftsbury and Sheffield are being held captive by this experiment called Section 248. It has created a venue in which 'expert witnesses' are the only factor that has any value in the process of siting and somewhere along the line has become only the 'experts' that have been hired by the developers.

The 'experts' acquired by the developers are swayed because they are hired to show a favorable report for their project. They all know their business. Residents of a selected host town are blind-sided by the developer/utility coming before them with a proposal they know nothing about, dangling a carrot (money) in front of them which would cure 'all of their problems' by quickly providing the windfall of money that is needed to fulfill the towns' wish list.

At that point few of the abutters have the knowledge that could begin to match what is already in progress - much like a grade school student being thrown into college.

Fast forward to the point of the PSB hearings and it has been shown that the well orchestrated plan of Section 248 is metered out so that interveners are not allowed to speak at the 'public hearings' within a town under the pretense that they will have their time to speak at the 'technical hearings'.

In our own case the person taking names of persons that wanted to speak crossed our names and the other names of interveners off the list of speakers, with a laugh, and told us that we would have our chance at the technical hearings. We were not happy because members of the select board (who were also interveners) were allowed to speak and report to the audience all that they had been told at private meetings. One of the speakers thought the microphone was a telephone but did as told and spoke for the selectmen.

Next comes the arduous task of processing all of the information being thrown at the residents outside of the loop of the closely knit group which has formed around the developers. A majority of people at this point haven't been in a process like this and are not prepared in any way for terms like 'discovery', and 'interrogatories' and are left treading water because they now have to hire a lawyer to help them through the process or go pro se into even deeper water. Even though experts are hired who are every bit as qualified as the ones hired by the developers the PSB does not hide the fact that they give more credibility to the 'experts' by the developers because they have been mandated by the legislature to promote energy projects. The landowners that have lived on this surrounding property and know 'real time' what happens in given situations of noise and run-off during storm is completely dismissed as unknowledgeable.

Now, fast forward again through the legal maze to the technical hearings. Even though interveners have been given the chance to provide written testimony they have no way, time or money to match the parade of lawyers and experts hired by the developers. Most interveners are working people that have to take time off in a depressed economy to be at a hearing that consumes several days in the courtroom. All of the prep work, filing and following all of the legal format is daunting and financially restrictive because of the copying and mailing of eight copies to the PSB along with a copy to each party on the service list ( in our case it amounted to almost 30 copies each time). They request electronic copies also. The interveners are no match for the lawyers that come into the room every day and go home at night, having staff to gather the facts, materials, copies and exhibits for the next day.

In our case, during a break, a lawyer for the developers was heard to make a comment about 'getting these people out of here so we don't have to look at their faces'.

In the end the PSB is only allowed to ask questions of the interveners IF and ABOUT the information given upon questioning by the developer. One by one the developer told the PSB said they had no questions and once again all of our concerns were denied.

The task of the siting commission should look very carefully at the areas being considered for utility development and the concerns of the people being sacrificed everyday in the end results of the industrial developers.

There are so many new facts available just in the past ten years about the effects of changing the flow of water from a mountain top and the effects of sound and low frequency noise. If the source or a stream or spring erupting from the top of a mountain for hundreds of years is interrupted and diverted to a new location it will eventually affect the beautiful lake at the end of its course but during its trip to that lake it will disrupt and change the lives of hundreds of people and features along its course.

The effects of noise are just being tested in the areas of Sheffield and Lowell and will in a short time be tested in Milton and Georgia. The newer studies from around the world are showing that much greater setbacks are needed for the health and safety of the people and communities around these areas. Several countries no longer allow onshore development of wind facilities. Even transmission lines are being sited, with poles which are treated with toxic materials, near areas that affect the safety of humans, animals and water supplies. These are being ignored in the grand slam of having the best, biggest, showiest project in the state whether it is wind, solar, biomass, etc. The human element is being ignored.

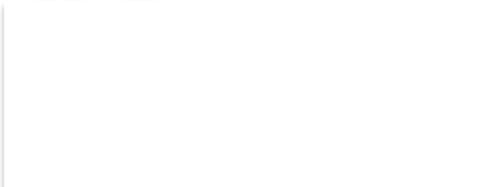
You, members of the siting commission, have been given the position where you could say slow down, let's look at what has been done and see what can be salvaged from the package the legislature has delivered. The human guinea pigs may show that 45 decibels of continuous noise is not realistic. It isn't the noise of a library, a quiet conversation of a bedroom at night. It is a continuous noise and feeling that is disrupting lives, disrupting sleep, making people irritable, driving away the wildlife and increasing health costs for families. Many people live in the valleys created by the mountains of Vermont – the Green Mountain State that are being adversely affected by the noise and flow of water created by these mountains. If the fabric of the communities are truly inspected this whole issue would be put aside for energy solutions that would fit with our surroundings. The manner in which these mega-projects are sited are tearing apart the lives, families, towns, marriages and quality of life of Vermont and its residents.

When the last tree is cut down  
The last river poisoned  
The last fish caught  
Then only will man discover  
That he can not eat money.  
-Cree wisdom

I understand that the developers view of siting is to get the biggest bang for the buck and take advantage of the PTC's but at this time Vermont has a glut of power for possibly the next 20 years, so siting to them has no human element. Vermont is better than that- we are a community of people that deserve better. We should be part of the equation.

Everyone keeps calling us OPPONENTS - but we are neighbors.

Shirley Nelson



Like a bad neighbor, big wind is there.

I am having a hard time wrapping my head around all this.

Let's see if I can get this straight. The federal and state governments have given wind companies the ability to destroy our natural resources by blowing off our mountain tops, have been given permits to kill while not being held responsible for any harm they are responsible for. The worst of it is they are harming children while being backed by the very people who are supposed to protect us. We feel our State and Federal governments have forsaken us to side with the large faceless corporations.

They are using the disguise of green energy to sucker in job poor areas with the promise of jobs and money for the town. For the locals the jobs are temporary as they have a fleet of workers that travel from job to job. Then the wind companies reap the benefits of tax credits that are coming out of the very pockets of the citizens they are harming, with Billions of these tax credit dollars being spent out of country.

Is it right to sacrifice even one family under the guise of something that is supposed to be for the greater good?

Study after study have shown living in close proximity to wind turbines make people ill, with all the studies being ignored.

The results of these studies are very real to us as we are now ill.

If you could see the dark circles around my children's eyes due to the lack of sleep caused by the wind turbines, maybe you'd better understand my frustration.

It is a parent's duty to protect their innocent children from harm. If we were to knowingly put our children in harm's way the State would be after us. But in this situation it is the State that has helped put my family in harm's way.

There have been many times through history that supposedly well meaning men have pushed their own agenda under the guise of doing something for the greater good. But in reality the deed is self-serving and innocent people are sacrificed along the way.

During times of war sleep deprivation was used to weaken the enemy.

We feel the longer we stay at our home they know we will become sicker, weaker and more apt to give up without a fight. But if they think for one minute we will go quietly into the night, they could not be more wrong.

Every Vermonter impacted and not impacted needs to stand up and be heard. For those not impacted by wind projects with a State that does business with reckless abandon, the next project supposedly for the greater good could be knocking on your door.

What is the next project that will require problems and sacrifice to be made of Vermont citizens?

This is not something I chose to do. This is something I'm being forced to do.

We need to be heard.

People need to understand.

We are not playing a game.

We are not only fighting for ourselves, we are fighting for every Vermonter who may be threatened with the loss of their home, land and sanity.

United we stand, divided we fall.

Steve Therrien, Green Mountain Boy.

COMMENTARY FOR PUBLIC HEARING VERMONT ENERGY SITING COMMISSION  
FEBRUARY 12, 2013  
GLENDA NYE, DERBY, VERMONT

I thank this Commission for conducting these Public Hearings on energy siting.

I have but only one major point to make, that being Vermont does NOT need Industrial Wind Turbines, we presently have a glut of electricity, the population for this state is decreasing, we have little to no industrial development, and we rank as the oldest in age population in the United States. What we are doing by blasting ridgelines is selling the Renewable Energy Credits, REC's to out of state coal fired electric plants so that "on paper" they claim alternative energy production. This is truly the definition of "INSANITY."

Why would Vermont need to construct mammoth Industrial Wind Turbines and blow up ancient Vermont ridgelines when in fact, it ranks last in CO2 emissions in the United States. The total CO2 for electricity generation measured in millions of metric tons is so low that it rounds to zero, according to the US Energy Information Administration.

In an article on January 30, 2013 ISO New England issued an order to wind projects to curtail or "ramp back power" because they can't put electricity on to the network because it would de-stabilize the grid. The problem being the electricity network gets out of sync if the turbines produce more power than is being used at any one time. According to David Hallquist, CEO of Vermont Electric cooperative, the Sheffield wind project capacity factor for 2012 was 23 percent versus the projected capacity factor of 30 to 35 percent. The reason for this is because wind doesn't blow all the time, furthermore, there is no way to store electricity production for future use.

Vermont is consistently in the top 10 for highest utility rates in the United States. The cost of wind power increases utility per kWh rates, in addition we subsidize the wind industry via Production Tax Credits and escalated depreciation. The updates to the grid required for wind projects are passed onto the users, furthermore, the grid updates are in numerous locations due to the oftentimes remote locations of wind projects. Vermont does NOT consider Hydro Power as alternative or "green" power why is that? Why is the State of Vermont approving the construction of huge 40 story industrial structures above the 2,500 foot level?

We do NOT need wind power, I would liken it to pigs at the trough, a rush to sell before people catch onto the farce, if I want to be stooped, I can go to the carnival and play the shell and pea game. We cannot absorb additional cost of living in this state. Just when does that become a consideration, just when does the Public Service Board actually consider cost effectiveness of proposed electric facilities?

Put the subsidy money going to Industrial Wind where it would really benefit which is weatherization/insulation of residential and commercial structures that would therefore actually reduce CO2 emissions. There is an old saying in Vermont "you can afford to come to Vermont but you can't afford to leave," this applies to long term Vermont residents who through the years have seen their expendable income constantly diminish. That is the number one "Charge" out of the total of seven Charges that should be in the Governor's Executive Order, to this Siting Commission.

P.S. Please refer to the attached Editorial Comment from the Orleans Record also.

Thanking you,  
Glenda J. Nye  
2-12-13

Todd M. Smith, Publisher

O

## Editorial Comment ...

# SIMPLY UNRELIABLE

The widespread opposition to wind turbines in the Northeast Kingdom usually centers on aesthetics, health effects and environmental damage. Others, like us and the Ethan Allen Institute, protest the multiple, compounded subsidies handed out to wind promoters, without which they couldn't exist.

An article in the British journal *Energy and Environment*, found in the *Science and Environmental Policy* weekly report of February 13, describes a study of the production from 21 [wind] farms spread out over the grid for eastern Australia which is described as the largest, most widely dispersed, single interconnected grid in the world. Unlike many studies, such as those by the US National Renewable Energy Laboratory (NREL) which relied on computer models, this study relies on hard data.

"The study focuses on the year 2010, which was, apparently, not significantly different from other years. The study uses an unusually low standard of 2% of installed capacity for the Minimum Acceptable Level (MAL). That is, the wind farm needs to produce at least two percent of its rated production at full-scale operation. It relies on data provided by the grid operator that covers average power output over five minutes. Shorter time periods are preferable and instantaneous output is ideal.

"For 2010, the entire fleet (the combined output of all wind farms) failed to produce 2% of installed capacity 109 times. The longest [outage] period was for 70 minutes. One wind farm, described as typical, failed 559 times in the six months. The longest period was for 2.8 days. Not only does the entire fleet fail frequently, but also it fails throughout the year. Clearly, such performance would be unacceptable for any traditional method of generating electrical power.

"After analyzing the data, the authors state that wind cannot be used for base load, the daily minimum requirement, and that the installed capacity of required back-up must be at least 80% of installed wind farm capacity. In eastern Australia the required back up is open cycle gas turbines (basically jet engines) which are far less efficient than closed cycle gas turbines. But the closed cycle systems cannot react sufficiently quickly to variation of wind power output. Further, the open cycle turbines must be operating constantly on stand-by mode, wasting energy when the electricity is not needed."

The SEPP authors conclude: "Wind power promoters, and their supporting politicians, are leading the public into an expensive wind trap." In

**BOB** THE COLUMBIANS D  
CABLE CARTOONS.

Letters to  
*Forward for se  
on health care  
backwards for  
others*

Winter 2013

mont

Electric



CO-OP LIFE

## Update: Learning from experience, VEC recommends use on additional renewable mandates

By David Hallquist, CEO

reflects the sentiment of VEC members who are concerned about finding balance between rising electric rates and the pace at which we adopt a greener power portfolio.

It should be noted that VEC has taken a different position from some other groups and organizations that are calling for a wind moratorium. As leaders in the adoption of renewable energy, we have learned through experience that in-

One concern, based on current technologies, is that without a cost-effective energy-storage solution for additional intermittent renewables, electricity rates could increase significantly. There isn't, and could not be, a reliable alignment between when the wind blows and when there is demand for the electricity it produces. If, without undue costs, we could store excess wind energy that is generated during times of low demand, it could

complex operating procedures that are designed to ensure the day-to-day, reliable operation of New England's bulk power generation and transmission system.

Studies like the ISO-NE-sponsored *New England Wind Integration Study* and the Electric Power Research Institute's 2011 *Impacts of Wind Integration* point to the difficulty and cost of integrating higher levels of intermittent renewable

## Comparison of Major Cost And Revenue Assumptions

	(248 Rebuttal Filing)	(Post CPG Filing)
<b>1. Capital Cost Assumptions:</b>		
Inflation Factor	2.50%	2.00%
Cost of Construction	\$136,800,000	\$ 154,837,583
Weighted Average Cost of Capital	8.26%	7.95%
Income Tax Rate	40.53%	40.53%
Production Tax Credits:		
PTC Rate (\$/MWh)	\$22.08	\$23.35
Years Available	10 years	10 years
Asset Life	25 years	25 years
AFUDC	\$10,840,000	\$0
<b>2. Operating Cost Assumptions (Year One)</b>		
Transmission Expense - Taxes & Maintenance	\$20,000	\$20,000
Specific Facility Charges	\$310,000	\$559,000
Annual O&M	\$1,820,000	\$2,620,000
Site Maintenance	\$16,000	\$16,000
Electrical Usage	\$9,000	\$9,000
Permit Mitigation/Misc Environmental Costs	\$180,000	\$347,000
Project Administration	\$36,000	\$36,000
Insurance	\$50,000	\$50,000
Land Owner Payments	\$300,000	\$370,000
Lowell Agreement & Good Neighbor Fund	\$1,140,000	\$1,286,000
<b>3. Revenue Assumptions</b>		
On-Line Date	12/31/2012	12/31/2012
Number of Units	21	21
Capacity per Unit KW	3,000	3,000
Capacity for Project	63,000	63,000
Capacity Factor	28.42%	35.78%
Output per Unit kWhs	7,469,000	9,403,641
Plant Output in kWhs	156,844,000 * prior to loss factor being applied	197,476,461 * prior to loss factor being applied
Availability Factor	100.00%	100.00%
Loss Factor	4.76%	6.00%
A&G Adder	1.80%	1.80%
REC's Sold: Percentage	100.00%	100.00%
<b>4. Depreciable Lives</b>		
Generation	25 years	25 Years
Transformer	37 years	37 years
Road Ways	55 years	55 years
Cost of Removal	25 years	25 years
<b>5. Levelized Cost of Service</b>		
	100%	100%
	\$13,400,000	\$14,860,000
	\$0.103 per KWH	\$0.092 per KWH



**PREFILED TESTIMONY OF MARY G. POWELL  
ON BEHALF OF  
GREEN MOUNTAIN POWER COPRPORATION**

1   **1.    Q.    What is your name and business affiliation?**

2           **A.    My name is Mary G. Powell and I am President and Chief Executive Officer for**  
3   Green Mountain Power Corporation (“Green Mountain Power” or the “Company”), 163 Acorn  
4   Lane in Colchester, Vermont.

5

6   **2.    Q.    Please describe your business experience?**

7           **A.    I joined Green Mountain Power in 1998 as Vice President of Human Resources**  
8   and was promoted to Chief Operating Officer in 2001 and then to President and Chief Executive  
9   Officer in 2008. Prior to joining Green Mountain Power, I served as Senior Vice President of  
10   Community Banking for Key Bank in Vermont, worked in Vermont state government for three  
11   years when I first came to the state and, before moving to Vermont, worked for The Reserve Fund  
12   in New York City as the Associate Director of Operations.

13

14   **3.    Q.    Have you testified before the Vermont Public Service Board?**

15           **A.    Yes. I previously filed testimony in the Company’s rate case, docket number**  
16   7175 and the acquisition case of the Company by Northern New England Energy Corporation,  
17   docket number 7213.

18

19   **4.    Q.    What is the purpose of your testimony?**

1           A.     I describe the benefits of the proposed Kingdom Community Wind investment for  
2 our customers; the economic benefits to the Town of Lowell and the surrounding communities;  
3 the importance of this generation addition to the Green Mountain Power's supply portfolio and  
4 how this investment complements our long-term energy strategy and, finally, why this project is  
5 demonstrating new strategies in how utilities and other energy developers can build wind  
6 projects in Vermont.

7

8     **5.     Q.     Please describe why Green Mountain Power wants to build Kingdom**  
9 **Community Wind?**

10           A.     Green Mountain Power is pursuing the Kingdom Community Wind project to  
11 deliver on our promise to our customers to deliver an energy future that is low carbon, cost  
12 effective and incredibly reliable. We made that promise to our customers when we developed  
13 our energy strategy in 2008, which was based on what we heard loud and clear from surveys,  
14 news reports and the Department of Public Service's and the Legislature's deliberative polling  
15 process – Vermonters want us to develop meaningful renewable energy and they care about cost.  
16 Vermonters also have told us they want projects that are developed in, and tied to, Vermont. Our  
17 strategy involved embracing relicensing of Vermont Yankee, but then ramping down our  
18 dependence while we ramped up cost effective renewable energy sources. We also included  
19 developing a strategic relationship with the Province of Quebec whereby we can utilize its large  
20 scale renewable resource to provide the backbone for our renewable energy development here in  
21 Vermont.

22

1 In our quest to ramp up renewable energy, we found that while small renewable projects are an  
2 important part of our communities, we also needed to also develop cost-effective utility-scale  
3 projects. But we wanted to find a way to avoid paying the highest prices that the market would  
4 bear. Our analysis showed us that by simply shifting some of our portfolio focus back to what  
5 we “own” versus what we “rent” through power purchase agreements, we had a much better shot  
6 at delivering renewable energy cost effectively for our customers. Simply put, it is the “own  
7 versus rent” analogy. For example, our hydro units are some of our lowest cost sources because  
8 someone a long time ago had the foresight to build the hydro units. Now that they are paid off  
9 and only require annual maintenance and capital improvements, we get a cost of power which is  
10 roughly around 3 cents per kwh. I will provide more detail of this “own vs. rent” concept later in  
11 my testimony. Purchase Power Agreements (PPA) will continue to be an important part of how  
12 we achieve our quest for renewable energy in the portfolio but, simply put, we feel that owning  
13 the asset on behalf of our customers presents a very compelling long term value proposition.

14

15 **6. Q. Please describe in more detail Green Mountain Power’s Energy Strategy?**

16 **A.** Green Mountain Power is seeking approval for the Kingdom Community Wind  
17 project because it is an integral part of the Company’s energy strategy that was announced in  
18 2008. Our strategy is based on three principal components: Cost, Carbon and Reliability.

19

20 The goal was to devise an energy future for Green Mountain Power that would maintain the  
21 Company’s current competitive price advantage in New England with the low carbon profile that  
22 we now enjoy. At the same time, the energy strategy encourages the maximum use of cost-

1 effective efficiency programs and demand response to reduce load growth. The strategy also  
2 includes reducing our reliance over time on base-load power and energy that we obtain from  
3 Vermont Yankee while continuing – and perhaps even increasing over time-- the amount of base  
4 load power and energy that we purchase from Hydro-Quebec and other large hydro facilities.

5  
6 As this Board knows well, the future of Vermont Yankee, Vermont's 38-year old generation  
7 station on the Connecticut River, is still to be determined. On the other hand, our efforts to  
8 secure another long-term contract with Hydro-Quebec reached an important milestone on March  
9 11, 2010 when Governor Douglas and Quebec Premier Charest, along with Green Mountain  
10 Power, Hydro-Quebec and Central Vermont Public Service Corp., signed a Memorandum that  
11 included the business terms for a new 26-year contact commencing in 2012. The power and  
12 energy final contractual terms are now being negotiated for final agreement by mid-year. The  
13 new Vermont/Hydro-Quebec Purchase Power Agreement then will be submitted to this Board  
14 for its consideration and decision.

15  
16 Finally, Green Mountain Power's energy strategy called for building and owning new renewable  
17 generation because, as I said earlier, it offers the long term value for customers and cost-effective  
18 power and energy.

19

20 **7. Q. Please describe Green Mountain Power's interest in wind generation.**

21 **A.** Green Mountain Power has long had an interest in wind generation. Long before  
22 I joined the Company in 1998, Green Mountain Power employees in the 1970s began exploring

1 alternative forms of energy and investigated whether wind generation could be built on Lincoln  
2 Mountain in Lincoln.

3

4 The project was abandoned after it became clear that the community did not favor the location of  
5 wind turbines. Green Mountain Power's early experience with wind generation in Lincoln in the  
6 1970s in Vermont was a harbinger of things to come over the efforts to build utility-size wind  
7 generation in Vermont.

8

9 For Green Mountain Power, it imprinted on us that if you desire to be successful you need to  
10 secure community support for siting and building utility size wind projects. This key learning  
11 led Green Mountain Power in the mid-1990s to secure community support before it launched a  
12 project to build in Searsburg, the first-ever utility sized wind generation farm east of the  
13 Mississippi River. This important project, which was commissioned in 1997, is still generating  
14 clean energy every day for Green Mountain Power customers. Prior to the decision to select  
15 Searsburg, the Company also explored other sites in southern Vermont, including Manchester,  
16 before choosing Searsburg.

17

18 **8. Q. How did Green Mountain Power get interested in the Kingdom Community**  
19 **Wind Project?**

20 **A.** The Kingdom Community Wind opportunity came about as a Lowell landowner,  
21 Trip Wileman, was interested in developing a ridge line on a mountain he owns in that Orleans  
22 County community for wind generation. Over time, Mr. Wileman decided that developing wind

1 was better left to those who had previous experience, so he entered into a long-term agreement  
2 with Green Mountain Power to develop the renewable energy project.

3

4 **9. Q. Please describe the Company's review process.**

5 **A.** After our review, Green Mountain Power's Board of Directors in 2008  
6 authorized the Company's management to explore the feasibility of investing in a wind farm in  
7 Lowell. This effort resulted in an extensive analysis of the project:

8

9 Our team looked at the following:

- 10 1. Did the project screen from an economic perspective?
- 11 2. Was there community support to build it in Lowell?
- 12 3. Were there environmental "show stoppers"?
- 13 4. Were there regulatory and public policy reasons that would guide us on  
14 whether we should pursue the project?
- 15 5. Were there lessons to be learned from other wind developers in  
16 Vermont?
- 17 6. Could we do this project with another utility partner, specifically Vermont  
18 Electric Co-op?
- 19 7. Have we explored all the risks and whether we had a solid plan to mitigate  
20 identified risks?
- 21 8. How would this project help to meet our energy strategy goals?

