

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Joint Petition of Green Mountain Power Corporation,	)	
Vermont Electric Cooperative, Inc., Vermont Electric	)	March 21, 2011
Power Company, Inc., and Vermont Transco LLC,	)	
for a Certificate of Public Good, pursuant to 30 V.S.A.	)	Docket No. 7628
Section 248, for authority 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.	)	

**PROPOSED FINDINGS OF FACT AND BRIEF OF DON AND SHIRLEY
NELSON**

FINDINGS OF FACT:

1. The Nelsons incorporate the conclusions of law and the findings of facts found in LMG's brief and emphasize the following facts.

GENERAL FACTS

1. There is no number that should be used as a "cut off" regarding how many people should be protected. (Kane Testimony Feb.9 p.73).
2. The Nelson Farm consists of approximately 600 acres. (Nelson Pre Filed Testimony p.1).
3. The Nelson family has owned the property for over 70 years. (Nelson Pre filed Testimony p.6).
4. The Nelsons have 2 springs located on their property, which have significant value to the property, especially for any future residential or agricultural use. (Nelson Surrebuttal p.1).
5. The Nelsons have many trails on their property and have hosted students from Sterling College (located in Craftsbury Common) for their Winter Survival Course for over 30 years. (Nelson Pre Filed Testimony p.2).
6. The Nelsons' property abuts the Project for nearly one and one half miles. (Nelson Pre Filed Testimony p.1).

7. The Nelsons would be able to see all of the turbines from their property and at least 15 turbines from inside their home. (Nelson Pre Filed Testimony p.2).
8. A GMP representative has referred to the Nelson property as “sacrificial.” (Nelson Pre Filed Testimony p.3).
9. The Nelsons should have the right to use their springs in the future for various purposes. (Nelson Surrebuttal p.1).
10. The Nelsons and their guests and other invitees should have the right to safely use all of their property.
11. The Nelsons should have the right to enjoy all of their property.
12. The Nelsons should have the right to the full market value of their property.
13. The Nelsons should have the right to build a house anywhere on their land as permitted by the Lowell Zoning Ordinance. (See Blomberg Exhibit 8).
14. Based on review of a landowner who is leasing land for GMP’s project which addresses electrical interference, there is a valid concern for its effect on the Nelsons. (Nelson Pre Filed Testimony p.5)
15. This project will make a great deal of the Nelson land uninhabitable and unusable. (Nelson Pre Filed Testimony p.4).

GMP’S PROJECT WILL CAUSE UNDUE ADVERSE EFFECTS; THE BOARD SHOULD NOT GRANT GMP A CERTIFICATE OF PUBLIC GOOD FOR THIS PROJECT.

GMP proposes to build 21 turbines each of 459 feet in height across nearly four miles of mountaintop.

As GMP presently has situated the property lines for its project, the Nelsons property is approximately 200 feet from the nearest turbine. The impacts they will bear from this project are far reaching and will affect every part of their lives. As presented to the Board, GMP’s project contains many risks to the Nelsons which the Board should not tolerate. These risks include those based on construction, safety, noise, the environment, and to our sole economic asset, our property itself.

Although GMP continuously tries to minimize us and what we will endure, “there is no number that should be used as a cut off regarding how many people should be protected. (Kane Testimony Feb.9 p.73). GMP’s experts could not answer the question as to when it is too many people being impacted by their project. The question we pose to the Board, is when to the costs: environmental, aesthetic, health, outweigh the unproven benefits repeatedly stated by GMP. Does SPEED legislation make it acceptable to so drastically and so permanently impact the people, wildlife, and natural and visual character of Vermont?

**GMP HAS FAILED TO PROVE IT HAS THE PROPERTY RIGHTS NEEDED FOR
THIS PROJECT**

FINDINGS OF FACT:

1. GMP has not proven to the Board that it has the necessary property rights to build this project. (Nelson Surrebuttal pp.1-5).
2. Part of the proposed project is on land owned by the Nelsons. (Nelson Surrebuttal pp.1-5).
3. GMP’s witness Ian Jewkes did not perform a boundary survey for the project. (Testimony Feb.3 p.227).
4. Jewkes will not certify the accuracy of the boundary lines. (Testimony Feb. 3 p.229).
5. GMP has not filed all of the surveys which they claim show they have the requisite property rights to build this project. (Pughe Testimony Feb.3 pp.87-88).

CONCLUSIONS OF LAW:

GMP does not have the required property rights to build this turbine project. Despite the Nelsons repeated statement of this fact, GMP has failed to provide the Board with sufficient proof that it does have the rights required. The boundary lines were performed by a witness not made available during these proceedings, and GMP’s own

witness refused to verify their accuracy. Further, GMP has failed to file certain surveys in the town clerk's office: a basic premise of surveys is that they be filed. If the Nelsons are correct, then GMP will be building on land that it does not own. The Public Service Board should not issue a CPG without clear proof of this necessary and basic prerequisite.