22

1    **10.    Q.    Were there other policy considerations?**

2           **A.    Yes.** Another important consideration was the policy direction of the State of  
3 Vermont and its efforts to incent and encourage the use of renewable energy. For Green  
4 Mountain Power, the enactment of the SPEED Law in 2005 and the Standard Offer Program in  
5 2009 were clear policy directions and an unmistakable message: Vermont wants more renewable  
6 energy for customer use, and all reasonable projects that meet common sense customer and  
7 financial goals should be pursued.

8

9    **11.    Q.    Describe your conclusion after these reviews and policy considerations.**

10           **A.    As I said in the opening of this testimony, after that review and consideration I**  
11 stand before you today to ask your support for this petition for a Certificate of Public Good  
12 permit for the construction of up to 21 turbines over 3.2 miles of ridgelines on Lowell Mountain,  
13 which will generate up to 63 megawatts (MW) of installed capacity. This wind farm will  
14 generate roughly seven percent of Green Mountain Power’s energy requirements, and up to 8  
15 MW of output will be sold to VEC per a cost-based power purchase agreement.

16

17 The environmental reviews we conducted convinced us that there were no “show stoppers.” If  
18 there had been, we would have stopped the project.

19 More importantly, was the community response. We stated upfront that if a majority of voters in  
20 Lowell did not want us to build in their community, we would cease all efforts.

21

1 The vote at the March 2, 2010 Town Meeting in Lowell could not have been more convincing to  
2 us that we were wanted, when after a 78 percent voter turnout, 75 percent of the voters said “yes”  
3 to the project. I believe this is the most resounding community support yet for a Vermont wind  
4 project. Since that vote, Green Mountain Power and the Selectboard have signed an agreement  
5 on property taxes to be paid as well as setting forth other commitments to the community, for  
6 example, on the use of local and regional labor, the use of the town roads, as well as to the  
7 maximum extent possible, a regional labor supply.

8

9 **12. Q. Why is Green Mountain Power proposing a Good Neighbor Fund for**  
10 **communities surrounding Lowell?**

11 **A.** Vermont is a small state, one in which we care about our neighbors. In many  
12 issues facing the state, such as health care and budget decisions, the broader community shares in  
13 the benefits and drawbacks. This is not necessarily the case in power generation. I have long  
14 felt that any large generation project ought to benefit the larger community in more ways than  
15 simply power supply. Although GMP and VEC customers in the region benefit from the cost-  
16 effective, renewable generation they will receive from Kingdom Community Wind, I feel  
17 strongly that neighboring towns to the project should share some of the direct economic benefit,  
18 in addition to Lowell’s tax benefit. As a result, we are proposing to create the Good Neighbor  
19 Fund for towns within five miles of the project.

20

21 The inspiration for this comes from the Northeastern Vermont Development Association’s 2005  
22 Regional Plan for the Northeast Kingdom. In its discussion of wind energy, the plan requests the

1 PSB to consider “A weighing of the potential benefits as well as negative impacts on not only the  
2 host town but other impacted towns, including a possible outline of tax payment benefits to  
3 impacted towns.”

4

5 It has become clear to us that public acceptance is critical to the development of wind in  
6 Vermont, and that regional planners expect benefits to extend beyond the boundaries of the host  
7 town. By creating the Good Neighbor Fund, we recognize that people living near the project, but  
8 not in Lowell, should benefit from the siting of this project in their region. In his testimony,  
9 Robert Dostis will present details of our plan for the Good Neighbor Fund and why we believe it  
10 is an important feature of the project.

11

12 **13. Q. Please describe in greater detail why Green Mountain Power wants to invest**  
13 **in this project rather than just buying wind from a PPA from another developer.**

14 **A.** Green Mountain Power is pursuing both strategies. As you know from docket  
15 number 7589 (Granite Reliable Power), which is now pending before this Board, we are seeking  
16 to also buy wind generation from other developers through a conventional power purchase  
17 agreement.

18

19 **14. Q. Why is it important for Green Mountain Power to build renewable**  
20 **generating projects as opposed to just relying on purchase power agreements?**

21 **A.** Quite simply, the economic analysis we have done has shown that it is more cost  
22 effective for customers to “own” rather than “rent.”

1   **15.   Q.    Please describe in greater detail.**

2           **A.**    I look at our Green Mountain Power-owned small hydro plants as a relevant  
3   example for this line of thinking. Many years ago, the Company made decisions to build hydro  
4   electric facilities on rivers in our service area. The capital costs for many of these plants have  
5   long since been amortized and other than paying for annual maintenance and taxes, these dams  
6   continue to produce very low-cost energy for our customers. Typically, purchase power  
7   agreements are for a 10-25 year term. Once these contracts expire, there is no “ equity” left as  
8   there is in a power generation unit that we own and that still generates electricity by using the  
9   “free fuel” —such as water or air—for our customers. Obviously, like hydro units, wind farms  
10   offer an opportunity to re-power in the future once the permit life is expired. Re-powering is a  
11   very attractive option because the infrastructure -- roads, transmission lines to get the power  
12   down from the mountain, substations, are all in place for re-use.

13

14   There is also another basic economic reason for owning rather than renting a generation source,  
15   as it provides an opportunity for our investor to grow earnings in a way that benefits our  
16   customers by bringing them cost-effective, renewable electricity. This is important if we are to  
17   incent and encourage other generation and transmission projects in Vermont.

18

19   **16.   Q.    Do you have a closing statement?**

20           **A.**    I want this Board to know of the passion the team at Green Mountain Power has  
21   about our work to develop a new energy strategy for our customers. Our commitment to cost,  
22   carbon and reliability drives the Company’s efforts to build wind generation in Vermont. It is

1 not for the faint of heart, but lowering our carbon emissions and meeting customer expectations  
2 is worth it. I hope you all agree.

3

4 17. Q. Does that complete your testimony?

5 A. Yes it does.

6

# The Vermont Statutes Online

## Title 30: Public Service

### *Chapter 89: RENEWABLE ENERGY PROGRAMS*

#### **30 V.S.A. § 8005. Sustainably priced energy enterprise development (SPEED) program; total renewables targets**

##### **§ 8005. Sustainably priced energy enterprise development (SPEED) program; total renewables targets**

(a) Creation. To achieve the goals of section 8001 of this title, there is created the Sustainably Priced Energy Enterprise Development (SPEED) program.

(b) Board; powers and duties. The SPEED program shall be established, by rule, order, or contract, by the board. As part of the SPEED program, the board may, and in the case of subdivisions (1), (2), and (5) of this subsection, shall:

(1) Name one or more entities to become engaged in the purchase and resale of electricity generated within the state by means of SPEED resources. An entity appointed under this subdivision shall be known as a SPEED facilitator.

(2) Issue standard offers for SPEED resources in accordance with section 8005a of this title.

(3) Maximize the benefit to rate payers from the sale of tradeable renewable energy credits or other credits that may be developed in the future, especially with regard to those plants that accept the standard offer issued under subdivision (2) of this subsection.

(4) Encourage retail electricity provider and third party developer sponsorship and partnerships in the development of renewable energy projects.

(5) In accordance with section 8005a of this section, require all Vermont retail electricity providers to purchase from the SPEED facilitator the power generated by the plants that accept the standard offer required to be issued under section 8005a. For the purpose of this subdivision (5), the board and the SPEED facilitator constitute instrumentalities of the state.

(6) Establish a method for Vermont retail electrical providers to obtain beneficial ownership of the renewable energy credits associated with any SPEED projects, in the event that a renewable portfolio standard comes into effect under the provisions of section 8004 of this title. It shall be a condition of a standard offer required to be issued under subdivision (2) of this subsection that tradeable renewable energy credits associated with a plant that accepts the standard offer are owned by the retail electric providers purchasing power from the plant, except that in the case of a plant using methane from agricultural operations, the

**PREFILED TESTIMONY OF ROBERT DOSTIS  
ON BEHALF OF  
GREEN MOUNTAIN POWER CORPORATION**

1   **1.    Q.    What is your name, occupation, and business address?**

2           **A.    My name is Robert Dostis. I am Leader of Customer Relations & External**  
3   Affairs at Green Mountain Power Corporation (“GMP” or the “Company”), 163 Acorn Lane in  
4   Colchester, Vermont.

5

6   **2.    Q.    Please describe your educational background and pertinent professional**  
7   **experience.**

8           **A.    I have worked at GMP since August, 2008. My job responsibilities involve**  
9   leading the Company’s external relations strategies, and until recently have also managed the  
10   Company’s customer services and call center activities. I am also a lead strategist in developing  
11   renewable energy supplies for our customers.

12

13   I served in the Vermont legislature from 2001 to 2008. During the first four years, I served on  
14   the House Commerce Committee, including time as Vice Chair. During that time, all energy  
15   legislation was addressed in that committee. From 2005-2008, I served as Chairman of the  
16   House Natural Resources and Energy Committee. The scope of the Committee’s responsibility  
17   included all renewable energy legislation.

# The Vermont Statutes Online

## Title 10: Conservation and Development

### *Chapter 23: AIR POLLUTION CONTROL*

#### **10 V.S.A. § 578. Greenhouse gas reduction goals**

##### **§ 578. Greenhouse gas reduction goals**

(a) General goal of greenhouse gas reduction. It is the goal of the state to reduce emissions of greenhouse gases from within the geographical boundaries of the state and those emissions outside the boundaries of the state that are caused by the use of energy in Vermont in order to make an appropriate contribution to achieving the regional goals of reducing emissions of greenhouse gases from the 1990 baseline by:

- (1) 25 percent by January 1, 2012;
- (2) 50 percent by January 1, 2028;
- (3) if practicable using reasonable efforts, 75 percent by January 1, 2050.

(b) Vermont climate collaborative. The secretary will participate in the Vermont climate collaborative, a collaboration between state government and Vermont's higher education, business, agricultural, labor, and environmental communities. Wherever possible, members of the collaborative shall be included among the membership of the program development working groups established by the climate change oversight committee created under this act. State entities shall cooperate with the climate change oversight committee in pursuing the priorities identified by the committee. The secretary shall notify the general public that the collaborative is developing greenhouse gas reduction programs and shall provide meaningful opportunity for public comment on program development. Programs shall be developed in a manner that implements state energy policy, as specified in 30 V.S.A. § 202a.

(c) Implementation of state programs to reduce greenhouse gas emissions.

in this section, all state agencies shall consider, whenever practicable, any increase or decrease in greenhouse gas emissions in their decision-making procedures with respect to the purchase and use of equipment and goods; the siting, construction, and maintenance of buildings; the assignment of personnel; and the planning, design and operation of programs, services and infrastructure.

(d) Advocacy for cap and trade program for greenhouse gases, including those caused by transportation, heating, cooling, and ventilation. In order to increase the likelihood of the state meeting the goals established under this section, the public service board, the secretary of natural resources, and the commissioner of public service shall advocate before appropriate regional or national entities and working groups in favor of the establishment of

Speaker 1

My name is Anne Morse . I live in Craftsbury.

In the 1920's Aldo Leopold synthesized an ethic for use of the land. "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

We are part of the biotic community. We need integrity in our public dialogue. We must avoid deception.

There is a guideline for discussing renewable energy that has been violated thousands of times in Vermont.

It was violated when the Lowell Project was first presented to the public.

It was violated when the citizens of Lowell were mailed descriptions of this project before their vote.

It has been violated in testimony before the Public Service Board.

The guideline is simple and best illustrated with an example. The example comes directly from the Federal Trade Commission – the FTC - the national institution charged with assuring integrity in the marketplace.

"A toy manufacturer places solar panels on the roof of its plant to generate power, and advertises that its plant is "100 % solar-powered." The manufacturer, however, sells renewable energy certificates based on the renewable attributes of all the power it generates. Even if the manufacturer uses the electricity generated by the solar panels, it has, by selling renewable energy certificates transferred the right to characterize that electricity as renewable. The manufacturer's claim is therefore deceptive. It also would be deceptive for this manufacturer to advertise that it "hosts" a renewable power facility because reasonable consumers likely interpret this claim to mean that the manufacturer uses renewable energy."

Climate change is a global problem. For all the world's citizens to effectively address this problem we must address it with integrity.

I recommend that the State of Vermont adopt the Federal Trade Commission guidelines for describing renewable energy in all its work: legislation, publications and deliberations – in place of the current practices fostered by the energy corporations and their lobbyists that serve private and not global interests.

Thank you for your attention.

Speaker 2

My name is David Rodgers. I live in East Craftsbury.

The FTC guideline is simple: to refer to energy as renewable it must be coupled to renewable energy certificates. Anne Morse claimed that the guideline has been violated thousands of times in Vermont with the implication that the violations were of consequence. She has given you an envelope of documents.

Document number 1 is a copy of the financial statement presented by Green Mountain Power to the Public Service Board for the Lowell Wind Project. The last item in paragraph 3 reads "REC's sold: percentage 100%". Green Mountain Power intends to sell the RECS.

Document number 2 is a copy of the written testimony of Mary Powell, CEO of Green Mountain Power, to the Public Service Board. Does she refer to the energy generated by the Lowell Project as renewable with full knowledge that the RECs will be sold?

See page 2 – line 20 "renewable energy development here in Vermont."

There are 6 additional direct references to renewable energy with the clear implication that the Lowell Wind Project is renewable energy.

I conclude that violations of this basic guideline are both obvious and prevalent.

Similar deceptive statements have been made by Governor Shumlin, Senator Bernie Sanders, Avram Pratt, the Burlington Electric Department, and Bill Mckibben in his recent presentation to a Joint Session of the Vermont Legislature on the invitation of House Speaker, Shap Smith.

These deceptive statement have been made in the presence of legal counsel to the Public Service Board and the Department of Public Service.

I recommend that the role of the Public Service Board and the Department of Public Service – as citizen's advocates - assure that the integrity of public dialogue on renewable energy meet the standards of the Federal Trade Commission.

Thank you for your attention.

### Speaker 3

My name is Ron Holland. I live in Irasburg. You now know the substance of the FTC guideline and that its violation is prevalent and tolerated by government officials. So is this a violation of significant financial and environmental consequence, or is it trivial?

Last week RECs were selling for \$62 per megawatt hour. The week before they were selling for \$55 per megawatt hour. The recent average is \$58.50. From the financial statement that has been provided you, in paragraph 3 you will see the predicted annual plant output for the Lowell Project to be 197,476 megawatt hours. The expected annual income from the RECs is 11.5 million dollars. The expected lifetime return can be estimated at 289 million dollars. Recall that the construction cost for the project is 155 million dollars and that the fuel is free; also note that the 289 million dollars does not include selling any electricity, nor the 46 million dollars in production tax credits that Green Mountain Power will receive. I conclude that this violation of FTC guidelines has major financial consequence.

Is there an environmental consequence?

If you generate renewable energy but sell the environmental attribute, carbon accounting, requires that you assume the average emissions burden of grid that does not have a REC – the industry refers to this burden as the residual emissions. Independent Systems Operators of New England publish the residual emissions every quarter. The most recent residual emissions rate was 639 lbs/mwh. So in exchange for the 11.5 million dollars received by Green Mountain Power, the people of Vermont assume a carbon burden of 57,358 metric tons of CO<sub>2</sub>. Is this a lot? Vermont currently has the lowest carbon footprint per capita for the electrical sector in the U.S. The last measured total annual emission rate for the Vermont electrical sector was 8,100 metric tons or 3 lbs per megawatt hour. (.5 % of the iso New England rate) Using formal carbon accounting there is a 7 fold addition to the carbon footprint for Vermont's electrical sector by the Lowell Project.

If the RECS are bought by the coal powered steam turbine in Bristol, Massachusetts that was upgraded in 2011 to generate 634

megawatts (the equivalent of 634 3 mw wind turbines, 30 Lowell Projects), the actual emissions allowed by the purchase of the Lowell RECS are 22 times Vermont's current carbon foot print for the electrical sector.

Violation of the FTC guideline has major financial and environmental consequences and enables facile deception.

Thank you for your attention.

#### Speaker 4

My name is Eric Wallace Senft. I live in West Woodbury. I want to talk about the implied deception in how Vermont's policy makers have ignored this FTC guideline.

When and how did this deception of Vermonters begin?

Document number 3 is one page of Title 30, Chapter 89 entitled "Renewable Energy Programs" that includes 31 pages of hard to read and understand legislative language. Paragraph b2 reads "Maximize the benefit to rate payers from the sale of tradable renewable energy credits or other credits that may be developed in the future....." This hard to discover paragraph is the permissive legislation that allows the deception of Vermonters. This paragraph enables the mining of Vermont ridgelines as REC factories to satisfy the demand for fossil fuel energy and Vermont's RECs.

This Legislation was passed by the 2005 legislature.

Who has been aware of this deception?

Document number 4 is the self-written resume of the Chairman of the Committee who was responsible for this legislation, Robert Dostis, the current Government Affairs Director for Green Mountain Power. It is reasonable to assume that he understood the implications of the legislation that he husbanded. Please note in the testimony of Mary Powell, page 2 lines 4-6, "This project is demonstrating new strategies in how utilities and other energy developers can build wind projects in Vermont." Also note in the testimony of Robert Dostis page 1, lines 10-11 that he was "a lead strategist in developing renewable energy supplies." The appearance of conflict of interest is vivid.

I recommend that Vermont develop legislation that prevents the revolving door between government and industry officials.

I recommend that future State renewable energy legislation be written to comply with FTC guidelines and that existing legislation be rewritten to comply with the FTC guidelines.

Thank you for your attention.

## Speaker 5

My name is Ryan Gillard. I live in Plainfield.

January 1, 2012 was to be a great day of celebration for Vermont's environmental community. Document 5 is a copy of Vermont's green house reduction goals. You will note that on January 1, 2012 Vermont's greenhouse gas emissions were to be at 25% below their 1990 level of 8.11 million metric tons. Was there a celebration? Does anybody know the current magnitude of Vermont's current green house gas emissions? Did we reach the goal?

When measured in 2008 – Vermont's emissions were 3% above the 1990 level – 28% above the goal. In 2010 the EPA reported co2 emissions to be 10% above 1990 levels - 35% above the goal. Certainly there was not a 35% drop in 2 years.

It is easy to espouse lofty goals. As Donella Meadows said – “You can fool the voters but you cannot fool the atmosphere.”

I recommend that each new energy project be characterized as accurately as possible by its actual versus theoretical impact on Vermont's carbon footprint.

Thank you for your attention.

Speaker 6

My name is Suzanna Jones. I live in Walden.

The wind industry has been clever at manipulating a concerned public into believing that industrial wind is the solution to climate change. Nothing could be further from the truth.

The assumption this build-out has been operating on is that wind factories displace dirty energy elsewhere. This assumption, generated by the profiting industry, has so far remained unchallenged. But tonight we have looked at one of the many ways industrial wind is contributing to the problem, while the build-out of dirty energy continues.

The industry has been abetted by political and environmental leaders who want to appear "green" without challenging the underlying causes of our crisis.

Today environmentalism is everywhere. These days you can't even open the phone bill without seeing something about saving the planet. But there is a terrible hollowness to it all.

We can now say that environmentalism has finally been successfully mainstreamed, at the cost of its soul.

This co-oped version isn't about protecting the landbase from the ever-expanding empire of humans. It is about sustaining the comfort levels we feel entitled to without exhausting the resources required. It is entirely human centered and empty. And it serves corporate capitalism well.

What makes people happy? It isn't the "stuff" provided by an ever-growing destructive economic system. Authentic happiness comes from a healthy relationship to nature and community. As Vermonters have discovered industrial wind destroys both.

What industrial wind represents should be obvious to everyone. This is business as usual disguised as concern for the planet. Far from an effective solution to climate change, it is only the same profit- and growth-driven destruction that is at the root of every crisis we face.

We hear a lot about Vermont being a leader these days. Let's lead by showing the world we choose a healthy land base over business as usual.

1.

The permitting process was never intended to serve Vermonters. It was constructed to work precisely as it has to serve multi-million/billion corporations, most non-VT. or foreign-owned.

The real purpose of that process is dual: a.) to enable these corps to colonize VT; b.) to do this by an elaborate SHAM of hearings, a permitting process, and use of terminology which implies (but does not manifest) concern for the environment and the good of the public.

We are not naive; we are not stupid. We fully understand that this corrupt administration has pre-determined the outcome of each step of the whole process.

So, your role? You have a specific charge. This commission was established to be one more part of the SHAM by which Gov. Shumlin and giant corporations are destroying VT. ecosystems for their greed. Your focus is on how to improve the process. The assumption underlying the specifics of your charge is that the process will continue.

But the hidden agenda is to create the illusion of hearing our concerns, meanwhile derailing the push for a moratorium.

There is a different way! There is truth in the saying that if one is not part of the solution, one is part of the problem. This commissioner, as charged, is part of the problem. The People, the True Environmentalists, are fighting to protect their land and way of life. The Nelsons refused to sell, and have had 28 ac. stolen through the Gov. appointed judge. Seventeen people have been arrested so far. We are being colonized again, as happened 400 years ago. But it is different this time. These colonizers do not live here. They destroy the very ecosystem that nurtures the local people. Clearly, the solution is NOT to continue such destruction at all. The solution is to STOP this madness. How?

1. Begin by adopting the plan put forward by Energize VT, developing a local generation of energy to strengthen local economies.
2. Take down the turbines; send away those corporations.
3. Keep reducing all non-essential energy uses, especially in transportation and home-heating.

4. Learn again the values which Honor Earth as a living, pulsing Being. Know the Waters as lifeblood and keep them safe and clean. See Brother Wind as the Sacred Breath of our world and refuse to use him as an excuse for greedy destruction. Protect the habitat of All Our Relations: those Standing Ones/the Plant People, the 4-leggeds, the wingeds, swimmers, and creepy-crawlers. They are vital for holding the Web of Life intact, and the Web nurtures us, sustaining our way of life.

This is a different way. Many of us have made our choice, even at great risk and cost.

This way requires courage, and it is now your turn.

We invite you to join local communities of Vermonters. Resist the SHAM; decline to further the hidden agenda. Advocate for a different, truly environmental, way.

Thank-you,  
Carol Irons

Vermont Energy Generation Siting Policy Commission

February 12, 2013

I would like to thank the members for coming here tonight and listening to all our concerns. I would like to address and respond to the concerns you have heard on the former Derby Line Wind project. The siting of this particular project in my opinion and many others was totally inappropriate. It's proposed location on the International Border within the source protection area for an International Water system and located within such close proximity to so many primary residences in the United States and Stanstead, Quebec was questionable. As the project was withdrawn by the developer we never heard from the State's Water Supply Division what their opinion was about this proposal.

The entire 248 process is a challenge for Towns to meet within too short a period of time. Town boards are basically volunteers trying to understand voluminous amounts of technical information within the statutory guidelines or they have to hire experts and go over budget and face the ire of the taxpayers. Towns should have the same options as the developers and have the expertise of the Public Service Board at their disposal or State funds available to them. As soon as a project is proposed the entire Town should be made aware of it, not just a few.

248 certainly needs to be amended so that proper notification can be given and Public Hearings to any projects that take place near the Canadian border. By the time many Canadian abutters received notices of the Derby Line project meetings and statutory deadlines to intervene for example had already gone by. How can people participate in proceedings they know nothing about, yet they are taking place in their own backyard? The difference is their yard happens to be in a different country, separated from my house in Vermont by a few hundred feet.

I hope the Siting Commission addresses the concerns presented by others such as NVDA, VELCO and ISO regarding health issues, property values, and the grid. I have experienced first-hand what a small industrial sized proposed wind project could have done to my community. The wounds it has inflicted may never heal and yet I would do it all again for the people I represent. People are our most important resource they should not be sacrificed for a few who want to gain from the system.

Respectfully,



Karen Jenne

Tues 2/12/13 Lowell Siting Commission

Before deciding WHERE to put industrial wind, we should be deciding IF it is feasible in VT

Therefore the Siting Commission should be put on hold until many questions can be answered. A moratorium will give time to answer those questions which will best be done by independent, scientific studies of Lowell and Sheffield.

Some questions are:

- What is Grid capacity and how will it handle intermittent power--currently turbines are being shut down when power production surpasses demand
- GMP is currently installing a \$10 ½ million voltage regulator to stabilize the grid from intermittent power. Who pays for this?
- What is the LEGAL status of REC's? Selling them to out of state utilities allows those utilities to continue burning fossil fuels. So there is no net gain on carbon reduction
- What is the bird and bat kill? Neotropical songbirds are in decline and 3 species of bats are on the VT endangered list
- What changes have occurred in storm water runoff and water quality?
- What is the output of the installed turbines compared to the utilities projected output?
- What is the temperature change of ground surface and of headwater streams after a forest is clearcut? Is increased temperature adding to global warming?
- How much carbon sequestration is lost by clearcutting the mountain top forests?
- How much carbon is emitted in the manufacture, transport, site construction, operation, maintenance, and decommissioning of Lowell and Sheffield turbines
- TOTAL carbon emissions and loss of carbon sequestration should be compared to any amount of carbon saved, if any, since intermittent power does not cause any baseload fossil fuel plants to be decommissioned.
- What are the health effects of low frequency noise?
- Are the WHO noise guidelines suitable for rural, quiet VT away from traffic?
- What are the effects of forest fragmentation on animal corridors and habitat?
- 
- ACT 248
- How can Act 248 be changed to evaluate environmental effects and give them equal weight?
- How can Act 248 be changed to give make citizen input equal with corporation input?
- What monetary means can be taken to help citizens hire lawyers and expert witnesses to appear before the PSB?
- Or what can take the place of the PSB?

Remarks for Energy Siting Hearing  
January 23, 2013

My name is Michael Bosworth and I live in Brattleboro. My remarks are primarily about siting wind power facilities, and primarily from a recreation impact perspective.

I come to this discussion with a background in 2 areas:

1. I have been and intend to continue to be personally involved with siting renewable energy facilities, including a rooftop solar array that has been installed and a community-scale, wood-fueled cogeneration system that has not yet happened.
2. I have spent a fair amount of time in the out of doors in my life, including some time backpacking and a lot of time hiking and cross-country skiing. I am a member of the Appalachian Mountain Club, the Green Mountain Club and the Catamount Trail Association.

I believe the following:

A. Having renewable energy facilities in Vermont is highly desirable, most particularly in light of climate change but also for more local control of our energy resources.

B. Vermont needs *to do its fair share* of siting renewable energy facilities and *should want to be a leader* in siting such facilities.

C. Wind power in particular can cause conflicts with landscape level issues, such as the recreation experience and, yes, even Vermont's landscape "brand" that is so important to its tourist economy.

D. Both the scale and location of wind power are important. One wind turbine at a ski area where there is already developed infrastructure is much different than a whole set of turbines on a heretofore undeveloped ridgeline.

E. The state should prioritize locations where wind power makes the most sense and locations where it does not make sense. I assume this commission is already aware of the Wind Energy Facility Development policy of the Green Mountain Club and the even more detailed Conceptual Wind Power Siting Guidelines put together by the Appalachian Mountain Club and Audubon Society of New Hampshire. Neither of those documents state that there should be no new wind power facilities. Rather, they set frameworks for evaluating the suitability of wind power proposals.

F. From a recreational point of view, the Appalachian Trail corridor, the Long Trail corridor and the Catamount Trail corridor should receive special consideration. Also, public lands and wilderness areas should receive special consideration. Wind power proposals in those areas should receive a higher level of review. Particularly for the hiking trails, the view sheds from the ridgeline portions of those trails should be an important factor given consideration.

G. The Green Mountain Club has brought up the issue of "cumulative impact." That is, multiple wind power developments in one area have the potential of overwhelming the recreation experience. I agree with that sentiment.

H. While I realize that individual communities, right down to the individual household level, can sometimes be the most impacted by particular wind power proposals, I do not think either those communities or the regions they lie within should have veto power over such proposals. Yes, they should have the opportunity to argue for or against a proposal. I believe, however, given the adverse impacts that climate change is already bringing to us, that decisions on renewable energy facilities are important enough to be made at the state level.

Finally, as an example of how I would put my own thoughts into practice in a real world situation, the wind power development off Rte. 8 in the Searsburg/Readsboro/Woodford area comes to mind. I like the existing turbines. I like knowing that they're generating power renewably. I think they look cool, even when I see them from miles away while I'm hiking. When I first heard of the proposal to put more turbines up, I thought that would be a good thing. Now, even though the new turbines will be generating a fair amount more power, I no longer think the project is a good one. The new turbines will be several times taller than the existing turbines, and there will be more of them, and they'll impact the experience from Woodford State Park as well as the Aiken Wilderness. If the size of the turbines were smaller, or the number of turbines were lesser, or if the location were different, or some combination of those factors, I would be in favor. As it has played out, I am no longer in favor.

I hope these remarks are helpful. Thank you for the chance to comment.



## Wind Energy Facility Development

*Policy As Approved by the Board of Directors of the Green Mountain Club, Inc.*

The mission of the Green Mountain Club is to “make the Vermont mountains play a larger part in the life of the people by protecting and maintaining the Long Trail System and fostering, through education, the stewardship of Vermont’s hiking trails and mountains.” This mission was memorialized in 1971 by a Joint Resolution of the Vermont General Assembly, which recognized GMC as the “founder, sponsor, protector, and defender of the Long Trail.” The resolution went on to entrust the club “with the responsibility for the leadership in the development of policies” supporting this mission. It also requested that “the club report to the general assembly such action as it deems may be required to insure the preservation, maintenance, and proper use of the Long Trail system and other hiking trails.” (Resolution R 44 Vermont State Legislature 1971; Joint Resolution 18, Vermont Legislature 1985). On March 11, 2010 the Vermont General Assembly reaffirmed its support of GMC’s role in Vermont by stating that “the core mission of the GMC is to make ‘the Vermont Mountains play a larger part in the life of the people’ by protecting and maintaining the Long Trail,” and that GMC will continue to be “the founder, sponsor, defender and protector of the Long Trail system for now and future generations to come.” (VT LEG 256638.1 No. R-383. House concurrent resolution commemorating the Green Mountain Club on its centennial anniversary. H.C.R.271))

GMC supports the need for increased energy conservation, efficiency, and renewable energy generation. GMC recognizes that generating electricity from wind has the potential to mitigate or slow the negative impacts of air pollution and climate change on the Long Trail environment and hiker health. However, like all forms of development, wind energy facilities can have impacts on natural and cultural resources. Careful siting of wind energy developments is crucial in the protection of the hiking experience on the trails and lands in which GMC has a management responsibility. Wind energy facilities, including the associated infrastructure, roads, and utilities may or may not be compatible with GMC’s mission.

This policy will guide GMC’s response to proposals for wind energy facilities that may affect GMC Managed Trails, Trail Corridors, and Lands (see below and the Definitions section at the end of the policy for a description of these areas and GMC’s management responsibilities) which include the following :

- **Long Trail System Corridor:** The Long Trail System is defined as the Long Trail/Appalachian Trail and the Long Trail from the Massachusetts border to the Canadian border and its designated side trails, shelters, conserved lands, and associated facilities.
- **Appalachian Trail Corridor in Vermont:** The Appalachian Trail corridor is defined as the Appalachian Trail from east of Sherburne Pass in Killington to the Vermont/New Hampshire border in Norwich and its designated side trails, shelters, conserved lands, and associated facilities. GMC manages the Appalachian Trail in Vermont in partnership with the Appalachian Trail Conservancy, National Park Service, and USDA Forest Service. For projects near the Appalachian Trail corridor, GMC will look to both this policy and the Appalachian Trail Conservancy’s [Policy on Wind Energy Facilities](#) for guidance.
- **Kingdom Heritage Lands Hiking Trail Corridor** – The Green Mountain Club is designated by the State of Vermont as Corridor Manager for hiking trails on a portion of the Kingdom Heritage Lands in Vermont’s Northeast Kingdom region.

**GMC Managed Trails, Trail Corridors, and Lands: Wind energy facilities are not appropriate on any of the trails, trail corridors, or lands that are part of GMC's management responsibility. Wind energy facilities located on these lands or trails could result in significant adverse effects on recreational resources and pose a risk to the safety of hikers and visitors.**

Should GMC appear as a party in any formal legal proceeding related to a proposed wind energy facility, the club's legal positions shall be guided and informed by this policy, subject at all times to the advice of legal counsel and expert witnesses.

For a wind energy facility proposed in the viewshed of hiking trails located on GMC managed trail corridors and lands, GMC may elect to review the project and evaluate potential impacts. GMC may oppose, may not oppose, or may endorse any project using the following two sets of evaluation criteria:

**Tier I:** GMC will use the following criteria when evaluating a proposed wind energy facility in the viewshed of GMC managed trails, trail corridors, and lands:

1. **Visual Impacts:** Because of the size of modern wind turbines and the tendency to locate them on mountaintops, these facilities are visually prominent and can be serious intrusions on the desired natural character of trails and their viewsheds. GMC is most concerned when these impacts will affect primitive quiet backcountry areas, particularly overnight sites, vistas, open summits, or other unique natural features. GMC opposes new wind energy facilities on GMC managed trails, trail corridors, and lands. In the case of projects in the trail viewshed (edge of corridor/property boundary to the horizon) visual impacts will be weighed based on the following factors:

- Height and Size of the turbines: The height of a turbine greatly affects its visual prominence.
- Scope of the project: The number and size of turbines and the length of ridgeline that is developed will affect the project's visual prominence and the number of viewpoints from which it will be visible. The siting of associated infrastructure can also have a significant effect on the trail viewshed. Locations and construction of power lines and access roads should be analyzed as part of any visual assessment. This analysis should include the size of the turbines relative to landscape in which they are placed and the distances from which they can be seen.
- Project location: This is the location of the wind energy facility relative to GMC managed trails, trail corridors, and lands and the degree of direct impact to these areas.
- Landscape setting: Undeveloped landscapes are less acceptable for development than settings with permanent development such as cities and towns, roads, mountaintop developments such as telecom towers or ski areas, or permanent landscape alterations such as mines or quarries. Temporary landscape modifications such as timber harvesting should not be used as a factor in deciding whether a landscape setting is suitable for wind energy facilities.

An additional factor is the viewer's location. Viewing locations that offer sweeping long distance vistas such as open areas, alpine areas, cliffs or firetowers are considered more sensitive. Also, viewing locations that are in federal Wilderness, Wilderness Study Areas, National Recreation Areas, National Park Service Natural Areas and remote areas more than two miles from a trailhead or road crossing are considered more sensitive. The number of locations from which a project is visible also will be a factor.

If a project is visible from a single location it may be more acceptable than if it is visible from several prominent vistas along a hiking trail or hiking trails.

2. **Aircraft Hazard Lighting:** Currently, structures more than 200-feet tall are required to have constantly flashing Federal Aviation Administration-approved hazard beacons to protect against aviation collisions. Wind turbines that require hazard beacons under FAA guidelines should utilize radar-activated lighting systems or comparable technology so as to mitigate the impacts of nighttime lighting and daytime visual impacts from turbine color while maintaining aircraft safety.

Hazard lighting has a significant impact on the visual integrity of a landscape, even at great distances. Lighting also may negatively impact or lead to the death of birds and bats. In some settings, turbines less than 200 feet that are not lighted may be acceptable where larger towers with aircraft hazard beacons may not.

3. **Noise Impacts:** Turbines make noise as they spin, particularly in high wind conditions. Turbines should not be heard from GMC managed trails, trail corridors, and lands (footpaths and facilities) on an ongoing basis.
4. **Hiker safety:** In areas close to hiking trails and their related facilities, visitors could be injured as a result of the presence of a wind energy facility, e.g., falling ice or other hazards.
5. **Public and GMC Investment:** The Long Trail is America's oldest long-distance hiking trail and has over its lifetime benefitted from many thousands of hours of labor by volunteers and staff and millions of dollars in private and public funding for maintaining and improving the trail and its infrastructure. Additionally, significant resources were invested for the conservation of tens of thousands of acres of lands the trail crosses – most of this land is now in public ownership. Wind energy facilities are being considered on both public and private lands. GMC believes that wind energy facilities are best suited to private lands. If a project is being considered on public lands, there should be no net loss of recreation values as a result of the development. Mitigation (on or off-site), may be applied to achieve a no-net-loss of recreation values.
6. **Roads and Access:** In areas with limited existing access in the vicinity of the proposed site (i.e., few permanent roads or very low road density even in adjacent low-elevation areas) construction of new roads to access a facility could have a significant impact on large areas that are essentially roadless. In addition to the turbines themselves, this criterion includes powerlines, roads, structures, and any other facilities associated with the project. It should be noted that high-elevation areas may be the least accessible parts of an otherwise accessible landscape. Windpower facilities located in more remote areas may compromise the remote character of the site.
7. **Wildlife, Vegetation, and Natural Communities:** Areas with significant natural resources such as natural heritage sites, endangered species, water resources, unique geologic features, or significant wildlife habitat are less acceptable for wind energy.

**Tier II:** GMC may consider the following additional criteria when evaluating a proposed wind energy facility in the viewshed of GMC managed trails, trail corridors, and lands:

1. **Recreational and Cultural Resources:** Areas that contain significant recreational resources such as other trails, shelters, potential future recreation areas not presently managed by GMC, and significant cultural or historic sites. Impact on recreational use must consider the likely closure of the project site to the public for safety and security reasons, and the project's impact on the recreational experience. Both

existing and future recreational use should be included in the evaluation, as growth in recreational demand may mean the expansion of recreational activity into new areas in the future.

2. **Soils and Topography:** Soils in mountain areas are generally more fragile than soils at lower elevations. Proposed projects should aim to minimize soil disruption by siting facilities in suitable locations.

## **MITIGATION OF WINDPOWER PROJECTS**

Any proposed wind energy facility which could cause significant impacts should include mitigation measures such as, but not limited to:

1. On-site mitigation at the project site, and/or impact fees for permanently impacted recreational, scenic, natural and cultural resources.
2. Use of an Audio Visual Warning System (if hazard lighting is required by the FAA) to mitigate the impacts of nighttime lighting and daytime visual impacts from turbine color.
3. Restoration of the impacted site, e.g., road closures and measures to restrict unauthorized motorized or mechanized access throughout the life of the project.
4. Ongoing monitoring of impacts to the Long Trail System and corridor at the windpower project operator's expense.
5. Complete decommissioning and total restoration of the facility upon closure. This includes the development of a decommissioning plan prior to construction and the establishment of a bonded fund to ensure adequate resources to implement the plan at the time of decommissioning.
6. Enhancement of the long-term protection of the Long Trail System corridor, Appalachian Trail corridor, Kingdom Heritage Lands, and trail viewsheds through fee or easement acquisition or other permanent restriction of other lands to ensure no net loss of recreational resources within the mountains of Vermont.

GMC recognizes that there has been relatively limited experience with windpower facilities in the Northeast mountains, and expects that the guidelines in this policy will be reviewed and revised based on future experience and with the development of state siting guidelines or regulations for windpower projects.

## **DEFINITIONS**

- A. **Long Trail:** "The Long Trail is a primitive footpath, continuous from the Massachusetts border to the Canadian border, providing people the opportunity to enjoy the Green Mountains in their varied natural and cultural conditions, under their own effort and in a degree of solitude that insures maximum contact with the environment." ("The Ideal Long Trail", Green Mountain Club, 1982)
- B. **Long Trail System:** This includes the footpath of the Long Trail/Appalachian Trail and Long Trail, the footpath of the designated side trails; the designated shelters, tent sites, outhouses, trailheads and any other associated facilities.
- C. **Long Trail System Corridor:** The Long Trail System corridor is defined by the *Long Trail System Management Plan* – the guiding policy document for the Green Mountain Club's protection and

management of the Long Trail System. It is specifically defined as the 1000-foot wide corridor centered on the Long Trail, irrespective of ownership. A 1000-foot wide corridor is “designed to maintain and promote the experience of hiking in a natural, wild, or rural setting; and to enhance scenic beauty, solitude and contact with nature, while preventing degradation to the environment” (Corridor Protection Standards, Long Trail System Management Plan).

- D. ***Trail Viewshed:*** The zone extending beyond current and future GMC managed trails, trail corridors, and lands to the horizon.
- E. ***Trail Corridor:*** A linear tract of land that contains a hiking trail or may contain a hiking trail in the future.
- F. ***Long Trail Lands:*** Lands conserved for the purpose of protecting the physical, natural, and cultural resources of the Long Trail System and corridor.
- G. ***Kingdom Heritage Lands:*** For the purposes of this policy, the approved trail corridor within the Kingdom Heritage Lands.
- H. ***Appalachian Trail Corridor:*** The Appalachian Trail corridor in Vermont is defined as the Appalachian Trail east of Sherburne Pass in Killington to the Vermont/New Hampshire border in Norwich and its designated side trails, shelters, conserved lands, and associated facilities.
- I. ***Wind turbine:*** A single structure consisting of a tower, a nacelle, and blades that rotate in the wind for the purpose of generating electricity.
- J. ***Wind Energy Facility:*** Either a single wind turbine or a wind farm and all associated power lines, roads, buildings and structures.
- K. ***Wind Farm:*** A grouping of wind turbines in a single location.
- L. ***Associated Facilities:*** The developments and improvements required to install, maintain, and operate a wind farm. These consist of roads, powerlines, buildings, fences, electrical sub-stations and any other man-made developments and man-altered conditions relating to the wind turbines.

**Policy created March 22, 2009; amended September 26, 2009; amended March 24, 2012.**



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## Wind Power: Public Policy

AMC works to promote the development of state policies and regulations that address the specific characteristics of wind power development, provide a high level of protection to important natural resources, and guide development to suitable sites. To date our work has been focused in Maine, New Hampshire and Massachusetts.

**Maine:** AMC served as an alternate member of the Governor's Task Force on Wind Power Development. The recommendations of the Task Force were enacted into law in 2008. The new law provided a streamlined permitting path for wind power development in portions of the state deemed most suitable for this development, while retaining existing protection for natural resources. The law also changed the approach to evaluating scenic impacts in recognition of wind power's unique visual aspects, while retaining strong protection for scenic resources of state and national significance. AMC continues to work with Maine's Land Use Regulation Commission as it develops more detailed guidance to implement the new regulations in the state's unorganized territory.

**New Hampshire:** AMC, working in cooperation with the Audubon Society of New Hampshire, convened an ad-hoc group of stakeholders that developed [Conceptual Wind Power Siting Guidelines](#) for permitting and siting wind power in the state. The group included representatives of conservation organizations, the wind power industry, state agencies, and municipal interests. The guidelines were presented to the legislatively-established Energy Policy Commission and included in the commission's 2008 final report to the legislature. AMC continues to promote the adoption of these guidelines into official state policy or regulation.

**Massachusetts:** AMC served on the Renewable Energy Siting Task Force, established by the Green Communities Act of 2008. The Task Force drafted legislation that would create a more straightforward permitting process for wind power projects, while directing the state to develop standards for siting projects that are at least as protective of natural resource values as existing state regulations. The legislation is currently under consideration by the state legislature. If enacted, AMC will continue to play an active role in the development of the siting standards.

**Public lands:** Wind power development on public lands is being considered across the region. The Green Mountain National Forest is evaluating the first proposal for wind power development on any National Forest, and development on state lands has been a topic of considerable discussion, particularly in Massachusetts and Vermont. AMC has been urging public land managers to update and clarify their land management plans to address wind power development, and to conduct comprehensive assessments of their land holdings to determine what areas (if any) could be considered for development without compromising the high level of resource protection expected of public lands.



Photo: David Publicover

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**NH: AMC & Audubon Society of NH convened stakeholder ad-hoc group and developed the following:**

**Conceptual Framework Windpower Siting Guidelines for New Hampshire** (pp. 3-4)

The following document was prepared by an ad-hoc working group with an interest in appropriate windpower siting as input to the Wind Siting Subcommittee of the New Hampshire Energy Policy Commission, established by the legislature in 2006.

The New Hampshire Energy Facility Evaluation, Siting, Construction and Operation Act (NH RSA 162-16:H.IV) sets forth the following criteria for the permitting of energy facilities under the jurisdiction of the state's Site Evaluation Committee (SEC):

The Committee must find that the proposed site and facility:

- a) Applicant has the adequate financial, technical, and managerial capability to assure construction and operation of the facility in continuing compliance with the terms and conditions of the certificate.
- b) Will not interfere with the orderly development of the region with due consideration given to the views of municipal and regional planning commissions and municipal governing bodies.
- c) Will not have an unreasonable adverse effect on aesthetics, historic sites, air and water quality, the natural environment, and public health and safety.
- d) Operation is consistent with the state energy policy established in RSA 378:37.

**GENERAL GUIDELINES FOR APPROPRIATELY SITED PROJECTS**

Ideally, appropriately sited windpower projects will have the following characteristics:

- ↓ Have substantial support from the local community.
- ↓ Provide positive economic benefits to the local community.
- ↓ Are compatible with local land use plans and regulations.
- ↓ Avoid or minimize degradation of the quality of life for local residents.
- ↓ Maximize the amount of power generated for the given level of impact.
- ↓ Avoid or minimize disturbance of populations of or habitat for rare plant and animal species.
- ↓ Avoid areas that create a high risk of mortality to birds and bats.
- ↓ Avoid or minimize disturbance of uncommon or high-quality wildlife habitat.
- ↓ Avoid or minimize fragmentation of large blocks of natural habitat.
- ↓ Avoid or minimize disturbance of steep or fragile soils.
- ↓ Avoid or minimize disturbance of wetlands, streams and riparian areas.
- ↓ Avoid or minimize disturbance of areas of high recreational use, especially use that is focused on the natural environment.
- ↓ Avoid or minimize degradation of scenic views, especially from areas of recognized high scenic value that depend on the undeveloped natural environment for their appeal.
- ↓ Have necessary infrastructure (access roads and transmission lines) on-site, in close proximity, or able to be constructed without undue impacts.
- ↓ Are located in areas that have been and continue to be altered by human use (e.g., developed or agricultural areas or lands under active timber management)<sup>4</sup>.

## **RESOURCE AND SOCIAL ISSUES TO BE CONSIDERED** (pp. 6-7)

The issues listed here are primarily issues of environmental or social concern. Other issues relevant to the permitting criteria listed under RSA 162-H also need to be considered but are not discussed here (for example, grid interconnection and system reliability, the financial capability of the applicant, the clean air benefits of a proposal, etc.).