THIS PROJECT WILL CAUSE AN UNDUE ADVERSE EFFECT ON SAFETY

FINDINGS OF FACT:

1. GMP's safety expert did not perform any analysis on safety issues with turbine transport or on construction.(LeBlanc Testimony Feb.10 p.198).
2. GMP has not finalized a blasting plan nor have they performed a pre-blasting survey. (Jewkes Testimony Feb. 3 p.232).
3. GMP has not provided the Board with a remediation plan if blasting causes damage to property owners. (Jewkes Testimony Feb. 3 p.233).
6. GMP has not provided the Board with any testing plan or protocols to determine on-site contamination. (Esty Testimony Feb.4 pp.244-245).
7. GMP is responsible for any oil leakage and the cleanup; for any impacts. (Pughe Testimony Feb 3 p. 87).
8. There are studies worldwide recommending 3 kilometer safety setbacks in hilly terrain. (Nelson Pre Filed Testimony p.3).
9. The project's safety zone is only 60 meters (or 195 feet) (Testimony Feb. 2 p.86).
8. According to GMP, turbine 5 is 213 feet; turbine 6 is 230 feet and turbine 8 is 586 feet west of the Nelson property. (Exhibit A- Krebs & Lansing Feb. 23 2011).
9. GE recommends that the turbines should be set back at 1.5 X hub height + Rotor Diameter. (Exhibit-LMG-Blomberg-13).
10. GMP's expert admitted that the project would not meet the suggested safety zones for ice throw and turbine collapse. (See LeBlanc Testimony Feb. 10 pp. 201-202, 213-214).

11. GMP stated that turbines can throw ice up to 300 meters away. (LeBlanc Testimony Feb. 10 p.197).
12. LeBlanc's estimates were based on turbine models much less than those GMP intends to use for this project. (LeBlanc Rebuttal Exhibit 4 p.2).
13. It is reasonable to make certain that the turbines are as safe as possible. (LeBlanc Testimony Feb. 10 p. 202).
14. It is possible to move the turbines far enough away from another's property so that neither ice nor a turbine's tower could fall on their property. (LeBlanc Testimony Feb. 10 p.214).
15. The property owner should not have the expectation that he is going to have something thrown on his property. (LeBlanc Testimony Feb. 10 p.216).
16. The main causes of the blade and tower failures are a control system failure leading to an overspeed situation, a lightning strike or a manufacturing defect in the blade. (LeBlanc Testimony Feb. 10 p.198; Ex-LeBlanc-.5).
17. An entire blade can be thrown 150 meters [492.125 feet] and a blade fragment, 500 meters [1640.419 feet] (LeBlanc Exhibit 4 p.2).
18. Blade failure can happen more frequently than tower failure. A structure failure occurs on the skin that surround the turbine usually from a lightning strike, and what would happen was they would just open up and would typically drop a part; the blade would fall apart and land on the ground. (LeBlanc Testimony Feb. 10 p.210).
19. GMP has not submitted any requirements of a lightning prevention system nor a safety plan in the event of a lightning strike.
20. GMP's expert stressed the importance of proper installation, maintenance and monitoring of the turbines, and proposed a control mitigation strategy including the import of properly trained maintenance personnel. (LeBlanc Testimony Feb. 10 p.199).¹ The O&M that needs to be followed is defined by the turbine manufacturer. (Testimony Feb. 10 p.208).
21. Claiming weather conditions, GMP has failed to timely correct problems with the meteorological towers. (See Docket # 7558 and Testimony Feb.10 p.201).
22. GMP's safety expert admitted that the weather can pose challenges to fixing problems on the mountains. (LeBlanc Testimony Feb. 10 p.201)
23. GMP has given the Board no indication through testimony or documents that they

¹ The GE manual on Turbine safety suggests the following requirements (Exhibit-LMG-Blomberg-13).

will be able to immediately correct any potentially dangerous situations on the project site in severe weather.

CONCLUSIONS OF LAW:

Even using the property lines as GMP characterizes them, this project will not protect the Nelsons' safety, nor that of their invitees or any other person legally on their land, such as the Sterling College students who annually camp along the ridgeline. GMP's own expert admits that as designed, GMP's project will not meet safety setbacks. (Feb.10 Testimony pp.201-202, 213-214). He also notes that his safety review and recommendations do not include dangers from transportation of the turbines or construction. (Feb. 10 pp 198-199). GMP has not provided the Board with a blasting plan or any survey or remediation plan. (Testimony Feb.3 pp. 232-233).

LeBlanc notes the importance of strictly followed safety protocols that begin with installation and continue with maintenance, repair, and monitoring.(Testimony p.199). Yet, despite this, GMP has failed to provide the Board with any of these plans. Even more concerning to the Nelsons, GMP repeatedly has failed to promptly fix a problem with the existing meteorological towers, (Docket#7558; Testimony Feb.10 p.201), which do not pose nearly as many dangers as do the 21 turbines. Their referring to inclement weather does not bode well for their ability or capacity to effectively handle the turbines during the adverse weather conditions that are frequent in the Northeast Kingdom throughout the winter, and even worse on the mountaintop.