### **Rare plants (Appendix A.1)**

**Rare and exemplary natural communities (A.2)**

**Soils and topography (A.3)**

**Waters and Wetlands (A.4)**

-Wetlands

-Streams and riparian areas

-Water quality

**Wildlife (A.5)**

**Existing land use (A.6)**

**Existing infrastructure (A.7)**

**Recreational use (A.8)**

**Visual (A.9)**

-Views from recreational and scenic areas

-Views from communities and residential areas

**Cultural, historic and archaeological features (A.10)**

**Noise (A.11)**

**Other "nuisance" issues (shadow flicker, hazardous waste, etc.) (A.12)**

**Conservation status of land (A.13)**

**Regional conservation plans (A.14)**

**Municipal issues (A.15)**

-Compatibility with local land use plans and regulations

-Support of local officials and citizens

-Social and economic impacts

# Wright Energy, Inc.



January 23, 2013

The attached is a letter written to Tony Klein which was written as a series of suggestions for streamlining the Group Net Metering legislation currently in place.

The purpose of the letter was to help the State accelerate the process of permitting solar photovoltaic projects so that they might better enable the State to fulfill its renewable energy objectives.

There is an underlying conviction that I hold which is that solar technology is hampered by encumbrances placed on smaller more community centric applications in favor of large commercial installations not suited to the Vermont mystique.

I hope it is helpful.

David Russell

# Wright Energy, Inc.



January 21, 2013

Representative Tony Klein  
Chairman, House Committee on Natural Resources and Energy  
House of Representatives  
State of Vermont  
115 State Street  
Montpelier, VT 05633-5301

Re: Streamlining Solar Projects

Dear Mr. Chairman,

You were kind enough to spend time with me and others on Inauguration Day discussing the obstacles to renewable energy installations in the state. I told you, as a project development operator, that there were practical suggestions that could be made to help streamline the permitting process, to improve the economics and increase the impact of the legislation. The following are a list of thoughts for your consideration.

1. The SPEED program should be abandoned because it constitutes an unnecessarily high cost to the utility, the state and the utility's customers, the installations are unnecessarily large and intrusive to the landscape, it has attracted out of state operators providing few jobs for Vermonters and it detracts from more community based efforts and financial subsidies that might be made available were it not siphoning resources.
2. The Group Net Metering legislation (GNM) should be strengthened to assist individuals, communities and commercial developers to make installations more economically viable; specifically, the adder should be set at a flat 6 cents per kilowatt without a 20 cent cap and the adder should remain in place for 20 years not 10. In all cases, the economics of payment for PV installations require more than ten years for a proper payback.
3. The limit on projects qualifying for GNM should be expanded to one megawatt (MW). It may have been an unintended consequence of the legislation but there is just enough in the economics of GNM to provide meaningful savings to commercial beneficiaries of the monetized credits, a reasonable return to the developer and the funding source. I can assure you no one is getting rich but you created the framework for each participant to have an adequate incentive. You should want to build on the current limit to a point where you are not creating solar eyesores (one MW occupies approximately eight acres)
4. Green Mountain Power (the "Utility") has subtly changed course since the merger and is now becoming the principle problem in permitting especially for larger projects that take

advantage of the upper limits of GNM. The Utility should be instructed to “get on board” for streamlining the permitting process up to the maximum allowed under the legislation by providing quotes for prospective projects before the CPG is filed. As it stands, the developer knows nothing of what will be required in the way suitability or impact studies in order to get the Utility’s acceptance or approval of a CPG application until after it has been filed. We have seen charges quoted ranging from \$3,500 to \$1 million by the Utility but only after land acquisition, pre construction engineering, system design and equipment research has been completed. If an interconnect is going to be prohibitive, valuable assets are wasted in what amounts to a guessing game. In California, the utilities routinely provide the developer with costs for studies, transformers and interconnection before the permit is submitted.

5. I am aware that ANR has proposed changes to permitting that would require preapproval for site selection. While our experience has been that ANR is responsive as a part of the permit process, I am not sure why they need to be a pre condition to filing other than to collect fees or create an encumbrance. In so many words, the ANR portion of permitting seems to be working and if it ain’t broke.....
6. The Utility should be barred from building or installing wholly owned PV production projects. Vermonters are now faced with a monopolistic power that has interests in the state’s hydroelectric, natural gas and electric facilities. Whether it is the case or not, there is the perception that permit approval, interconnect studies or charges are slanted to favor wholly owned projects and unnecessary obstacles have recently surfaced when dealing with the Utility. For one project we are developing we were told that the cost would be \$31,000 last year and when we approached the Utility again this year there was \$40,000 to \$60,000 of additional expenses indicated.
7. If a developer pays for interconnect equipment and either upgrades or starts another project, the Utility should be required to reimburse or provide credit for previous payments. As it stands, if I were to fast track a 150 kW installation and upgraded to a 500 kW project, the transformers for the smaller project would be taken by the Utility (even though I paid for them) and I would bear the full cost of the larger transformer needed for a larger installation.
8. The current rules governing net metering discourage consumers from installing properly sized arrays for PV because they are aware that excess credits will be zeroed out at the end of the year. The Utility makes a valid point in objecting to cashing out excess credits at the residential rate or commercial rates since all of these programs invade their operating margins. However, consumers should be encouraged to properly size installations to make maximum use of renewable resources. The net metering concept should be revised to allow for unused monetized credits to be cashed out at the end of the year. However, the payment for such credits should be set at the wholesale rate the Utility would pay to an independent power producer. Applied in the current environment, this would mean receiving credits at rates between 2.5 and 9 cents per KWH
9. The Public Service Board needs to have staff expansion to handle the application flow that has emerged as homeowners, businesses and municipal operators have tried to take

advantage of the GNM subsidies. As it stands, all permits flow through one person and that person is virtually inaccessible. We have had fast track permits take up to eight months for approval because our submittals had errors.

10. There should be a statewide moratorium declared for property tax revaluations for solar installations. As it stands, each project is dependent upon the good will of a local Select Board to give assurances that such installations won't be impacted and these assurances are only good for as long as the current Board is not changed and a new mind set comes to office. Hard to run a business with a modest income stream when exogenous costs can crop up at the whim of a local Board.
11. Vermont's banks should be called upon to appear before the Committee and explain their lending criteria for PV installations. Vermont's banks have been embarrassingly slow in developing realistic lending criteria. These installations should be treated like home mortgages and the lending criteria should reflect it. It took us the better part of a year to persuade VSECU to make renewable energy loans. To my knowledge, with the exception of Mascoma Savings Bank (a New Hampshire based institution) there are no commercial loans available on terms the projects can support (other than SPEED projects).
12. The State's Treasurer should be called upon to provide support for solar installations. I know that she is quite interested in providing financial assistance. I have suggested that the PACE program be sponsored at the state level to facilitate and accelerate the availability for homeowners to make residential installations. The same could be said for commercial projects, or, to follow her suggestion, perhaps the state could make deposits in banks where projects were financed as a moral factor or incentive for the bank to lend.

I hope these ideas are helpful. I am philosophically committed to both renewable energy and the quality of life in Vermont. I think the GNM is an inspired piece of legislation and hope that it can be refined and embraced to make a meaningful contribution to the goal of 90% renewable energy by 2050.

If there are questions or further comment required, please feel free to contact me.

Very truly yours,



David Russell  
President

**Industrial Biomass and Vermont Energy Policy**  
**Drafted by Jan Ameen Westminster, VT**  
**November 12, 2012**

In March 2011 Governor Shumlin said, "I am committed to aggressively fighting interstate air pollution and climate change. Coal-fired power plants in the Midwest are significant emitters of carbon dioxide, which is the primary greenhouse gas contributing to climate change. Climate impacts in Vermont include the loss of our hardwood trees including Sugar Maples, the spread of insect pests impacting our forests, waters, and public health, and increased soil erosion."

While Vermont is leading the way in developing systems that support Governor Shumlin's position, industrial biomass has been shown to contradict his vision. Research has shown that biomass power plants:

- directly contribute more carbon dioxide to the atmosphere than do Midwest coal-fired power plants
- require woody material from a multi-state region which increases the probability of introducing invasive pests
- create acid rain which damages our forests, including Sugar Maple trees
- have a deleterious health effect, especially for Vermonters suffering from respiratory and cardio-vascular ailments.

Vermont should, and can, do better than including industrial biomass in its Comprehensive Energy Plan. It should follow the lead of other states in recognizing that the negative environmental and health impacts of industrial biomass far outweigh any benefits.

## **1. Emissions**

Woody biomass plants generate air pollution, including greenhouse gases (GHG) and particulate matter (PM). The trucks transporting wood and removing ash will generate additional GHG and PM. Together these emissions are considered to be a major source of air pollution and acid rain by the ANR and a respiratory health hazard by medical groups.

Research conducted in 2010 by the Manomet Center for Conservation Sciences, and funded by the Massachusetts Department of Energy Resources, revealed that burning woody biomass generates more carbon dioxide than do coal or natural gas power plants of equivalent size. They found that there is a carbon debt with biomass of 20 years more than coal and 90 years more than natural gas.

Two biomass plants currently operate in Vermont. There are several operating in New Hampshire and Maine. There is also one new 35 MW biomass plant being proposed in North Springfield. According to the developer's application, the facility will release 1,176 tons of GHG per day, 429,000 tons per year and 21.5 million tons over the plant's lifetime. The ANR's air permit division considers the North Springfield project to be a "major source of air pollution and a major source of acid rain."

The North Springfield plant anticipates that between 50 and 120 trucks will enter and leave the plant each day. These trucks will generate a significant amount of GHG emissions and particulate matter. Additional trucks will inevitably be required to remove the ash thus contributing even more air pollution from the plant's operation. (The plant developer has not yet

specified what will happen to the 1.5 tons of ash generated every hour. Ash from biomass facilities contains dioxins, arsenic, lead, and possibly radionuclides.)

According to ANR's Air Pollution Control Division's draft air permit for North Springfield's proposed facility:

"The estimate for potential GHG emissions includes the distillate fuel oil that would be used for 4 cold startups of the boiler. Each cold startup is expected to take 11 hours and consume an estimated 9,000 gallons of distillate fuel."

"Ultra low sulfur distillate oil (ULSD) may be fired in a burner system with a capacity of up to 160 MMBtu/hr for start-up until the steam output reaches approximately 50% load. The plant is proposed to run as a base load plant with a limited number of startups each year." This means that fossil fuel is used to start the wood burning.

"Vermont has not amended its regulations to defer the applicability of permitting requirements for biogenic CO<sub>2</sub> emission sources such as NSSEP. However, because a carbon accounting method has not yet been developed to accurately adjust a bioenergy facility's actual stack emissions up or down based on the induced changes in carbon stocks on land (in soils, plants and forests), such sources are currently subject to air permitting requirements in Vermont based solely on direct CO<sub>2</sub> emissions from the stationary sources. In other words, at this time, air permitting for biogenic stationary sources is not taking into account possible supplemental emissions such as from depleted soils after harvesting or any future carbon sequestration that could result from the use of biogenic feedstocks." This means that the impact of removing trees from forests for biomass impact CO<sub>2</sub> generation on multiple levels.

Vermont policy cannot simultaneously aim to reduce CO<sub>2</sub> and GHG emissions while supporting biomass plants and including them in the Comprehensive Energy Plan.

## 2. Carbon

There has been much debate about whether biomass plants are "carbon neutral." The June 2010 Manomet Center study clearly demonstrated that biomass plants are not carbon neutral. In addition to creating more carbon dioxide than coal and natural gas, when whole trees are used carbon that has been "sequestered" in the trees is released into the atmosphere. This process increases CO<sub>2</sub> generation and exacerbates climate change. Biomass plants have a significant carbon debt for close to 30 years before trees regrow to their previous size when cut for fuel.

The Vermont Comprehensive Energy Plan (CEP) from December 2011 erroneously identifies biomass plants as carbon neutral (VT CEP, page 89) despite the Manomet Center's study being released 18 months prior to the CEP's publication date. Apparently, the DPS has submitted testimony to the PSB indicating that biomass is carbon neutral despite contrary regional and global scientific findings.

The North Springfield biomass plant proposes to burn 550 cords of green wood per day. Over the lifetime of the plant they will burn 10 million cords of wood. This is 20,000 acres of trees a year and 1 million acres of trees over the lifetime of the facility. There is a debate about whether this amount of woody biomass exists in New England, especially when one considers competing

biomass facilities in the Northeast. It has been shown that the McNeil Generating Station in Burlington has harvested and chipped wood in North Springfield and hauled it 120 miles to the facility. An estimate of the fuel usage for trucking for the proposed North Springfield biomass plant totals 161,000 gallons of diesel per year with 1,756 tons of CO<sub>2</sub> generated. Over the lifetime of the plant over 8 million gallons of diesel will be used just for transporting wood to the facility. Other fossil fuel will be used for cutting and chipping the wood. The further the wood supply is from the biomass plant the greater the GHGs and fossil fuel consumption.

### **3. Wood Supply**

There is conflicting information about the availability of wood to fuel additional biomass facilities in Vermont. The CEP claims that around 2001 “the demand for wood processing residues surpassed supply. Since then, the additional demand for wood fuel has been satisfied by forest harvesting.” (VT CEP, page 87) This means whole trees are being used not just forestry waste. When forestry waste is used there is a negative effect on soil health and more carbon is actually released. Removing forestry waste also negatively impacts insects, birds, reptiles, and mammals which consider this “waste” as habitat.

Much of Vermont’s forests are privately owned and it is unclear how much wood is actually available from private land. In order just to feed the North Springfield plant, over 20,000 acres of trees would need to be cut each year. Supply and demand economics lead one to believe that cord wood prices for residential use will increase sharply as biomass plants will be able to pay more than homeowners. The CEP recognizes this fact on page 88. “Increasing the demand for forest products risks raising the prices for lower-grade firewood – a burden that would fall disproportionately on lower-income Vermonters who rely on firewood to heat their homes.”

Also of concern is that the likely source of wood would come from a multi-state region of New England. Other New England states have invasive pests that infect and kill native trees. These include the Asian Long-horned Beetle and the Emerald Ash Borer. With 450,000 tons of wood required per year for the North Springfield plant it becomes obvious that trees from out-of-state will be needed. With greater interstate transport of wood, the risk for introducing invasive species is greatly increased.

### **4. Human Health**

Pollution is generated from most combustion processes. Burning wood is no different. In fact, megawatt for megawatt biomass emits roughly the same amount of particulate matter as burning coal. Despite “best available control technology (BACT)” pollution will exit every biomass stack and into Vermont’s air. Some of those emissions will be GHGs and some will be particulate matter. Emissions from biomass can create ground-level ozone (smog). When inhaled, particulates cause respiratory illnesses. People most at risk from particulate pollution have heart and respiratory illnesses, especially the young, the elderly, and those who are pregnant. Vermont – and the rest of New England – already has high rates of asthma. According to the CDC, in 2008 Vermont’s rate of asthma in adults and in children exceeded the national rate. The CDC estimated that over 60,000 Vermonters were diagnosed with asthma in 2008. That was four years ago and the expectation is that the number is much higher at present. The American Lung Association, American Heart Association, and American Cancer Society all oppose biomass because of the negative impacts of air pollution from biomass combustion.

According to the American Lung Association, “Black carbon, or diesel soot, and ozone not only significantly impact global warming but also endanger public health. Black carbon from diesel, a mixture of 40 different toxic substances, increases the risk of developing lung cancer. Ozone, the most commonly encountered pollutant in America’s cities, damages lung capacity and aggravates asthma. Both pollutants send people with asthma and other chronic lung diseases to the hospital and emergency room. Both cut short the lives of thousands of people every year.”

Vermont is a national leader on managing the health and well-being of its residents. However, biomass pollution is diametrically opposed to enhancing the health and wellness of Vermonters. There is unambiguous evidence that Emergency Room visits increase in proportion to proximity and exposure to carbon emissions from vehicles, fossil fuels, and biomass burning power plants. In fact, the resulting health effects will increase health care costs for the State of Vermont and for Vermont’s health insurers.

## **5. Biomass Efficiency vs. Energy Efficiency**

Burning green wood for electricity has about a 25% efficiency rating. This means that most of the energy stored in the wood is wasted. Even combined heat and power plants have a very low efficiency rating. By comparison, most home heating units are now rated at over 80% efficiency.

New England appears to have an excess of 3,000 megawatts of electrical generation. According to the CEP, a 40 MW biomass plant (electric only) would only generate 1.02% of VT’s load in 2025. Not only is additional generation not needed but the amount of electricity it would add is very low – and at a lower efficiency level.

According to a 2007 Massachusetts Department of Energy Resources document (Massachusetts Saving Electricity: A Summary of the Performance of Electric Efficiency Programs Funded by Ratepayers Between 2003 and 2005), *conservation* is the cheapest source of energy, costing only 3.5 cents per kilowatt-hour. Energy conservation and energy efficiency programs cost less per kilowatt hour than generating new electricity from biomass.

According to Efficiency Vermont’s 2011 report, the organization’s conservation efforts resulted in 790,000 tons of avoided CO2 emissions in 2011. The North Springfield biomass plant will release 429,000 tons of GHGs per year which effectively voids most of the annual gains made by Efficiency Vermont.

## **Summary**

Vermonters have been burning firewood for centuries. It is understandable that many people would assume that burning wood in an industrial biomass plant is the same as burning firewood in a wood stove. The problem is that the sheer magnitude of wood that must be burned to produce heat and/or electricity in a biomass plant changes the equation for greenhouse gases, CO2, toxic pollutants, particulates, and the loss of carbon sequestering trees. Instead of burning 3-4 cords of wood in a residential wood stove, a 35 MW biomass plant consumes 550 cords a day.

If one honestly considers all of the negative environmental and health effects of industrial biomass plants then it is impossible to support their development in a “green” state like Vermont.

Jan. 22, 2013

Ms. Gaye Symington  
Governor's Energy Generation Siting Policy Commission

Please, may I have a few moments of your time? Then take a few more moments to digest the information I am presenting and what these ramifications could mean.

I write to you as an individual, a resident of North Springfield, Vermont for nearly 30 years, a member of North Springfield Action Group (one of the folks against the biomass power plant proposed for North Springfield), a tax paying citizen and lastly a person who values her home, property and quality of life in Vermont.

Recently Gov. Shumlin sent a letter to my husband, Bob dated Dec. 20, 2012. That letter got me to thinking and prompted this letter and the attachments.

Gov. Shumlin stated, "Biomass is my least favorite form of renewable energy. I tend to think it has more potential as a source of heat than as a source of electricity". And..."the decision to build a biomass plant is a decision that must be weighed carefully by the potential host community." You no doubt are researching the pros/cons of biomass for this state and the environment. I am not a scientist, nor an engineer, developer or business person, or a representative of the people at either the town or state level but after reading the Governor's letter a serious concern developed in my thinking over how ethical the steps have been in the decision to place a biomass power plant in North Springfield.

**This is key to my concern:** "the decision to build a biomass plant is a decision that must be weighed carefully by the potential host community". What had we missed? Bob and I, none of our neighbors, nor anyone residing in N. Springfield we've spoken to ever received an invitation to a meeting, a breakfast and even a letter letting us know that a biomass plant was being considered our community. I sat by the hour at the town office perusing agendas and minutes of Select Board meetings back to January of 2008...A timeline attached for details. We hadn't missed anything, because our officials did not disclose Biomass as an agenda item for discussion until the plant was announced for a Public Service Hearing in February of 2012. This is a very important point because now the only true way to question or fight is at great cost and time through the Section 248 hearing process. This is very costly and difficult challenge for the average citizens of North Springfield. I must mention the subject (biomass) made its way in the minutes just a few times...however that was by way of citizens' comments...and not a single stated agenda item was it ever announced. Even though some of those comments were made by our own Town Manager (under citizen's comments?).

**I ask you....what constitutes a community...a few select board members, a town manager and a director of a regional development commission OR its citizens?**

**Never did our officials call a town meeting or a public hearing** to discuss the ramifications: those ramifications include: decreased air quality, increased traffic, poor location, disregard of our own Town Plan, lower property values, visual impacts, and in general the derogation of the quality of life the residents of this community, we must sacrifice these for a inefficient merchant power plant. Not once! They did engage the developer to host a informational meeting with limited questions, one with major changes were submitted to the PSB in a complete change from a water cooled plant to an air cooled facility that now includes over 5 acres of covered structures. A complete change from the original plan submitted in December of 2011 to the Public Service Board. Does that sound like community involvement? Might that make you question the process? One more point ...27 years ago another developer attempted to place a biomass plant at the same industrial area and was sent packing by concerned citizens...so our officials knew there was a prior attempt. I would think that should make them want to sell this idea even more to the citizens, not negotiate behind their backs.

**Inefficiency-** who in their right mind would buy, build, or invest in anything that was 26% efficient? Or 29-31% efficient...IF (and that is only a proposal in this application) they create a thermal heating loop. The McNeil Plant has studied the heating loop idea for years, and it has not been built! There must be good evidence of just why they didn't use it in that larger community. What happens when you use green wood, wet wood...does it burn well? NO! What Vermonter burns wet; green wood? One would think that the efficiency must be affected in a very wasteful way.

**Water Issues** – it was not until the Public Hearing in February that the citizens learned their single source of water supply would be threatened with the plants need of 720,000 gallons of water/day. Springfield needs approximately 800,000 gallon/day now. Approx. 95% of the attending citizens spoke against that issue resulting in an amended application by the developer as a result of the PSB hearing. **WHERE** was our leadership from day one in protecting the residents from this huge issue? **Why** didn't they state on first view of the idea the crucial concern for protection of our water? They changed their application, lowering the need for water. The new plan using environmentally friendly rain water but is cited in the area of our recharge zone for the Towns only aquifer. I would question what might be the long term effects related to this plan? Has our town's leadership studied this question to the complete satisfaction of all concerned and have they told the citizens of that finding to alleviate concerns? We have not been informed.

**Zoning: Compromised/Industrial vs. Residential/Light Industry** - our officials allowed the developers' Landscape Architect to call this area a "compromised landscape and industrial." She was standing not 20 feet from our property – a property which we are paying one of the highest "graded" view taxes in Springfield. To me, we citizens might now consider a challenge for the reassessment of properties surrounding this site and demand lower taxes...since we are

viewing “a compromised landscape and industrial area”. **Who is correct in their assessment? A developers’ Landscape Architect trying to sell a merchant power plant, or an impartial property assessment team hired to assess the entire town?**

The Town Plan uses the wording residential areas ...the Developers’ Landscape Architect call’s it industrial and compromised, at the beginning...then with the new application and a need to sell the idea of the residential thermal loop they offer to 100 RESIDENTS , maybe more...the option to pay to get onto a thermal loop. SO WHAT IS THAT AREA...RESIDENTIAL or INDUSTRIAL ...they change the zoning for whatever their need ...IS THAT ETHICAL? **Why was the Town Plan developed, if it is to be ignored?**

**Air Quality and Stack Height** – The developer’s engineers using Good Engineering Standards stated the stack height should be 290 feet. Now, North Springfield hosts an airport...and this stack is going to be in the path.....but it wouldn’t be if the height were 140 feet! Why are these engineers allowed to practice, if indeed the standard is not going to be followed? This plant sits in a mountain bowl, 140 feet does not exceed the height of the bowl...therefore all the pollutants will drop onto this immediate vicinity. Please take another look at the list of very serious pollutants being emitted from this facility into our air. Please note the American Lung Association, the American Heart Association and the American Cancer Society all are against biomass burning and state how detrimental these emissions are to children, elderly, and persons with lung diseases. **Why aren’t our local officials concerned for the health and welfare of its citizens of North Springfield? Why are they turning a blind eye in regard to the height of this stack?**

**Traffic Patterns** – the town requested a traffic study which was completed in December of 2007. The issues as a result of that study: only one route, with two restricted bridges, poor intersection configuration for large trucks, road conditions – narrow local roads, condition of some roads, curves on... etc., poor signage/industrial park is hard to find, and over-length truck permits are a concern for “trucking companies”. To date this has not been addressed, to date the citizens in that immediate area do not know whose, if any, properties are being sacrificed. There has been no word from the developer or our leadership or VTrans regarding this very crucial part of the traffic pattern. **Again, I ask you...where is our leadership in all this? Where is the disclosure, the information that the Governor says is necessary in placing these types of facilities?**

**Town Plan** - Our Springfield Town Plan (excerpts attached) states at one point, on Page 81, “North Springfield Industrial Park...The North Springfield Industrial Park was developed for industrial uses and should continue to focus primarily on industrial uses. The priority for growth in this is the **reuse of existing structures for industrial purposes. Large truck access in this area is a problem** because of the small residential streets leading to the industrial area...Therefore, uses that do not require large truck access are preferred in this area” ... then on page 85, Goals..2. “**Encourage the adaptive reuse of underutilized and vacant structures and land.** 3. Encourage smart growth in the community through the identification and mapping of optimal

growth area. 4. **Preserve the character of residential neighborhoods.** Objectives: 3. **Adopt performance standards for commercial and industrial development, which set specific limits on noise, air pollution (dust, ash, fumes, vapors, gases), hazardous and flammable materials use or storage, light, vibration, odors, and distance from residential units for use in permitting and site plan review.** 7. **Ensure that most commercial uses are not located in residential area, but rather are limited to....**13. **enhance the preservation of scenic views....**" I could go on and on with these statement from our Town Plan.

This facility will be situated on a 20 acre site; the building will be in excess of 10 STORIES –a height, far exceeding the height limitations in the zoning district that limits structures to a 75 ft height limit. There will be 3 – 65 foot high cooling towers when situated together they will be approximately 2/3 the size of a football field, there will be 2 huge wood chip piles...35 feet high and encompassing 3 acres of roofing, the stack will be 140 (improperly sized) feet high and the by the developers own application, the 5-to-12 tractor trailers/hour in, and 5-to-12 out/ HOUR, 10 to 12 HOURS/DAY, 5 DAYS/WEEK, along with fuel delivery trucks, service vehicles and ash removal trucks (averaging over 3000 lbs per day of ash generation) on a regular basis. Does this sound like this plant is fitting into the surrounding? Or will it be the "Game Changer" our town and community will be stuck with for future generations? Is this the type of community you would be willing to make your home in? raise your children in? or grow old in? And again **...why write a zoning regulation...if the officials turn a blind eye to it?**

Just prior to the Public Hearing three representatives of North Springfield Action Group (my husband was one) met with the Developers at their current plant location. After hearing our concerns...realizing we couldn't be swayed into their thinking that this was a good thing for our area, or for that matter any location in the nation...Mr. Adam Winstanley looked right at them and stated "I don't know why you are fighting this as we have already spoken to the Governor, the legislators' and town officials....this is going to happen!" What in the world were we to think at that statement? Have all of these representatives of "the people" sold us down the river...before we even had the knowledge of this facility? And now we face the Public Service Board, and with all the costs and time needed to fight this...and all the while...we are reminded of that very statement? What would you be thinking...as a citizen? However we must continue to hope and have faith that the Section 248 process will be fair and impartial.

Planning Commission...recently Springfield's planning board decided to rewrite the Town Plan. Now mind you...it was revised only 3 years ago. The reason they gave for doing this, they weren't able to do as much in 2009 as they had wished. Ok, but now they have decided it was beneficial to add language for sustainable energies: Wind, Solar and BIOMASS...not a bad idea. HOWEVER...the new biomass language included the use of municipal and animal waste and construction waste. These types of waste have their own polluting factors, smells, etc. The board patiently let citizens speak, submit wording that would exclude municipal and animal waste and in general appeared to acknowledge our concerns. They stated they would try to rework the wording. The day before their next meeting...my husband received word from the Zoning administrator that stated, "Please let Bob K know there is nothing on biomass tonight.

Before we have that PH on biomass wording for the Town Plan there will be a notice." What happened...well the very next night at the meeting....and not on the agenda, but at the end of the old business this same gentlemen added just one more item....discussion of the wording for the Biomass portion of the town plan...where they again put in wording for animal waste! Again, this appears to be a deceit from our town leadership.

One last item, and I apologize for the length, but you must see from a citizen's prospective the injustice we feel with the blatant disregard to open information regarding a drastic change in our community, air quality and the quality of life that our town. Perhaps state officials are willing to forfeit in the name of "green, sustainable, renewable" a inefficient unnecessary merchant power plant that will generate over 448,714 tons of Green House Gases per year, something that the State and the Governor is so vehemently fighting to curb, we don't get it and we question the rational.

Lastly...what are exactly are federal and state tax credits or federal subsidies for a plant like the one proposed? And why is the government rewarding inefficient, antiquated, forest robbing, green house gas producing Merchant Power Generating plants that receive them? Just this past December the press coverage for the fiscal cliff we were heading for frightened and threatened the nation? You are our elected or appointed officials; you chose to step up, give of yourselves for your towns, state and nation. We certainly do appreciate you for doing just that. However, when your decisions impact the nation's financial future and stability, you need to be held accountable. We want to trust and believe in you. We know many decisions were made a long time ago. However you can change the outcome....you are in power or you can promote positive and real change...you hold the key to financial stability, cleaner air, and you can protect us from decisions that will harm our environments and help perpetuate global warming...you owe it to the citizens and yourselves and future generations to stop making decisions based solely on the "almighty dollar and big business". This plant changed their mind about construction in an August 8, 2009 article. In a July 1' 2011 article, "The project had been put on hold more two years ago, but a change in administration in Montpelier was a key factor in its revitalization, said Chauncey "Chad" Morgan, project manager for Winstanley". He also goes on to say "the project was not dependent on any state or federal tax credits or grants, but that the company would obviously like to take advantage of such incentives." Remember...they are pushing to get a shovel in the ground before the end of 2013.....for the benefits of the credits! However..."the project was not in their own words dependent on the monies". Which is it?

This plant is oversized for this area, hugely inefficient in either application, is not a truly carbon neutral, pollutes the clean air quality of Vermont and the nation, defies the very Town Plan in which they are trying to place it, contributes to greenhouse gases and global warming. They need to get all their permits so they can begin building by the end of 2013...for tax credit purposes!, this leaves us wondering where \$90 plus million dollars of construction costs are coming from...as the developer states he will be paying \$28 million of the \$120 to \$160 million in costs? By the way the anticipated cost numbers are all over the place depending which document you look at. I didn't even discuss all the harm to our wonderful Green Mountains of

Vermont and neighboring states, nor the possibilities of invasive species, infrastructural problems with roadways due to very heavy truck traffic in the small area. Remember the process in which this plant was considered for this area...so very little disclosure to the citizens whose very lives and properties are being sacrificed for it.

Please help us stop the construction of this plant and any others across the nation. Please be the responsible leaders you professed to be during your campaigning. We elected you, or you were appointed by someone we elected. You have ask us to have faith that you care about the citizens and ask us to respect your decisions regarding the impact those decisions have on our towns, cities, states and nation....prove to us...you are worthy of that office or appointment.

The fate of the citizens of a very small community is in your hands with regards to this plant. Please weigh all the facts very carefully; please do not allow lobbyist and the salespeople for this plant to corrupt your decision ...take time to look at all the facts from both sides.

How would you feel, as the citizen of North Springfield if you were faced with the potential of the impact of a huge Merchant power plant in your community without ever having had the opportunity to address the issue in a timely manner?

Thank you so much for your patience in reading my very long letter. I've attached documentation for your perusal and to back up my statements. This letter, full of accusations was very difficult for me to write, as was my letter to the Board that is enclosed. But, these were the facts I was able to find in many hours of researching. I feel strongly that there was an injustice done to our community. I am asking you to consider righting a very large wrong.

Sincerely,



Fredda J. Kischko

C: Jan Eastman, Tom Bodett, Louise McCarren, Scott Johnstone

Encl.

January 14, 2013

Mr. Kristi Morris, Chair  
Springfield Selectboard

RE: North Springfield Biomass Plant

Dear Mr. Morris,

Good evening and thank you for all allowing me a few minutes of your time.

Recently my husband received a letter from Governor Shumlin thanking him for taking the time to share his thoughts and research regarding biomass energy in Vermont. My husband Bob and two additional members of NOSAG, along with Senator McCormack met with the Governor in December to discuss the issue of placing a huge power plant in N. Springfield and other issues that are influencing climate change. In that letter he states "Ultimately, I believe that Vermont must weigh the benefits of biomass against the concerns of communities in which these projects are proposed. The decision to build a biomass plant is a decision that must be weighed carefully by the potential host community." Even the Governor is concerned with Biomass for electricity.

Since the announcement of a 25-35 Mw power plant in the industrial park of North Springfield by way of the public service hearing almost a year ago our lives haven't been the same. We and many citizens wake up and go to sleep worrying, planning, writing, reading, researching, emailing, organizing and spending hard earned monies on the fight against this inefficient, forest robbing, air polluting HUGE power plant planned for our community. I am disgusted very time I hear the words "sustainable" or "green" when married with the term "Green Biomass" for electricity. I am questioning the leadership of our community as well as our nation in supporting this type of environmentally threatening inefficient antiquated enterprise.

Even Massachusetts has laws to make these facilities at least 50% efficient if they sell renewable energy credits. Biomass, like solar, hydroelectric and wind power, have long been considered by many government agencies to be renewable, based on the fact that wood can be regrown. But there has been debate over some biomass plants because of their emission of smoke and other pollutants. The Massachusetts Department of Energy Resources has implemented new regulations that they would no longer treat biomass plants as "greener" than plants burning fossil fuels if they don't achieve new efficiency standards. Massachusetts is the first state to take this step. The state now excludes plants with efficiency rates of less than 50% — that is, plants that turn less than half of the energy created from burning into electricity—from the renewable-energy certificate program or what is commonly know as "RECs". Many biomass plants now turn only about 25% of the energy released by burning into electricity. The wood used in these plants comes from logging and mill waste, and also, in some cases,

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from whole trees, we are encouraged with the actions taken in Massachusetts in placing restrictions on these types of facilities with efficiencies of less than 50%!

On October 29, 2012 an Associate Editor of Renewable Energy World, Meg Cichon reported the following, "On the heels of the recent biomass regulations imposed by the Massachusetts Department of Energy Resources (DOER), the 50-MW Russell Biomass plant, which has been in the works since 2005, has been terminated." This reinforces the fact that others in NE states are doing the right thing, why would Vermont take a step in the wrong direction?

I have spent hours reviewing Select Board agendas and meeting notes from as far back as January 2008.

How transparent have the leaders of our community been regarding this plan? I've enclosed copies of the agendas and excerpts from any language pertaining to Winstanley, biomass, traffic in that area, and Act 248 (which should read Section 248), etc. I count 0 times this plant was on the agenda. And 8 times (until the PSB hearing) it was mentioned in the minutes as being minimally discussed in some capacity. I've enclosed a couple articles from the Rutland Herald during those few years. And two reports from SRDC, ones a citizen would have go look for. I am not an investigator; I've spent much time trying to collect early information to support the fact that our leaders did embrace the community with the opportunity to weigh in on this very, very important decision. I regret to say, from my perspective....that was not the case.

I even wonder how they came to address any discussion regarding this project since I believe their meetings are public and open. And since I found NO mention of a public meeting on any agenda to inform or discuss the plant, how did they come to their conclusion to exclude citizens from this debate, or further more to not oppose the plant? In the handbook under Vermont League of Towns: 2. Agendas, a. Content. "While the open meeting law does not specify what must be contained in a meeting agenda, the Vermont Supreme Court has routinely interpreted the open meeting law with an eye toward making information available to the public."

The 2009 Town Plan was approved by the Select Board. I've taken many excerpts from that Plan that I felt illustrated areas of importance when considering a HUGE Power Generating Plant (as has been the word used by Mr. Forguites on 1/23/12, and Mr. Morris at a public meeting at the high school) for the village and small industrial area of North Springfield. Please see the attached excerpts. How did the Board justify, when presented with this idea from the very beginning...and who knows just when that was....could you even give it consideration at that location? Page 81 of Town Plan, "North Springfield Industrial Park...The North Springfield Industrial Park was developed for industrial uses and should continue to focus primarily on industrial uses. The priority for growth in this is the reuse of existing structures for industrial purposes. Large truck access in this area is a problem because of the small residential streets leading to the industrial area...Therefore; uses that do not require large truck access are preferred in this area. By doing a small amount of research...one of the premier studies from our own government, 2/2000 NREL (National Renewable Energy Laboratory Study), Lessons Learned from Existing Biomass Power Plants, John Irving, the station superintendent, believes that the primary lesson

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learned from the McNeil plant experience is careful attention to the siting of a biomass-fueled plant. The plant's site has caused a number of problems and extra expenses over the years: a permit requirement to use trains for fuel supply, high taxes, high labor rates, local political involvement, and neighborhood complaints about odors and noise. There are advantages of an urban setting, such as the ability to obtain urban wood wastes. Although Burlington's urban wood waste supply is a small fraction of the plant's fuel requirement, it effectively lowers the average cost of fuel and avoids costly and environmentally poorer choices for disposing of this material. Linking the plant's steam output to a district heating system has been studied, but has not yet been implemented because of low alternative energy costs causing marginal economic benefits. Generally speaking, it is best to site a biomass plant as close as possible to the center of its fuel supply, and far from residential neighborhoods.

The Manomet, a major study also states that plants like this are not carbon neutral.

It is also very compelling that Ms. Visering, the author of the Visual Impact Study for the petitioner, calls our area in North Springfield "compromised and industrial". That's an interesting opinion upon speaking with the town they don't like to use the term "View Tax" but they grade your property on the 'view' but refer to it as "grade", with the average grade of 1.0 in Springfield, our home has a property grade 2, twice the average yet being called by the professional as both "compromised and industrial" landscape. It is interesting that the amended version of the application now has made the offer to 100 plus "residents" a thermal heat loop, if you pay for the connection fee. So are we "industrial and compromised" or "residential and small industrial?"

Let's talk just for a moment about the water. 720,000 gallons of water was needed. The town's own water source was being threatened....and it became the citizens' responsibility to research and speak publicly to bring about an amended application. You were responsible for putting a fear in the hearts of the community.

Stack Height? By the petitioners own application, created by professional engineers....the 8 foot diameter stack should be 290 feet tall. However since North Springfield has an airport, why they will just cut the height of the stack to a mere 140 feet. Keep in mind the McNeil plant has a 10 foot diameter 257 foot stack. Why do engineers have standards and use good engineering practice guidelines? Where does that put all the pollution coming from the stack? Especially since the village is located in a bowl of hills and mountains?

Truck Traffic....ironically my timeline begins with a 12/07 traffic study ~~study~~...poor intersection for large trucks, narrow local roads, curves, and so forth...I've enclosed that as well. And to date your citizens still question why a business would be permitted requiring the use of 5-12 (x2) tractor trailer trucks per hour, 10 hours a day, 5 days per week into that area. The citizens STILL have not been given any information regarding the traffic patterns or permitted to participate in any discussions related to any changes in the possible traffic improvements. Nor do they know which properties might be threatened. That certainly gives a resident peace of mind.

January 14, 2013

In my research I found that the petitioner would be providing the first \$28 million of the cost of the plant for the "eventual \$120 million" cost. It's interesting that the PSB Application to the PSB puts a value of the facility at \$168 million. What level of Federal and State tax incentives are being used to fund the facility, are we the tax payers the "real silent partners"?

Mr. Winstanley also stated the town would not bare the cost of a new road if necessary. Just who funds the federal and state governments ... THE PEOPLE! For weeks the news across the nation cried for our legislators to help resolve the pending financial crisis to avoid the government's fiscal cliff...if in fact Winstanley is relying on over \$92 million in funding...isn't it in fact our monies and shouldn't we in fact have a greater voice in how those monies are being spent, especially in our own community...and in my opinion, this inefficient plant does not belong here or anywhere in the nation...if we are concerned about green house gases, emissions and a clean and healthy environment we should not be throwing our monies away on inefficiencies.

Let's talk about the Town Plan once again...interestingly...due to the inability with time constraints in 2009.....the Town decided to rewrite the plan this year. But in that new plan the language being considered under the new Biomass category read: Biomass for energy production is renewable materials such as wood, agricultural waste and municipal waste..... Converting current municipal solid waste, farm waste and other biomass can help to reduce pollution as well as ease the burden on waste management facilities. You posted this language on the Springfield Town site to be considered? You were satisfied as our leaders to allow language that broadens what the proposed wood chip plant could burn in the future? Human and animal WASTE and GARBAGE???? And that is supposed to help the residents feel confident? Again you waited until the public came forth requesting new language. And we did appreciate having a friendly debate and informational meeting with you. However, that language is still under debate as the planning board recently slid the discussion of proposed language into the end of old business during the last meeting, rather than announcing it as an agenda item ahead of time for concerned residents to participate.

As the towns leaders, you chose to step up, I applaud that you want to give of your time for your community in this capacity. But when you do that, we the citizens expect from our Board professionalism, trustworthiness, and being forthright, as well as being informed leaders. We expect leaders who lead and are not lead into difficult decisions by sacrificing the health and quality of life of our entire community by a few out of state developers in something they have no experience in.

Leaders who understand that a person's family, home, property, peace of mind and quality of life and the decision they made to be a resident of Springfield was one of the most important decisions of their life. When you make a decision that completely alters a community, create a game changer for its citizens....do you have that right without our informed participation? I truly do not believe you should.

During the Public Service Hearing in Feb of 2012, over 95% of the folks gathered there spoke out their concerns against the facility...95% WHY have you forced the town's citizens to do all the work protecting our community? WHY are you not listening to their voices? This was also true for the Agency

January 14, 2013

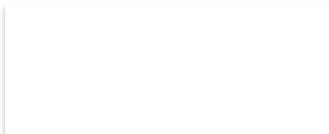
of Natural Recourses Public Hearing on the Air Permit held on August the 8<sup>th</sup>, 2012 at Springfield High School where over 95% of the folks gathered and spoke out against the facility and voiced concerns about the emissions, green house gases, stack heights and keeping our Vermont air clean.

Speaking for myself, my husband and many citizens, we have neither peace of mind, faith in our leadership, nor do we envision a quality of life in the Vermont we chose to live in. I truly cannot understand how you have chosen to sacrifice the health and welfare of an entire village for this plant. How do you sleep at night? Again, thank you for the time you have given me. This was not easy for me to say, or believe, but I truly am appalled by the way this came to be, and it is especially ironic that we purchased our home 27 years ago just at the time another developer tried to put a biomass plant in North Springfield and was sent packing.

One last note, I will be sending along a copy of my letter and all the attachments to the Governor to inform him of how our community was given the opportunity to participate in this village and environmentally changing decision.

Respectively submitted,

Fredda J. Kischko



c: Board Members: Michael Knoras, Peter MacGillivray, David Yesman, Stephanie Gibson

PETER SHUMLIN  
Governor



State of Vermont  
OFFICE OF THE GOVERNOR

December 20, 2012

Mr. Robert F. Kischko

Dear Robert,

Thank you for taking the time to share your thoughts and research regarding biomass energy in Vermont. It's obvious that you have given this issue serious time and consideration and I appreciate hearing your views. I believe there is no greater challenge and opportunity to Vermont and our world than the challenge to change the way we use and produce energy.

As you know, any form of power generation will have some environmental impacts. We need to find sources that will mitigate those impacts as much as possible. Vermont must come together to find local, clean, low-emission, renewable energy to reduce our carbon footprint and spur the local economy. Biomass power would be one way to accomplish that here in Vermont along with the combined effort of wind power, hydropower, and solar energy. This mixed portfolio allows each form to demonstrate its own unique benefit to the state as an efficient renewable energy resource.

However, I have often said that biomass is my least favorite form of renewable energy. I tend to think it has more potential as a source of heat than as a source of electricity. Ultimately, I believe that Vermont must weigh the benefits of biomass against the concerns of communities in which these projects are proposed. The decision to build a biomass plant is a decision that must be weighed carefully by the potential host community. In addition, any proposed project would require approval from state regulators. As you hear at our meeting, the Agency of Natural Resources and the Public Service Department are actively litigating the Springfield project before the Public Service Board. While there are still hearings ahead, ANR and PSD are committed to thorough review of the project, including any forestry procurement, environmental controls and usual of the thermal loop.

With Vermonters' collective common sense, I am confident we will succeed in leading the United States in renewable energy and energy efficiency innovation. If I can be of further assistance, please don't hesitate to contact my office.

Sincerely,

A handwritten signature of Peter Shumlin in black ink, written over a horizontal line.

Peter Shumlin  
Governor

TIMELINE

- 1/3/08 - 8/11/08 On Agenda-N. Springfield Truck Study (1 pg)- 12/07. John Hall/Winstanley believes that activity is only going to increase in the NS Industrial park, possibly strong growth within 1-3 years. Consultant mentions new 350,000 sq ft building could double truck traffic. Tom Kennedy says town consider regional approach working w/neighboring towns toward a good solution/take matter to legislators
- 2/9/09 NOT on A-but under Priority Business in Minutes...Mr. Forguites informed the Board he attended Press Conference at Winstanley to announce \$150 mil 25 mw plant. Mr. Knoras ask If plant would be eligible for Economic Stimulus (didn't know)..will take 2 years for permitting, 2 yrs construction, buy waste wood - 50 miles radius, employ 25, Etc
- 3/30/09 Not on A- Morris made comment about working w/SWCRPC to devise truck access, Senator McCormack ask for study and present plan
- 8/30/09 Article Rutland Herald- Biomass Plant put on back burner!
- 12/27/10 Not on A.- in SRDC update – discussions are continuing w/Biomass with a possible Announcement sometime in 2011
- 01/24/11 NOT on A.-During discussions regarding tax exemption for IVEK solar field..Ms. Smallheer from the Rutland Herald ask if Biomass would get exemptions.
- 6/2011 Filed under SRDC ...Winstanley formally notified local officials of plant to apply for Certificate of Public Good for 25-35 MW plant..."after four years of planning.....
- 7/1/11 Article in Rutland Herald – Biomass back
- 9/26/11 Agenda item: Act 248 Review - Tom Kennedy to explain the process, town stated not opposed to the project. But would want to be interested parties with air quality, noise, traffic, impact on water. Questions about attorney cost/sharing.
- 10/1/11 Article in Rutland Herald...crash course on Act 248 (should be Section 248)
- 12/22/11 Winstanley's filing to the PSB

Attachment

January 14, 2013 - Letter to Springfield Selectboard

- 01/9/12 NOT on A-Under Citizens Comments in Minutes...Forguites pointed out town had received Winstanley Application to PSB about a week and a half ago.
- 1/23/12 **On Agenda Old Business**: Tom Kennedy was ask to speak at a Select Board Mtg. for Section 248
- 2/13/12 NOT on A, under citizen comments Mr. Morris mentions to Mr. Lockwood who was discussing town condition...the BioMass if approved would add to Grand List
- 2/27/12 **On Agenda-New Business** .....Ingold introduced to the Board...ONLY...no discussion.
- 2/28/12 PSB Hearing
- 3/26/12 Not on Agenda-Citizen addresses board - Mr Pugh ask if Ingold could present of thermal loop
- 5/29/12 **On Agenda-Old Business** – Town hired firm to review town ability to provide water.
- 6/7/12 Article from Rutland Herald –Changes to proposed biomass plant – approx 12 acres of roofs, Flint pursuing fed/state fund for the road. **Flint declined to be specific about potential for new access road.** Winstanley said the road built at no cost to people of Springfield. Winstanley is funding \$28 million of the \$120 million. Add \$350,000 pledge for woodstoves, enough steam & hot water to heat 100 homes in the immediate North Springfield area or possible more if the homes were retrofitted. Traffic issues. The proposed residential loop.
- 8/13/12 **On Agenda-New Business** – Mentions the New application, reminder of the meeting and there will be Public hearing on air draft permit
- 8/16/12 Board attended Town/Planning Commission meeting for update on application
- 10/24/12 Springfield Select Board ...during discussion of terminology for Biomass on revised Town Plan...town official stated in “Nov/Dec 2009” didn’t even have Biomass on “our radar” - Not one Selectboard member or person correct this statement.