Given the distance that ice can be thrown or dropped and that the turbines, standing 459 feet tall, or can collapse, GMP's proposed 60 meter setback is offensive.

Once again, GMP has failed to provide the Board with any standards for lightning prevention, which causes turbine failures. (See LeBlanc Testimony p.210).

THIS PROJECT WILL CAUSE NOISE THAT CREATES AN UNDUE ADVERSE
EFFECT ON HEALTH AND ON AESTHETICS

FINDINGS OF FACT:

1. People have the right to sleep with their windows open. (Irwin Testimony Feb.24 p.56).
2. People living in a rural area expect quiet. (See Testimony Feb.22 pp 53-54).
3. The acceptable decibel level should not be based on an objective standard. It should be based on what the background noise levels are and on what people are used to, ie; what is there now. (Testimony Feb.22 p.53).
4. GMP's expert recorded existing background sounds of 16 decibels in the Lowell area; this level does not include the lower levels that occurred 10 percent of the time. (Kaliski Rebuttal p.9).
5. GMP's expert on the health effects of noise agrees with Albany's experts Mr. James and Dr. Lovko regarding the potential health implications of annoyance from noise, the fluctuating nature of wind turbine noise and the fact that disturbance from wind turbine noise occurs more at night. (McCunney Testimony Feb. 10 pp.56-57; James Pre Filed Testimony pp. 4, 17 (discussing the fluctuations of turbine noise)).
6. The goal of a health standard should not be at the brink of the risk. A bridge is not constructed so that it might fall down; similarly, a turbine project should not be designed or permitted where it is at the brink of causing adverse health effects. There should be a safety factor. (James Testimony Feb. 23 pp.43, 44).
7. Adverse direct health effects including an increased risk of cardiovascular disease have been observed at 40 dBA. (Exhibit-LMG-Blomberg-3 WHO Executive Summary, Table 3).
8. Turbine noise creates serious direct and indirect health impacts. (See Blomberg Pre Filed Testimony p.s.4-5, Surrebuttal pp. 12-14, 20; James Pre Filed Testimony pp.12-13, Rebuttal pp. 2,4, Surrebuttal pp. 3,8,13; Lovko Rebuttal pp. 2-11, Surrebuttal pp. 1-16)
9. A doubling in noise (from 30 to 40) would make the turbines clearly audible. (Irwin Testimony Feb. 24 p.68). This creates adverse effects on the quality of life and an individual's overall health. (Irwin Testimony Feb. 24 p.74; Pre Filed Testimony p.7).

10. The wind turbines will be four times as loud as existing background levels on nearly 2,000 acres of land not owned or leased by GMP (including the Nelsons' property) (Exhibit -LMG-Blomberg-5).

11. Since the levels are taken at the exterior façade of the house, there are areas between the house and the property line, where the levels will be exceeded. There are areas that might not be safe to put a home on. (Irwin Testimony Feb. 24 p.69).

12. The most effective and efficient standard to employ is 35 dBA outside. Proposing an exterior 35 dBA hour limit, although it permits some sleep disturbance, is a reasonable split between providing some protection at 40 dB and full protection at 30 dB. (James Testimony Feb.23 p.47).

13. Low frequency sound is less likely to be attenuated when it comes in contact with a structure, meaning that you might hear it inside even more than you would if you were outside. (Kaliski Testimony Feb. 22 p.156).

14. The figure of 15 decibel attenuation from outside to inside a building varies based on the construction of the house, its age, the quality of the windows, and a lot of other factors. (McCunney Testimony Feb.10 p.165).

15. The Nelsons' farmhouse was built in 1810, absent the modern-day insulation-making attenuation far less than the decibels claimed by GMP's noise expert Kaliski. (Pritchett Report p.16 and Kaliski Exhibit-Report p.7).

16. The prior Board standard might not ensure that noise inside the bedroom is kept to 30 decibels. (Irwin Testimony Feb.24 pp.64-65).

17. According to WHO, sleep interference begins at 30 decibels. (Blomberg Testimony Feb.22 p.255).

18. Negative indirect health effects can be caused by noise as low as 30 decibels in the bedroom. (Irwin Testimony Feb.24 p.67).

19. Members of the public should not be limited by the scope of what they may complain about nor should they have the burden of establishing the source of the noise. (Kaliski Testimony Feb. 22 pp.208-209; 200).

NRO:

20. NRO has never been used in a wind turbine project in Vermont (Kane Surrebuttal p.15).

21. NRO might be triggered every night; it could be extensive depending on the turbine.; could be triggered for a couple of thousand hours a year. (Kaliski Testimony Feb. 22 pp.210-211).

22. The NRO mode has not been proven to work for this project
23. You will not know the accuracy of a model until after the turbines have been built and you can perform monitoring. (Kaliski Testimony Feb. 22 pp.101-102).
24. At Vinalhaven, when others monitored the efficacy of the NRO mode, the NRO mode did not cause any change to the nighttime noise. (James Testimony Feb. 23 p.45).
25. The NRO mode only knocks off a decibel or two to the noise level., (James