**SOUTHERN WINDSOR COUNTY  
REGIONAL PLANNING COMMISSION**

Ascutney Professional Building, Route 5  
Post Office Box 320, Ascutney, VT 05030  
802 674-9201 / fax 802 674-5711  
www.swcrpc.org

North Springfield Truck Study  
Meeting with Springfield Town Officials  
August 11, 2008

- Currently about 300 trucks per day (2/3 medium trucks, 1/3 large trucks) generated by the industrial park
- 4 of the businesses in the North Springfield Industrial Park account for approximately 80% of truck traffic
- Based on responses from a business survey, trucking routes for business fleets are evenly distributed:
  - VT 106 north to Exit 8 at 27%
  - VT 106 east to Exit 7 at 27%
  - VT 10 west & 103 south to Exit 6 at 23%
  - VT 10 west & 103 north at 20%
- Industrial park growth might add nearly 600,000 square feet of new industrial buildings/uses, plus anticipated modest growth in current business truck volumes, combine to roughly double the existing truck traffic
- Issues:
  - Only one route to access the park based on two restricted bridges
  - Poor intersection configuration for large trucks
  - Road conditions – narrow local roads, condition of some roads (Fairbanks, VT 10 west)
  - Curves on South County Road (combined with right-turn from VT 10/Gassetts)
  - HCL near intersections of VT 10/South County Rd, VT 106/Main St (west), VT 106/VT 10
  - Poor signage / Industrial park is hard to find
  - Over-length truck permits are a concern for “trucking companies”
- Possible solutions:
  - Local roadway improvements in North Springfield:
    - Improve, straighten South County Road & Re-establish Carpenter Road or something similar  
( Harry Hill’s bridge improvements – VTrans programmed )
    - Widen Bridge No. 56 on Main St west of Fairbanks Rd
    - New road (steering committee’s preferred option)
    - Park connector road & upgrade/widen Fairbanks Rd
  - Turning lanes on VT 10 at South County Road and VT Route 106
  - Signage improvements – OBDS + “freight entrance” sign, entrance sign, internal signs
  - Improve web-based directions / Companies ID routes for vendors
  - Changes to permitting process
  - *Disbursing traffic*

# Town Plan - Highlights 2009

Goals...1. Improve the safety and levels of service on the main road through the downtown. 6. Improve traffic flow through downtown Springfield. 11 Identify and protect scenic roads to maintain the rural character of the town. 12 Prioritize transportation needs so that most important problems and issues are addressed early.

Objectives...1. Review the traffic impact of development proposals including the impact on the level of service of affected intersections...2. Ensure that access management principles are applied to new use and development of parcels...

Chap 9, Alternative Energy Resources....Wood is another source of fuel for heat and may be harvested from forest in town as well as from nearby towns. It is the goal of the Town to conserve these resources and to promote alternative energy resources.

Page 62..Energy and Land Use Patterns...When land use patterns do not relate to existing infrastructure and development, energy can be lost through excessive transportation distances and unnecessary expansion or extension of facilities and systems.

Goals...1. Encourage citizen participation in energy planning and implementation. 3. Promote enrollment of working forests into the Current Use program in order to promote local production of fuel wood and other forest products, foster good forest management and ensure the availability of these resources for future generations. 11. Promote efficient delivery of energy services. 13. Encourage land use patterns that promote the most efficient use of energy.

Chapter 10, page 65...with increased mobility, residential areas developed in N. Springfield and other outlying locations. Because of this loss (machine tool industry), the challenge is to rekindle the economic growth of the town's and the region's economy, retrain and re-employ the skilled workers; and provide opportunity, advancement, sustained growth and retirement security for its population. Page 66... Much of the facts and conclusions drawn in Regional Strategic Economic Development Plan ,,, Although much of the analysis conducted on the regional level is relevant to Springfield and any local action should compliment regional initiatives, this economic redevelopment plan is based on the needs of Springfield residents and their unique vision for the future.

Pg 73. Ideas for the future...comments at public meetings, LOCAL BUSINESSMEN (notice, not residents) Have recently gathered and expressed interest in developing renewable energy technologies.....throughout the comments, there was a common desire for the local economy to be developed through local, SMALL businesses.

Goals, page 73...focus economic development...9. maintain and enhance "quality of life" in Springfield.

**Page 81 North Springfield Industrial Park...The North Springfield Industrial Park was developed for industrial uses and should continue to focus primarily on industrial uses. The priority for growth in this is the reuse of existing structures for industrial purposes. Large truck access in this area is a problem because of the small residential streets leading to the industrial area...Therefore, uses that do not require large truck access are preferred in this area...**

**North Springfield...the village of North Springfield has easy access to water and sewer and would be a logical growth area for higher density housing and commercial establishments that serve residential areas.**

Page 82, Design and Site Plan Review....Vermont Forum on Sprawl...consideration of appropriate scale of buildings in relation to nearby structures and providing appropriate signs and visual buffers.

Protection of Scenic Views...page 83...Proper land use should take advantage of these scenic views without unduly compromising them..In order to protect these...development along ridgelines should be prohibited or given height limitations so that structures would not stick out above treelines...

Page 85..Industrial..areas are meant to accommodate heavier industrial used that may not be appropriate for mixed use areas, as well as concentrations of lighter industrial uses. Industrial areas should be used both to isolate industries incompatible with commercial and residential areas, and to congregate industrial uses where traffic and other impacts can be lessened by planning and mitigation techniques.

Goals...2 encourage the adaptive reuse of underutilized and vacant structures and land. 3 encourage smart growth in the community through the identification and mapping of optimal growth area. 4 Preserve the character of residential neighborhoods.

Objectives: 3. Adopt performance standards for commercial and industrial development, which set specific limits on noise, air pollution (dust, ash, fumes, vapors, gases), hazardous and flammable materials use or storage, light, vibration, odors, and distance from residential units for use in permitting and site plan review. 7. Ensure that most commercial uses are not located in residential areas, but rather are limited to .... 13. Enhance the preservation of scenic views....19. Examine current land use patterns, to determine future land use from a long term, cost/benefit perspective, in order to avoid additional costs to the town's infrastructure, unwanted sprawl, and the loss of cultural, historic, economic, agricultural, scenic and aesthetic resources.

Chapter 12 Implementation and Relationship to other Plans.. 2. Update zoning bylaws and ....Adopt performance standards for commercial and industrial development, which set specific limits on noise, air pollution (dust, ash, fumes, vapors, gases) hazardous and flammable materials use or storage, light, vibration, odors, and distance from residential units for use in permitting and site plan review

**Town Plan:**

Pg 1. Springfield intends to provide a superior environment and quality of life for its residents, yet it also pursues economic growth. True economic growth does not harm environments or people, but depends on them. The quality of Vermont's environment is what attracts people to live and work here. The reputation of our environment lends value to the name of products made in Vermont. This Town Plan keeps this perspective in mind. The individual sections of this town plan have goals and objectives that support the overall goal of attaining viable economic growth while promoting wise use of environmental resources and a high quality of life.

Statutory Authority: The authority to prepare and implement the Plan is granted to the Town through the Vermont Planning and Development Act, Title 24 of the Vermont Statutes Annotated, Chapter 117, The purpose of the Act is to "encourage the appropriate development of all lands..in a manner which will promote the public health, safety against fire, floods, explosion and other dangers; to promote prosperity, comfort, ...convenience, efficiency, economy and general welfare; and to provide a means and methods for the municipalities and regions of this State to plan..and to implement those plans..".

Page 6: 10. Promote the Connecticut River Scenic Byway and the Machine Tool Trail as destinations for cultural tourism..

Page 7: The health and vitality of Springfield's natural and scenic resources are critical to the quality of life on current residents and to the attractiveness of the town for prospective residents and businesses. This element of the Town Plan outlines the various natural resources in Springfield, presents some of the issues related to those resources and provides goals and policies for their future enhancement and protection.

Page 11 Forest Resources: the other resource land cover category is forested land. Throughout Vermont, about eighty percent (80%) of the land cover is forested with about 20% open land. Springfield is estimated to have somewhat more open land than the state average because of all the open fields in area such as Parker Hill, the Dutton District and Eureka. Conversely, it is estimated that Springfield has less forested cover than the statewide average.

Page 13 Deer Wintering Areas: The boundaries of existing winter deer yards have been mapped by the Department of fish and Wildlife ..but are subject to change due to fluctuations in environmental conditions.

Page 14 Springfield does not have a heavy industrial base or concentrated population that has led to an air quality problem. Accordingly, the town's air quality constitutes an environmental resource that has aesthetic as well as human health benefits. Elements that could negatively impact air quality include: smell, light, particulate matter (dust, smoke, fumes), radiation, and chemical vapors.

Air quality becomes an issue when projects or facilities emit pollution into the air or when traffic increases combine with air inversions to reduce dispersal of exhaust and other pollutants. Pollutants may also travel into the town from other areas, such as acid rain resulting from high stacks in the mid-western states.

Springfield's ambient air quality should be maintained. The town should set an example in not causing pollution through radiation, excessive noise, odor, or air-borne contaminations. Town policies and activities should be made within the perspective of keeping our air quality high....The effects of traffic congestion should be monitored when air quality degrades. The town should be zealous in responding to complaints about open air burning or other activities that violate state air pollution control regulations. The town should take an active role in the review of development proposals or plans that could adversely affect air quality.

Noise and Light Pollution: Noise and light pollution from development can negatively impact the rural character and quality of life of much of Springfield.....Noise pollution at certain levels can dramatically alter the character of a neighborhood.....

Goals: 4. Protect wetland functions, including filtering of pollutants, wildlife habitat, flood control, educations, aesthetics, and erosion control. 8. Protect important scenic resources for future generations. 10. Maintain high standards of air quality.. 11. Ensure that future development does not negatively impact community character of quality of life by developing standards for light, noise, odor, and dust..

Objectives on page 17. 18. Noise and odor pollution at certain levels can dramatically alter the character of a neighborhood. The town should be aware of the noise levels of its own activities, and should work to establish appropriate noise and odor thresholds for the review of proposed developments.

Page 27 Housing: Wages and Income.....In order to keep those with moderate or higher incomes in town, the town may need to address issues other than housing, such as quality of life, education, recreational resources, and the revitalization of the downtown.

Page 38 Transportation: The location of the interstate in relation to industrial areas impacts the number of trucks and heavy vehicles using Route 11 through the center of town. In addition, the increased number of automobiles on the road; automobile-centered retail development; more dependence on truck delivery with larger vehicles; and increase in commuter traffic through town to and from I 91 have created peak hours of heavy traffic. In the down town the location of Routes 11, and the main connecting side streets, the intersection misalignment, the varying road width, and the inadequacy of signals and signage adds to the traffic circulation congestion and delays during the peak hours...

When the roads of the Town of Springfield have been improved using the tools mentioned about, they will accommodate more traffic....

Agenda - Board of Selectmen - Monday, February 9, 2009 - 7:00 P.M., 96 Main Street -  
Third Floor - Springfield, Vermont

**MONDAY, FEBRUARY 9, 2009**

**TOWN OF SPRINGFIELD**

**BOARD OF SELECTMEN MEETING**

**7:00 P.M.**

**SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR**

**AGENDA**

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**WELCOME:** Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Mark Blanchard, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.

**A. CALL TO ORDER AND ROLL CALL:**

**B. MINUTES:**

1. Regular Board Meeting - January 26, 2009
2. Budget Workshop - January 14, 2009
3. Public Hearing - January 19, 2009
4. Special Board Meeting - January 19, 2009

**C. ANY REQUESTED ADDITIONS TO THE AGENDA:**

**D. CITIZENS TO ADDRESS THE BOARD:**

**E. PRIORITY BUSINESS:**

**F. PETITIONS AND COMMUNICATIONS:**

**G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:**

1. Springfield Police Department Monthly Report - January 2009

**H. ORDINANCES AND RESOLUTIONS:**

**I. OLD BUSINESS:**

1. Ellis Block Grant Forms

**J. NEW BUSINESS:**

1. Certificate of Highway Mileage

2. Parade Permit Application

**K. LEGISLATIVE REPORTS:**

**L. CITIZEN COMMENTS:**

**LOCAL CONTROL COMMISSION:**

Liquor License Renewals

Tobacco License Renewals

**M. ADJOURNMENT:**

*minutes from Feb. 9, 2009 meeting*

**E. Priority Business** -Town Manager Forguites informed the Board that he had attended a Press Conference held that day at Winstanley Enterprises in North Springfield. The purpose of the Press Conference was the announcement by Winstanley Enterprises that it plans to build a \$150 Million, 25-megawatt wood-fired power plant next to its building in the North Springfield Industrial Park.

Mr. Forguites stated that the plant would be built on twenty acres of land adjacent to the former Fellows Corporation plant, which is owned by Winstanley Enterprises. The plant would buy what the company called "waste wood" from area loggers and foresters in a 50-mile radius of the North Springfield plant. It would produce enough electricity for 25,000 homes. Mr. Forguites noted that the plant would need about one hundred (100) people for construction and a staff of about twenty-five (25). Mr. Forguites also noted that about one hundred fifty (150) jobs would be created producing the woodchips needed by the plant. The funding for the plant would be asset-based funding. Mr. Knoras asked if the biomass plant would be eligible for funding under the President's Economic Stimulus Package. Mr. Forguites replied that he did not know. The project will take about two (2) years to get all the necessary permits and two (2) years to construct so it will be about four years before the plant will open.

**Public Hearing and Agenda - Board of Selectmen - Monday, March 30, 2009**

*MONDAY, MARCH 30, 2009*

*TOWN OF SPRINGFIELD*

*PUBLIC HEARING - 7:00 P.M.*

**PROPOSED RE-ADOPTION OF THE SPRINGFIELD TOWN PLAN**

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**BOARD OF SELECTMEN MEETING**

*Immediately following Public Hearing*

**SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR**

**AGENDA**

**WELCOME:** Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Mark Blanchard, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.

**A. CALL TO ORDER AND ROLL CALL:**

**B. MINUTES:**

1. Regular Board Meeting - February 23, 2009
2. Re-Organization Meeting - March 09, 2009

**C. ANY REQUESTED ADDITIONS TO THE AGENDA:**

**D. CITIZENS TO ADDRESS THE BOARD:**

**E. PRIORITY BUSINESS:**

**F. PETITIONS AND COMMUNICATIONS:**

**G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:**

1. Springfield Senior Center Newsletter - March 2009
2. Springfield Parks, Recreation & Leisure Services - 2009 Spring & Summer Preview
3. Springfield Housing Authority Minutes - March 10, 2009
4. Springfield Police Department Monthly Stats for February 2009

5. Springfield Regional Development Corporation Minutes - February 24, 2009
6. Springfield Regional Development Corporation Executive Director's Reports:  
November 20, 2008, December 10, 2008, January 22, 2009 and February 19, 2009
7. Water and Wastewater Departments' Monthly Reports - February 2009

**H. ORDINANCES AND RESOLUTIONS:**

**I. OLD BUSINESS:**

**J. NEW BUSINESS:**

1. Highway Safety Awards
2. Police Grants  
Byrne/Justice Assistance Grant  
COPS Hiring Recovery Program (CHRP) Grant  
Other Grant
3. Annual Financial Plan - Town Highways
4. Highway Grant Application
5. Health Order - Mt. Vernon Street
6. Emergency Operations Plan
7. Tax Agreement Policy
8. Board and Commission Appointments
9. Library Trustee Vacancy
10. SAPA TV Support Letter
11. Semi-Quincentennial Committee
12. Parade Permit Application

**K. LEGISLATIVE REPORTS:**

**L. CITIZEN COMMENTS:**

**LOCAL CONTROL COMMISSION:**

Liquor License Renewals

Tobacco License Renewals

**EXECUTIVE SESSION:** Contracts and Personnel

**M. ADJOURNMENT:**

*From minutes of MAR 30, 2009 Select Board Meeting.*

**C. Any Requested Additions to the Agenda** - Town Manager Forguites requested that item number one under New Business - Highway Safety Awards be moved to Priority Business. Also, Senator Richard McCormick was moved under Priority Business rather than Legislative Reports.

Senator Richard McCormack - Senator McCormack thanked the Board for inviting him to attend the meeting. He admitted that he does not get to Springfield enough. He requested that the Board give him his "marching orders" as to what they want him to do for the Town of Springfield.

Senator McCormack explained that this period of time is what they call "crossover" in the Legislature. The Senate is done with the Bills and have passed them onto the House and the House has passed its bills onto the Senate.

A lengthy discussion followed on available Stimulus Funds and the projects Springfield had in the works which may qualify for Stimulus money. Senator McCormack admitted that he is still in the process of learning about stimulus funds and, therefore, was not able to answer all the questions the Board had.

Town Manager Forguites noted that the Town of Springfield was number 46 on the list of 145 requests for \$Nineteen Million of stimulus money for Water/Wastewater projects. Unfortunately, money ran out at number 45. At the present, the Town is working to clarify its priority points and there is a possibility that the Town will move up on the list. There was a lengthy discussion on the Town's position and private entities which were ahead of the Town on the list. Senator McCormack defended the President's position to get money out in the private sector to help the economy.

Mr. Mobus raised the question of Route 143 being subject to stimulus money. Senator McCormack assured Mr. Mobus that it was in play.

Senator McCormack's support in changing the position of a 10% match by  
Mr. Forguites also asked for the Senator's support concerning  
the \$100,000 in Highway Funds. Mr. Forguites stated that the January payment had a decrease of 15% and it

be reduced accordingly. Senator McCormack assured that the  
municipalities. Senator McCormack assured that the

Mr.

- News | Southern Vermont

## Springfield wood-chip plant plans put on back burner

By Susan Smallheer Staff Writer | August 30, 2009

- 
- [Email Article](#)
- 
- [Print Article](#)

SPRINGFIELD – A plan to build a \$150 million, 25-megawatt wood-chip-fired power plant in the North Springfield industrial park has been put on the back burner.

Bob Flint, executive director of the Springfield Regional Development Corp., said Friday that the project by Winstanley Enterprises of Concord, Mass., had not been abandoned, only slowed down.

Flint said part of the problem is that Winstanley has been unable to reach an agreement to sell power to Central Vermont Public Service Corp., the state's largest utility, which serves the Springfield area.

The project, called the North Springfield Sustainable Energy Project, was unveiled in February with great fanfare. It was expected not only to employ people but to create renewable energy based on local resources, with minimal environmental impact.

Winstanley executives, including President Adam Winstanley and Ken Grant, vice president of assets, didn't return telephone messages Friday.

Winstanley Enterprises has a proven track record in Springfield and Brattleboro. It bought the run-down Fellows Corp. headquarters in North Springfield three years ago and plowed millions of dollars into its modernization. Today the building is fully rented to three businesses, which employ 350 people. In Brattleboro, Winstanley bought the former headquarters of Northeast Cooperatives, a food warehouse facility that was nearly new, and converted it to office space.

The wood chip plant was to have been built next to the former Fellows Corp. headquarters and would have provided steam heat to that complex, as well as producing electricity. Part of the attraction was that the Fellows facility already had an electric substation because the plant, which once employed 1,300 people, was a big consumer of electricity.

The Winstanley project was one of about 100 projects submitted earlier this year to the state's utilities as part of the effort to diversify Vermont's energy portfolio, which is heavily dependent on the Vermont Yankee nuclear power reactor in Vernon and contracts

with Hydro-Quebec, the Canadian power company.

The utilities' contract with Entergy Nuclear expires in 2012, and the various Hydro-Quebec contracts all expire by 2015. Negotiations are under way with both those power companies, but so far no deal has been announced.

The state's utilities were seeking projects totaling 100 megawatts.

The Winstanley plant would have produced enough electricity for 25,000 homes and employed 100 people in its construction, with a full-time staff of 25. The company also estimated that supplying the plant with chips from waste wood would have given work to 150 people.

The plant was expected to require two years for planning and three years to build.

Flint said Winstanley Enterprises has invested heavily in time and effort in the North Springfield power project. Planning work has "slowed down dramatically," Flint said. "But it's not abandoned. It's been back-burnered."

Steve Costello, a spokesman for Central Vermont Public Service Corp., declined to comment on the Winstanley project, saying his company had signed confidentiality agreements and unless the Winstanley family spoke, the utility would follow suit.

But Costello did say that CVPS had decided to "focus" on four projects, including three involving renewable energy sources. Two of those three are in Vermont. He declined to identify them.

He said CVPS had originally decided to seek 40 megawatts of new generating capacity, but the four projects that the company is now entertaining represent 55 megawatts.

He predicted that Vermonters would be pleased with the company's choices. "It's a strong step forward on the renewable front. I think people will like them."

## **Agenda - Board of Selectmen - Monday, January 24, 2011**

TOWN OF SPRINGFIELD  
BOARD OF SELECTMEN MEETING  
SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR  
MONDAY, JANUARY 24, 2011  
7:00 P.M.

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### **AGENDA**

**WELCOME:** Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Kristi Morris, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.

**A. CALL TO ORDER AND ROLL CALL:**

**B. MINUTES:**

1. Regular Board Meeting - January 10, 2011
2. Public Hearing - January 17, 2011
3. Special Board Meeting - January 17, 2011

**C. ANY REQUESTED ADDITIONS TO THE AGENDA:**

**D. CITIZENS TO ADDRESS THE BOARD:**

**E. PRIORITY BUSINESS:**

**F. PETITIONS AND COMMUNICATIONS:**

**G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:**

1. Springfield Regional Development Corporation Minutes - December 21, 2010
2. Springfield Housing Authority Minutes - January 11, 2011

**H. ORDINANCES AND RESOLUTIONS:**

**I. OLD BUSINESS:**

**J. NEW BUSINESS:**

1. Public Hearing - Evergreen Heights Apartments
2. Proclamation - Mentoring Month
3. Alternate Energy Exemption
4. Town Meeting Warrant Draft
5. Parade Permit Application

**K. LEGISLATIVE REPORTS:**

**L. CITIZEN COMMENTS:**

**LOCAL CONTROL COMMISSION**

Second Class Liquor Licenses

Tobacco Licenses

**M. ADJOURNMENT:**

June 30, 2011

## Winstanley Announces CPG Filing Date for Biomass Plant in Springfield Industrial Park

Filed under: SRDC — admin @ 11:58 am

Winstanley Enterprises of Concord, Mass., has formally notified local officials of its plan to apply for a Certificate of Public Good to build a 25 to 35 megawatt renewable woodchip-burning electric generating plant at its existing industrial site located in North Springfield. The filing plan was announced on Monday in a letter from Chan Morgan, the project's manager, to local officials. The Winstanley development team is targeting early October to file its petition with the Public Service Board.

Winstanley Enterprises is a highly regarded New England developer with a history of investing in Vermont dating to 1991. Winstanley developed the Exit 1 Industrial Park in Brattleboro bringing the primary tenant, Country Kitchen Breads, to the state; successfully redeveloped and fully leased the 165,000 sq. ft. Northeast Cooperative/United Foods building also in Brattleboro; and renovated North Springfield's "new" Fellows Gear Shaper facility, which at 375,000 sq. ft. is one of the largest single story buildings in Vermont. The Fellows facility at 36 Precision Drive in the North Springfield Industrial Park was vacant when purchased in 2006 and today is nearly fully leased to three important local employers, Jeld-Wen, Kiosko and ADI, who collectively employ approximately 250 people.

"After four years of planning, meeting with local and state officials and commissioning numerous studies focused on fuel availability, environmental impacts, traffic patterns and economic benefits, Adam Winstanley is pleased to now be taking this important first step toward making this project a reality," Morgan said.

The project will infuse between \$130 and \$180 million of investment capital into the Springfield-Chester region, generating an average of 256 jobs for the proposed two years of construction and roughly 100 ongoing jobs valued at \$2 million annually, not including those associated with additional business park activity. The plant is projected to add roughly \$9 million annually to the state's economy, promote sustainable forestry in the Southern Vermont region and enhance Springfield's ability to attract employers to the industrial park.

One compelling aspect of the Winstanley project is the plan to build a hot water loop that will provide low-cost heat to the park. The concept of providing the thermal loop has already created interest among potential new business park tenants and will also provide impetus for current tenants to maintain and possibly expand their operations in North Springfield.

Bob Flint, executive director of the Springfield Regional Development Corporation said that this is a far-reaching economic development project for the region and the state. "This project will impact our economy in so many ways from our heritage foresters fueling an important and practical use of alternative energy to providing operational infrastructure that will lead to job growth in an existing industrial park," Flint said. "It's a home run."

If approved, the plant would provide a minimum of 25 megawatts of base load power capacity by early 2014. The output would be delivered to Vermont utilities through an existing on-site substation that once connected the North Springfield Fellows Gear Shaper building to the electric grid. In addition, the site has been in industrial use since 1968, was already graded level many years ago in anticipation of future growth, and provides an unparalleled opportunity to optimize the efficiency of the wood burning plant by being located in an industrial park that can utilize its thermal waste. As well, the site is located in the region of Vermont with the highest concentration of Net Available Low Grade Wood according to the

- Winstanley seeks biomass facility

By Susan Smallheer  
Staff Writer | July 01, 2011

- 
- Email Article
- 
- Print Article

NORTH SPRINGFIELD — The proposed 25-megawatt woodchip power plant in the North Springfield industrial park — and a new, low-cost steam heat district — is back on the front burner.

Winstanley Enterprises, the owner of the Fellows building, announced Thursday that it would be filing a request for a certificate of public good from the Vermont Public Service Board this fall to build a 25- to 35-megawatt baseload woodchip burning power plant.

The project had been put on hold more two years ago, but a change in administration in Montpelier was a key factor in its revitalization, said Chauncey "Chad" Morgan, project manager for Winstanley.

"Adam has never stopped working on this project," Morgan said, referring to Adam Winstanley, the head of the company, which is based in Concord, Mass.

Morgan said he had spent the last six months working with state officials on the project, which is planned to include an innovative low-cost steam heat district in the industrial park.

Morgan said that the project was not dependent on any state or federal tax credits or grants, but that the company would obviously like to take advantage of such incentives.

"The approach of Winstanley is not to rush things and to do them deliberately," said Morgan. "We are not predicating this project to receive the grants in the current tax bill."

Morgan said that the project would represent a \$130 to \$180 million investment and would create 256 construction jobs for two years, and 100 ongoing jobs, not counting any associated increase in employment in the industrial park.

Springfield Town Manager Robert Forguites said the town had been told by Winstanley earlier this week that it was going forward with the plan, which it had first announced in 2009 at a gala press conference.

"It was on hold indefinitely, but they are now looking at it in a different way," said Forguites.

He said the town would obviously need more detail about the project, in particular the amount of truck traffic in the vicinity of the industrial park, which is on the edge of a residential area of Springfield.

But Forguites said the plan to generate steam and hot water, and running it through the industrial park and offering it to existing and future tenants was an interesting development.

"Road issues will have to be looked at," he said. "It's pretty preliminary right now."

Bob Flint, executive director of the Springfield Regional Development Corp., has worked closely with the Winstanleys on a number of projects.

"This is a major commitment from Winstanley Enterprises. This is a tangible step toward making this

reality," he said.

Flint called the project a potential "a game changer" to the local economy.

"It takes an old-school industrial park, between the IVEK solar project and the thermal loop, and creates a prime site for commercial development and leading-edge alternative energy," said Flint.

IVEK, another firm in the industrial park, installed one of the state's largest solar installations last year, and generates most of its power.

"It's fascinating," said Flint.

While Flint said "there's not a shovel in the ground yet," he said his long experience with Adam Winstanley made him convinced the project was a go. "Knowing Adam Winstanley, this decision does not come lightly," he said.

The Winstanley company is a real estate development company, and turned the run-down Fellows building in North Springfield into prime real estate for local manufacturing companies. It is also the owner of the former headquarters of Northeast Cooperatives in Brattleboro, a new facility which it converted into business space after the food company went out of business.

Winstanley estimates that the plant would add roughly \$9 million annually to the state's economy, and create a market for what Morgan said was essentially "waste wood."

He said the plant would use wood from a 50-mile radius of North Springfield, primarily southeastern Vermont and southwest New Hampshire.

susan.smallheer@rutlandherald.com

**Agenda - Board of Selectmen - Monday, September 26, 2011**

***TOWN OF SPRINGFIELD - BOARD OF SELECTMEN MEETING***

***SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR-MONDAY, SEPTEMBER 26, 2011***

***7:00 P.M.***

***AGENDA***

**WELCOME:** Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Kristi Morris, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting.

Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.

**A. CALL TO ORDER AND ROLL CALL:**

**LOCAL CONTROL COMMISSION:** Tobacco License - Magic Mushroom

**B. MINUTES:** 1. Regular Board Meeting Minutes - Monday, September 12, 2011

**C. ANY REQUESTED ADDITIONS TO THE AGENDA:**

**D. CITIZENS TO ADDRESS THE BOARD:** 1. Goldie May

**E. PRIORITY BUSINESS:**

**F. PETITIONS AND COMMUNICATIONS:**

**G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:**

1. Springfield Regional Development Corporation - August 23, 2011

2. Springfield Housing Authority - September 13, 2011

**H. ORDINANCES AND RESOLUTIONS:**

**I. OLD BUSINESS:** 1. Weathersfield Reservoir Timber Cutting

**J. NEW BUSINESS:**

1. Act 248 Review

2. Sustainable Communities Grant

3. Record Restoration Account Resolution

**K. LEGISLATIVE REPORTS:**

**L. CITIZEN COMMENTS:**

**M. ADJOURNMENT:**

Date  
Time

## **Minutes - Board of Selectmen - Monday, September 26, 2011**

**J. New Business - 1. Act 248 Review** - Mr. Forguites explained that he had asked Tom Kennedy from the Southern Windsor County Regional Planning Commission to attend the Board meeting to review Act 248. Both the proposed Bio-Mass Project and the Vermont Telephone Tower Project in North Springfield come under Act 248 and Mr. Forguites felt it was important for the Board to understand the process and the standing the Town may have in the process.

Mr. Kennedy gave a brief summary as to the steps taken by the Public Service Board (PSB) for a Petition for a Certificate of Public Good during the Act 248 process. He summarized the eleven steps of the process. (A list of the steps is attached to these Minutes.)

Mr. Forguites noted that the Town had filed a letter with PSB, as an interested party, concerning the proposed Bio-Mass Plant. It stated that the Town was not opposed but had four issues it was concerned about. Those issues were 1). Air quality, 2). Noise, 3). Traffic, 4). Impact on the water system.

Chairman Morris asked Mr. Kennedy if the Town should wait until after the Public Hearing to hire an attorney. Mr. Kennedy replied that he would not wait, but talk to the Town Attorney now. He added that Regional Planning has similar interests as the Town.

Chairman Morris questioned the familiarity of the Town Attorney with the Act 248 process and whether the Town should get the same attorney as Regional Planning. Mr. Forguites added that the Town could co-pay the attorney's fees.

Mr. Knoras asked if the local Planning Commission was involved. Mr. Kennedy said the local Planning Commission could also ask for party status. He stated that he had been in contact with Bill Kearns concerning the issue.

# Rutland Herald

we are vermon

Reposted here from the Rutland Herald.

By Susan Smallheer

Staff Writer – Published: October 1, 2011

SPRINGFIELD — The town of Springfield got a crash course on the ins and outs of Act 248 this week.

The state law governs utility construction projects, which in Springfield's case would include the proposed \$180 million biomass plant proposed for the North Springfield Industrial Park and the beginning of the ambitious broadband expansion by Vermont Telephone Co.

Town Manager Robert Forguites said this week that Springfield will have to decide how involved it wants to get in the state review of both projects.

Earlier this week, Tom Kennedy, executive director of the Southern Windsor County Regional Planning and Development Commission, gave an overview of the law, which is sometimes referred to as the "certificate of public good" process.

Under state law, any major utility investment must be approved by state regulators.

"Act 248 is new to this board and new to me and I wanted Tom here to explain the law and what the board should be aware of," Forguites said.

So far, both projects are only in the pre-filing stage, Forguites said.

Winstanley Enterprises, owner of the Fellows Corp. building in North Springfield, first proposed the 25 to 35 megawatt wood chip project on land next to the Fellows building two years ago, but put the project on hold.

In late June, Winstanley announced it was putting the project back on the front burner, citing the change in administration in Montpelier.

According to Bob Flint of the Springfield Regional Development Corp., Winstanley expects to file its application for a certificate of public good from the Public Service Board later this year.

In June, the company said it was now including a low-cost steam heat district as part of the biomass project.

Forguites said the town's concerns about the wood chip project would probably be about the traffic in the area from trucks delivering the wood chips.

While the project is proposed for an industrial park, roads leading to the park go through residential neighborhoods.

VTel has proposed building a 120-foot tower in North Springfield, and recently held a site test with an aerial balloon, to let neighbors and the town estimate the height of the tower, Forguites said.

The tower would be constructed on VTel property in North Springfield, Forguites said. It is part of VTel's Wireless Open World (WOW) 4G/LTE project, Sharon Combes-Farr, VTel's director of marketing, said recently.

Under Act 248, the town could request to be an interested party or an intervenor, and could have varying levels of participation in the hearing process, the manager said.

The board didn't make a decision on what role to take in either project, he said.

"In both these cases, they haven't progressed far enough" to trigger town involvement, he said

## **Agenda - Board of Selectmen - Monday, January 09, 2012**

TOWN OF SPRINGFIELD---BOARD OF SELECTMEN MEETING

SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR--MONDAY, JANUARY 09, 2012

7:00 P.M. -----AGENDA

WELCOME: Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Kristi Morris, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.

**A. CALL TO ORDER AND ROLL CALL:**

**B. MINUTES:**

1. Regular Board Meeting Minutes - Monday, December 19, 2011
2. Budget Workshop Minutes - December 12, 2011

**C. ANY REQUESTED ADDITIONS TO THE AGENDA:**

**D. CITIZENS TO ADDRESS THE BOARD:**

**E. PRIORITY BUSINESS:**

**F. PETITIONS AND COMMUNICATIONS:**

**G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:**

1. Springfield Housing Authority Minutes - December 13, 2011
2. Springfield Senior Center Newsletter - January 2012
3. Springfield Police Department Monthly Report - November 2011

**H. ORDINANCES AND RESOLUTIONS:**

**I. OLD BUSINESS:**

1. Budget Timeline

**J. NEW BUSINESS:**

1. Justice Center Grant Request
2. Zoning/Building Permit Fees
3. Certificate of Highway Mileage

**K. LEGISLATIVE REPORTS:**

**L. CITIZEN COMMENTS:**

**LOCAL CONTROL COMMISSION:**

Liquor and Tobacco Licenses - K-B Ventures, Inc.

**M. ADJOURNMENT:**

## **Minutes - Board of Selectmen - Monday, January 9, 2012**

**L. Citizen Comments:**

Mr. Forguites pointed out that the Town had received about a week and a half ago the application filed with the State of Vermont Public Service Board for the Sustainable Energy Project for the Industrial Park in North Springfield. He noted that he had asked Tom Kennedy, Director of Southern Windsor County Regional Planning Commission, to attend the Board meeting on January 23, 2012 to address the Board concerning the application which was filed. He noted the voluminous application in front of him and invited any of the Board members or public to come in and review the application, if they so desired.

G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:

1. **Springfield Housing Authority Minutes - January 06, 2012**
2. **Springfield Regional Development Corporation Minutes - December 20, 2011**
3. Springfield Police Department Monthly Report - December 2011

H. ORDINANCES AND RESOLUTIONS:

I. OLD BUSINESS:

1. Approve Town Budget
2. Warrant Items
3. Biomass Project - Tom Kennedy

J. NEW BUSINESS:

1. High Risk Rural Road Grant

K. LEGISLATIVE REPORTS:

L. CITIZEN COMMENTS:

LOCAL CONTROL COMMISSION:

Liquor and Tobacco Licenses

M. ADJOURNMENT:

From Public Hearing-Board of Selectmen - Tuesday  
JANUARY 23, 2012

said that the reason he was trying to cut in parts of the operating budget was so that he could add in other places, like this position. Jim Benton said that, speaking for himself, he didn't give up 3 years worth of COLAs so that the Town could add another position. John Stettner voiced strong support for adding the article. Gay Mobus added that she spends lots of time with kids and would be willing to pay for additional drug enforcement. Nichole Downing said that she had spoken with several downtown merchants, mentioning Apron Strings, and that she, and they, perceive this issue also as an economic development issue. Kristi Morris responded that one detective won't make the problem go away. John Swanson said that the problem is getting worse and something has to be done. Terri Benton agreed, but said that the Town is looking at \$150,000 in personnel cuts and can't see adding a new position. Ritva Burton asked about other towns. Doug Johnston said that Hartford and Rutland have similar positions.

Kristi Morris asked if anyone had any other comments. Dave Yesman said that the Budget Advisory Committee hadn't spoken about this item as it was a late addition to the discussion. However, it has been their recommendation that no new positions be added. He added that the Selectboard should reconsider a stipend for their position. The goodwill gesture is a joke. He would support a stipend of \$1000 or even \$2000 for Board members. **The motion failed 2-3, with Stephanie Gibson and John Swanson voting aye.**

3. Biomass.

Bob Forguites said that he had asked Tom Kennedy from Southern Windsor County Regional Planning Commission to come speak to the Board about the proposed Biomass project at the industrial park in North Springfield. Tom Kennedy spoke about the permitting process for the project and how legalistic and involved the Act 248 process is. He strongly suggested that the Town be represented during the process. Even just the application for the proposal is 4 inches thick. He said that the SWCRPC has retained Chris Callahan and suggested that the Town approve Steve Ankuda to work with Mr. Callahan. In addition, SWCRPC is hiring a consultant in the field to review the application. He asked for the Town to share in this cost.

Bob Forguites said that this is a huge project, the largest in the area for many years. As such, he felt that the Town should be an active participant in the process and encouraged the Board to work with the SWCRPC through the process. He added that the project could add \$150,000,000 to the Town's grand list. **Terri Benton moved to authorize the Town Manager to work with the SWCRPC for purposes of co-counsel and co-consultant. Stephanie Gibson seconded the motion.**

Bob Kischko shared with the Board a letter than he'd writing expressing concern for the project. He mentioned that it would require a 140ft tall smoke stack and

that 13,000 additional tractor trailer loads a year would be added to our roads. Walter Dodd was also present and supported Mr. Kischko. Kristi Morris encouraged all residents to participate in the public hearings. **The motion passed unanimously.**

J. New Business:

1. High Risk Rural Road Grant.

Bob Forguites said that this is a small grant for rural roads that are unsafe. This grant is for additional signage for French Meadow Road. The Town has had a few previous HRRR grants with no problems. **Stephanie Gibson moved to approve and sign the maintenance agreement. Terri Benton seconded the motion that then passed unanimously.**

**Local Control Commission:**

The Board entered into Local Control Commission to consider a Second Class Liquor Licenses and Tobacco Licenses.

Bob Forguites said that the Town had Second Class Liquor Licenses to act on from Maxi Green, Inc., d/b/a Rite Aid Store #10313, Richard A. Jacobs, d/b/a Jake's South Street Market, and M.J. Inc., d/b/a Joe's Discount Beverage. He had checked with the Police Chief, who didn't have any concerns and taxes are current. **John Swanson moved to approve and sign the licenses. Stephanie Gibson seconded the motion that then passed unanimously.**

Bob Forguites said that the Town had Tobacco Licenses to act on from Maxi Green, Inc., d/b/a Rite Aid Store #10313, Richard A. Jacobs, d/b/a Jake's South Street Market, and M.J. Inc., d/b/a Joe's Discount Beverage. He had checked with the Police Chief, who didn't have any concerns and taxes are current. **Stephanie Gibson moved to approve and sign the licenses. John Swanson Gibson seconded the motion that then passed unanimously.**

**Kristi Morris declared the Local Control Commission closed.**

The Board returned to open session.

M. Adjournment.

The Board returned to open session at 9:38pm. **John Swanson moved to adjourn. Stephanie Gibson seconded the motion that then unanimously.** The meeting adjourned at 9:38pm.

No further action was taken.

**Agenda - Board of Selectmen - Monday, February 13, 2012**

***TOWN OF SPRINGFIELD***

BOARD OF SELECTMEN

SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR

MONDAY, FEBRUARY 13, 2012

7:00 P.M.

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AGENDA

**WELCOME: Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Kristi Morris, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.**

A. CALL TO ORDER AND ROLL CALL:

B. MINUTES:

1. Budget Workshop Minutes - Thursday, January 5, 2012
2. Budget Workshop Minutes - Wednesday, January 11, 2012
3. Budget Workshop Minutes - Wednesday, January 18, 2012
4. Public Hearing Minutes - Tuesday, January 24, 2012
5. Regular Board Meeting Minutes - Tuesday, January 24, 2012
6. Special Board Meeting Minutes - Monday, January 30, 2012

C. ANY REQUESTED ADDITIONS TO THE AGENDA:

D. CITIZENS TO ADDRESS THE BOARD:

1. Alan Lockwood

E. PRIORITY BUSINESS:

F. PETITIONS AND COMMUNICATIONS:

G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:

1. Springfield Police Department Monthly Report - January 2012

2. Springfield Senior Center Newsletter - February 2012

H. ORDINANCES AND RESOLUTIONS:

I. OLD BUSINESS:

J. NEW BUSINESS:

1. Police Cruiser Purchase

2. Parking Fine Fee

3. DPW Winter Storm Procedures

4. Parade Permit Applications

5. Mt. Ascutney Local River Subcommittee Appointment

K. LEGISLATIVE REPORTS:

L. CITIZEN COMMENTS

LOCAL CONTROL COMMISSION:

Liquor and Tobacco License Renewals

EXECUTIVE SESSION - Litigation, Contracts

M. ADJOURNMENT:

**Minutes - Board of Selectmen - Monday, February 13, 2012**

Chairman Morris informed Mr. Lockwood that the Biomass Project at the Industrial Park in North Springfield, if approved, would add to the Grand List. Mr. Lockwood pointed out to Chairman Morris that it would not help the downtown area. He noted the number of empty storefronts and the impression it gave when someone rode through the Town.

**Agenda - Board of Selectmen - Monday, February 27, 2012**

***TOWN OF SPRINGFIELD***

BOARD OF SELECTMEN

SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR

MONDAY, FEBRUARY 27, 2012

7:00 P.M.

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AGENDA

**WELCOME:** Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Kristi Morris, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.

A. CALL TO ORDER AND ROLL CALL:

B. MINUTES:

1. Regular Board Meeting - Monday, February 13, 2012

C. ANY REQUESTED ADDITIONS TO THE AGENDA:

D. CITIZENS TO ADDRESS THE BOARD:

E. PRIORITY BUSINESS:

F. PETITIONS AND COMMUNICATIONS:

G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:

1. Airport Commission Minutes - November 28, 2011

2. Springfield Housing Authority Minutes - February 14, 2012

3. Water/Wastewater Departments Monthly Reports - January 2012

H. ORDINANCES AND RESOLUTIONS:

I. OLD BUSINESS:

that citizens had an obligation to call the Town Manager to report any streetlights that were not presently on.

Mr. Knoras asked Chairman Morris to move the Motion.

Chairman Morris also asked for recommendations from citizens as to what lights should be permanently turned off.

Chairman Morris called for a vote on Mr. Knoras' Motion to proceed according to the Memorandum of Understanding with Efficiency Vermont, to formally notify, in writing, Efficiency Vermont and Central Vermont Public Service Corporation of the Town's intent to proceed, and to authorize the Town Manager, Robert Forguites, to enter into any Agreements or sign any documents in order to proceed. *Motion passed unanimously.*

2. 250<sup>th</sup> Anniversary Committee - Mr. Forguites explained that the Town needed to acknowledge the members of Springfield's 250<sup>th</sup> Anniversary Committee and their hard work to ensure that the Town of Springfield had a proper celebration of its 250<sup>th</sup> Anniversary.

Mr. Forguites read a Certificate of Appreciation that had been prepared acknowledging the members of the Committee. (A copy of the Certificate is attached to these Minutes.)

Chairman Morris asked for a Motion to approve and sign the Certificate of Appreciation acknowledging the members of the 250<sup>th</sup> Anniversary Committee.

MOTION: Michael Knoras moved to approve and sign the Certificate of Appreciation acknowledging the members of the 250<sup>th</sup> Anniversary Committee. Motion was seconded by Stephanie Gibson.

Before the vote, John Swanson introduced the following members of the Committee that were present at the meeting: Jenny Anderson, Carol Cole, Bob Flint, Carol Knight and Marita Johnson.

Hallie Whitcomb noted that she recently returned from California where she was visiting her mother, a former resident and teacher. She noted that her mother commented about the various 250<sup>th</sup> activities and how much she enjoyed the newspaper articles and the calendar.

Chairman Morris called for a vote on Mr. Knoras' Motion to approve and sign the Certificate of Appreciation acknowledging the members of the 250<sup>th</sup> Anniversary Committee. *Motion passed unanimously.*

**J. New Business - 1. NSSEP - Dan Ingold** - Mr. Forguites explained that Dan Ingold from Western Solutions, the Partner with Winstanley Enterprises in the North Springfield Sustainable Energy Project, (NSSEP) had asked to attend the meeting for the purpose of introducing himself to the Board

Mr. Forguites added further that Mr. Ingold was not attending the meeting in order to get into a discussion about the project, rather to introduce himself to the Board.

Mr. Forguites noted the Public Hearing which was held on Thursday, February 23rd, the site visit at 1:00 P.M. and the Public Service Board Public Hearing at 7:00 P.M. on the 28<sup>th</sup> of February.

Mr. Ingold informed the Board that Western Solutions and Winstanley would be holding "Open Door" Sessions from 2 to 6:00 P.M. on Tuesdays and Thursdays.

Mr. Ingold added that the Public Service Board would consider comments made during the site visit scheduled for 1:00 P.M. on Tuesday, February 28<sup>th</sup> an important factor. The Public Service Board would be reviewing prior testimony as part of their process in approving the Permit. Mr. Ingold noted that the Town's Design Review Board (should be the Development Review Board) would be reviewing the thermal loop.

Mr. Ingold felt that there would be at least two (2) or three (3) additional public meetings. He felt those meetings were important, as it provided an opportunity to learn what the concerns of residents are.

Weston Marshall asked Mr. Ingold where the "Open Door" sessions would be held. Mr. Ingold replied

at 36 Precision Drive, North Springfield. Cindy Johnson, of the Bellows Falls Shopper, questioned whether the site visit scheduled for 1:00 P.M. on February 28<sup>th</sup> was open to the public. Mr. Ingold replied yes.

Chairman Morris thanked Mr. Ingold for attending the meeting and commented that he looked forward to following the progress of the project.

2. National Register - Spencer Hollow School - Mr. Forguites explained that the Town had received a letter from the Vermont Division for Historic Preservation indicating that the Spencer Hollow School was being considered by the Vermont Advisory Council on Historic Preservation for nomination to the National Register of Historic Places. Mr. Forguites added further that the Town, as owner of the School Building, is allowed to concur or object to the listing. He explained that a listing on the National Register would allow the Building to qualify for Historic Preservation Grants.

There was a brief discussion concerning the nomination.

MOTION: Michael Knoras moved to concur with the proposed nomination for placement of the Spencer Hollow School on the National Register of Historic Places. Motion was seconded by Terri Benton, and passed unanimously.

3. Toonerville Trail Permit - Mr. Forguites explained that the Town had received a Toonerville Trail Permit Application from Nina Honeycutt on behalf of the Honeycutt Family - "SHrINE on Springfield - Walk for Shriners Hospital for Children - Springfield Facility." The Walk will be held on the Toonerville Trail on Saturday, June 9, 2012 from 9:30 A.M. to 2:00 P.M.

Mr. Forguites noted that the Honeycutt Family had sponsored that Walk for several years and there had been no problems with the event.

Mr. Forguites stated that if the Board members had no objections, the Permit Application would be approved with the usual conditions: posting signage at the Trail Head in advance of the Walk so regular users would be aware that there would be more walkers on that day; if dogs participated, they should be licensed, on a leash and under control; all debris from the Walk should be picked up and properly disposed.

With no objections from Board members, the Permit was approved.

4. Bank Certification Resolution - Mr. Forguites explained that there was a Town Account, Child Protection Fund, which needed a change of signers. Mr. Forguites further explained that the Account was used for funding of Educational Programs in Schools and for the K-9. Mr. Mobus stated that he believed there was approximately \$3,200. in the Account. Two of the persons who were presently on the Account as signers were no longer employed by the Town. Mr. Forguites and Mr. Mobus felt that the Town Treasurer, Meredith Kelley, should be one of the signers on the Account and requested to have her name added.

MOTION: Michael Knoras moved to authorize Town Treasurer Meredith Kelley as a signer on the Child Protection Account, adopt and sign People's United Bank Certification Resolution and to authorize the Chair to sign the Resolution on behalf of the Board of Selectmen. Motion was seconded by John Swanson, and passed unanimously.

A copy of the Bank Resolution is attached to these Minutes.

**K. Legislative Reports: None**

**L. Citizen Comments:** Mr. Mobus reported that the Annual Report had been mailed out last week and he encouraged residents to read the Town of Springfield Audit Report.

Susan Smallheer, Rutland Herald, commented that the pages in the Town Report on line did not correspond with the pages in the Book. Mr. Mobus acknowledged that the PDF file was off by one page.

John Swanson asked the Chair for a moment to thank the voters of Springfield for the opportunity to serve on the Board of Selectmen. He stated that his term had been an exciting six (6) years and he expressed his hope that excitement would continue in the future, offering Springfield new opportunities for economic growth and

## Agenda - Board of Selectmen - Monday, March 26, 2012

TOWN OF SPRINGFIELD

BOARD OF SELECTMEN  
SELECTMEN'S HALL - 96 MAIN STREET, THIRD FLOOR  
MONDAY, MARCH 26, 2012  
7:00 P.M.

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### AGENDA

WELCOME: Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Kristi Morris, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C - Any Requested Additions to the Agenda.

A. CALL TO ORDER AND ROLL CALL:

B. MINUTES:

1. Regular Board Meeting - Monday, February 27, 2012
2. Organizational Meeting - Wednesday, March 7, 2012

C. ANY REQUESTED ADDITIONS TO THE AGENDA:

D. CITIZENS TO ADDRESS THE BOARD:

E. PRIORITY BUSINESS:

F. PETITIONS AND COMMUNICATIONS:

G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:

1. Springfield Parks & Recreation 2012 Spring Brochure and Summer Preview
2. Springfield Police Department Monthly Report - February 2012
3. Springfield Regional Development Corporation - January 24, 2012 and February 28, 2012
4. Springfield Senior Center Newsletter - March 2012

H. ORDINANCES AND RESOLUTIONS:

I. OLD BUSINESS:

1. Streetlight Update

J. NEW BUSINESS:

1. Appointments:  
Board and Commission Re-appointments  
Springfield Housing Authority Board  
Town Service Officer  
Trustee of Public Funds
2. Basic Emergency Operations Plan
3. Blessing of the Bikers
4. Signature Authority - EWP Program

K. LEGISLATIVE REPORTS:

L. CITIZEN COMMENTS:

LOCAL CONTROL COMMISSION:

Liquor and Tobacco License Renewals

M. ADJOURNMENT:

### **Minutes - Board of Selectmen - Monday, March 26, 2012**

D. Citizens to Address the Board John Pugh - Mr. Pugh stated that the Energy Committee had contacted Dan Ingold of Western Solutions about giving a presentation, which would be open to the Public, about the History of District Energy and Thermal Loop. Mr. Ingold's presentation will be on Tuesday, April 17, 2012 at 7:00 P.M. in the Board of Selectmen's Hall at the Town Office. Mr. Pugh extended an invitation to the members of the Board and the citizens of the Town, noting that if there was a good turnout more meetings would possibly be scheduled.

Mr. Knoras questioned Mr. Pugh as to what District Energy was. Mr. Pugh explained that it was one large heating plant, like the one in Hanover, NH. Mr. Knoras also asked Mr. Pugh if the presentation would be publicized. Mr. Pugh answered yes. Mr. MacGillivray asked Mr. Pugh if the Energy Committee had considered a different location which would accommodate more people. Mr. Forguites felt Mr. MacGillivray made a good point. Mr. Forguites further added that previous meetings concerning the Biomass Project had initially been scheduled for the Selectmen's Hall but he had persuaded the organizers to relocate to the High School Cafeteria. He noted, seating in the Board of Selectmen's Hall was approximately fifty (50).

5/29/12

Fredda Kischko, a Baker Road resident, questioned why the Board was not inquiring whether additional wells would be dug. Chairman Morris noted that the Town had hired an engineer to review and prepare a report on whether the Town was capable of providing enough water to the woodchip plant, which would allow the Project to continue with its permitting process.

Henry Kraft, a French Meadow Road resident, stated that he would not want the water from the Davidson Hill Tank to go back into the Town's water system.

Mr. Ingold replied that there would not be additional wells dug. Chairman Morris addressed the Davidson Hill Tank issue by stating that there would be a back flow device installed on the tank. The tank would be used only to fill tankers or pumbers.

Cindy Johnson stated that she would like to ask Mr. Ingold some questions concerning the air cooling system. Chairman Morris reminded Ms. Johnson that the issue was the water system only.

Jean Willard reminded the Board that the Town only had one source of water - the Gilchrist and Chapman Wells. She cautioned the Board not to commit to the NSSEP's request until more investigation could be done. She stated that the Town did not have water to gamble away. Chairman Morris replied that the request from NSSEP was not going to stress the water system according to Aldrich & Elliott's report. He also reminded Mrs. Willard that there had been a decline in water usage over the years. A brief discussion followed concerning water usage.

Chairman Morris called the vote on Mr. Yesman's Motion. *Motion passed 4-1, with Michael Knoras voting no.*

2. Streetlight Update - Mr. Forguites explained that the Streetlight Committee continued to review the Town's streetlights and were at the meeting to give an update on the process.

Mary Ann Remolador, Energy Co-Coordinator and a member of the Streetlight Committee, reported that a revised Streetlight Policy had been passed out to Board members prior to the meeting. (A copy of the revised Streetlight Policy is attached to these Minutes.)

Ms. Remolador noted that the revised Streetlight Policy should be viewed as a basis and requested the Board to review, edit, remove or add to the Policy.

MOTION: Michael Knoras moved to acknowledge receipt of the Streetlight Policy from the Streetlight Committee and to appoint two (2) Board members to write the new Policy. Motion was seconded by Stephanie Gibson.

Mr. MacGillivray stated that he assumed the two (2) members already serving on the Streetlight Committee would be the members to review and write the Streetlight Policy. He added that he would hope the Policy would be done as soon as possible and remain simple. He asked if the Board wanted to approve the removal of the thirty-three lights recommended by the Streetlight Committee that evening.

Chairman Morris called for a vote on Mr. Knoras' Motion to acknowledge receipt of the Streetlight Policy from the Streetlight Committee and to appoint two (2) Board members, Michael Knoras and David Yesman, to write the new Policy. *Motion passed unanimously.*

Ms. Remolador noted that the Streetlight Committee had one (1) more evening to finish, with already three quarters (3/4) of the lights in Town reviewed. The previous list had been reviewed by Chief Johnston and he was requesting more information from the Committee, as he had an issue with the maps. After the list was received back from Chief Johnston, the Committee would bring it back to the Board, with any concerns or issues of Chief Johnston.

Chairman Morris also noted that the remaining three Board members should feel free to add their input to the new Policy.

Mr. MacGillivray, again, asked if the previous list with the recommended thirty-three removals which was part of a Motion made at the last meeting on May 9<sup>th</sup> should be voted on that evening. Ms. Remolador replied that Chief Johnston was still reviewing the list and was waiting for additional information he requested.

Mr. Forguites further explained that the original Application from NSSEP to the Vermont Public Service Board indicated a need for approximately 200,000 gallons of water per day to feed the cooling system at the Biomass Plant.

Mr. Forguites introduced Joe Duncan, Aldrich & Elliott. Mr. Duncan had reviewed the water system relative to the proposed woodchip plant in the North Springfield Industrial Park and its request for 200,000 gallons of water per day. Mr. Duncan was prepared to review his report and answer questions. (A copy of report of Aldrich & Elliott is attached to these Minutes.) Mr. Duncan was familiar with the Town's water system, as he has been working with the Town for the past five years on its improvements to the system.

Mr. Duncan noted that the developer was proposing to pursue water saving measures to minimize the amount of municipal water required for its operations. Those measures included the use of rain water and capturing water utilized during the pump testing at the Winstanley Building. It was his understanding that the developer had indicated a willingness to enter negotiations with the Town of Springfield for the purchase of the decommissioned 750,000 Davidson Hill concrete tank to utilize it for storage of water for their operations.

Mr. Duncan further explained that the Town's municipal water system would be used on a limited basis as part of the facility's thermal loop system. The use of the water would be during dry periods when the facility is not able to capture rainwater for use in their operations.

Mr. Forguites noted that it was his understanding that the Project's amended Application would indicate that the Project would be proposing to use air cooling and the need for water would be considerably less. The Project now felt that the maximum demand would be 30,000 to 40,000 gallons per day. The Aldrich & Elliott report indicated that supplying 40,000 gallons per day is feasible without stressing the water system.

Mr. Duncan briefly spoke of the water production and demands on the water system. He noted that any additional water demands would be drawn from the same aquifer, which had always been a concern for the Town, stating that "all the Town's eggs are in one basket."

Mr. Duncan explained that for Scenario #2 (40,000 gallons per day) a flow rate of approximately 27 gallons per minute would be required to provide water to the woodchip plant, if the required flow was provided over a 24 hour period.

Mr. Duncan explained the overall capacity of the water system and the typical operating capacity, noting that there would be excess. Jeff Strong, Superintendent of Water and Wastewater Departments, noted that it would be critical to limit the system during the summer months. He felt that 40,000 gallons per day was doable. He added that if the developer pursued the purchase of the Davidson Hill Tank and use it as storage, it would be a help with peak minimization.

Mr. Yesman questioned whether there would be additional capacity for other businesses, such as Black River Produce, who would be moving into the old Ben & Jerry's building. Mr. Duncan replied that there would be ample capacity, noting that there is 1,700 gallons per minute capacity in well fields. Ms. Gibson questioned Mr. Strong as to what the capacity was for Ben & Jerry's. Mr. Strong replied that it was about 20,000 to 30,000 gallons, noting that a lot of water went into the product. Mr. Duncan stated that he would confirm that figure. Chairman Morris stated that it would be good to have that information available.

There was a brief discussion concerning the capacity of the system in case of a fire event such as the Ellis Block fire. Chairman Morris noted that the Fire Department had installed two dry hydrants near the Black River.

Mr. MacGillivray pointed out that in Mr. Duncan's report on page 5, which Mr. MacGillivray read from "For Scenario #2 (40,000 gpd) under peak flow conditions the Town should be able to provide the required 40,000 gpd. Given that there really is no true off-peak period. It is preferred that under Scenario #2 the flow be provided over a 24-hour period where the delivery rate is 28 gpm." Mr. MacGillivray noted that Mr. Duncan had previously mentioned 27 gpm. Mr. MacGillivray asked for clarification on the gallons per minute. Mr. Duncan stated that it would be 28 gallons per minute, not 27, as previously mentioned.

Mr. Knoras noted the statement by Mr. Duncan that the Town had "all its eggs in one basket." He felt that it was an opportune time to look at water sources near the Union Street storage tank. Mr. Strong noted that the Town would have a hard time finding sources for ground water, as that area is mostly ledge. Mr. Strong also noted that there

was a water study done in the 80's and that there was water near Riverside Park. However, that source was deemed contaminated. Mr. Knoras stated that at one time there were 144 wells near the Union Street storage tank that supplied water to homes on Union Street and Park Street and he felt there must be enough water in that area.

Mr. Forguites introduced Dan Ingold, an Engineer from Weston Solutions, Inc. Mr. Ingold informed the Board, and those present, that the Project would be filing a supplemental filing on June 1, 2012 with the Vermont Public Service Board. The supplemental filing would indicate that the Project would be using air cooling and would need 23,000 gallons per day for its operations. Mr. Ingold added that in the supplemental filing it states that two-thirds (2/3) to three fourths (3/4) of its water needs would come from rain harvesting.

Mr. Ingold noted that the developer was interested in working with the Town to purchase the Davidson Hill Tank. He also noted that Ben & Jerry's used much more water than what the woodchip plant was requesting. Mr. Ingold stated that the developer realized that water is a precious resource and made the decision to go with an air cooling system instead of a water cooling system.

Mr. Yesman questioned Mr. Ingold if the 40,000 gpd was off the table. Mr. Ingold replied that it was. He felt the most realistic number was 23,000 gallons. He added that 30,000 was a more conservative number if it was available but no more than 30,000 gallons would be used each day.

Mr. Forguites felt that 30,000 gallons per day was a reasonable number. He also noted that the developer seemed committed to enter into negotiations with the Town concerning the purchase of the Davidson Hill Tank. Mr. Forguites felt NSSEP would work with the Town if the water stored in the Davidson Hill Tank was needed in case of a fire event.

Mr. Knoras cautioned locking into 23,000 to 30,000 gallons per day citing if there was a capacity problem, the Town was already committed to NSSEP to provide those gallons.

Mr. Yesman questioned Mr. Strong as to why the Davidson Hill Tank was decommissioned. Mr. Strong replied that the tank would not empty by itself. In an original plan from the late 1990's, it was estimated that it would take \$1,000,000.00 to make the tank active again. The water currently in the tank is stagnating.

There was a brief discussion concerning pressure in the area of the Industrial Park.

Mr. Knoras questioned Mr. Strong as to whether commitment letters were given to other businesses for water. Mr. Strong replied yes, an Allocation Letter is given to each business. Mr. Knoras asked how many current agreements there were now. Mr. Strong replied that every business in Town has an agreement with the Town concerning adequate capacity provided. Mr. Knoras questioned Mr. Strong as to whether the capacity amount was transferred to the new business, such as the Ben & Jerry's building to be occupied by Black River Produce. Mr. Strong replied that the new business would take credit for allocation to new business from Access Fee Ordinance. The Town would have to consult with an engineer to check capacity on business to business.

Mr. MacGillivray questioned whether there was an agreement with 100 River Street. Mr. Strong replied no.

MOTION: David Yesman moved to approve for the Town of Springfield to provide a Commitment Letter to the North Springfield Sustainable Energy Project to provide up to thirty thousand (30,000) gallons of water per day from the Municipal Water System. Also, to indicate a willingness to enter into negotiations for the purchase of the Davidson Hill Tank on Davidson Hill Road in North Springfield. Motion was seconded by Stephanie Gibson.

Before the vote, Mr. Knoras expressed his concerns. He felt it was premature to commit to NSSEP's request. He felt the Town should have a better handle on its water needs and to make sure that NSSEP would blend in with other economic development, as the Town only had one water source.

Mr. MacGillivray noted that the PSB's decision may be eighteen (18) months away. There also was the possibility that the Project may not be approved. He felt the Town should take the recommendation of Mr. Duncan, of Aldrich & Elliott, to provide 28 gallons per minute from the Municipal Water System.

## **Rutland Herald: Changes made to proposed biomass plant**

Jun 07, 2012 No Comments

Reposted from Rutland Herald.

NORTH SPRINGFIELD – The developers of the proposed wood-fired generating plant in North Springfield have submitted an amended application to state regulators, which includes significant changes in the plant's design and hopes for a new access road.

Adam Winstanley of Winstanley Enterprises LLC and Dan Ingold of Weston Solutions, the two companies that have proposed the 35 megawatt North Springfield Sustainable Energy Project, said Monday the changes were in response to community concerns raised in the past several months.

The amended application was submitted to the Vermont Public Service Board on Friday, they said.

The biggest change, Winstanley and Ingold said, was changing the 35 megawatt plant to an air-cooled system rather than a water-cooled system, thus drastically reducing the plant's need for water – either from drilled wells in North Springfield or water from the town's municipal system.

On peak summer days, the project had estimated it would need upwards of 700,000 gallons of water a day from the Springfield town system, almost equal to the town's total usage.

But that figure now stands closer to 23,000 gallons a day, said Ingold, although the town last week gave the project a commitment for 30,000 gallons a day.

The project also hopes to "recapture" water from the roofs of Winstanley's buildings in the North Springfield Industrial Park, most notably 36 Precision Drive, the former Fellows Corp. building, which covers eight acres and is one of the largest flat-roofed buildings in the state.

Additionally, the project plans on building four different sheds for the woodchips that will be burned at the facility, and would capture the water from those roofs as well.

Ingold, project engineer, said that would add another 3.5 acres of roof space.

A one-inch rainstorm would produce 250,000 gallons of runoff from the 12 acres of roofs, Ingold said. The project will have storage of 950,000 gallons, since the project plans on buying the town's now off-line Davidson Hill storage tank in North Springfield, which holds 750,000 gallons.

Together, the project would recapture about 6.3 million gallons of water a year, close to the project's annual requirement of 8.4 million gallons.

Ingold said that while the vast majority of wood-fired power plants are water cooled, there is a similar air-cooled biomass plant serving the Fitchburg, Mass., area.

Winstanley said the project's capital costs would be higher as a result, but that its long term operating costs would be lower with an air-cooled system.

**TOWN OF SPRINGFIELD  
BOARD OF SELECTMEN  
SPRINGFIELD HIGH SCHOOL CAFETERIA – 303 SOUTH STREET  
PUBLIC HEARING  
MONDAY, AUGUST 13, 2012  
7:00 P.M.  
Bike Path Grant Application**

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**BOARD OF SELECTMEN MEETING**  
*Immediately following the Public Hearing*

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**AGENDA**

**WELCOME:** Visitors are most welcome at Board of Selectmen meetings. Anyone wishing to address the Board on a specific matter is requested to make arrangements to appear on the Agenda with either the Chairman of the Board of Selectmen, Kristi Morris, or the Town Manager, Robert J. Forguites, before the Friday preceding each meeting. Emergency matters can be handled by requesting recognition by the Chairman under Item C – Any Requested Additions to the Agenda.

**A. CALL TO ORDER AND ROLL CALL:**

**B. MINUTES:**

1. Regular Board Meeting, Monday, July 16, 2012

**C. ANY REQUESTED ADDITIONS TO THE AGENDA:**

**D. CITIZENS TO ADDRESS THE BOARD:**

**E. PRIORITY BUSINESS:**

**F. PETITIONS AND COMMUNICATIONS:**

**G. BOARDS, COMMISSIONS AND DEPARTMENTAL MINUTES AND REPORTS:**

1. Police Department Activity Report – July 2012
2. Water/Wastewater Monthly Reports – May, June, July 2012
3. Springfield Senior Center Newsletter – August 2012
4. Springfield Regional Development Corporation Minutes – June 26, 2012
5. Springfield Housing Authority Minutes – July 10, 2012

**H. ORDINANCES AND RESOLUTIONS:**

**I. OLD BUSINESS:**

1. Citizen Concerns - Update

**J. NEW BUSINESS:**

1. Bike Path Grant Application
2. Weathersfield Reservoir Logging Contract & Use Value Application
3. Pole and Wire Relocation Request
4. Toonerville Trail Permit Request
5. NSSEP Application Presentation – August 16, 2012

**K. LEGISLATIVE REPORTS:**

**L. CITIZENS COMMENTS:**

1. Local Control Commission

**EXECUTIVE SESSION:** - Personnel

**M. ADJOURNMENT:**

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**Fw: tonight - tell Bob k nothing on biomass tonight.**

1 message

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**Wilbur Horton** <whorton67@yahoo.com>

Wed, Jan 2, 2013 at 2:51 PM

Reply-To: Wilbur Horton <whorton67@yahoo.com>

To: "rkischko@dubois-king.com" <rkischko@dubois-king.com>

— Forwarded Message —

**From:** Bill Kearns <toszoning@vermontel.net>

**To:** "Wilbur Horton, Jr." <whorton67@yahoo.com>

**Sent:** Wednesday, January 2, 2013 2:11 PM

**Subject:** tonight - tell Bob k nothing on biomass tonight.

Please let Bob k know there is nothing on biomass tonight.

Before we have that PH on biomass wording for the Town Plan there will be a notice.

Bill

Bill Kearns

Administrative Officer

Town of Springfield



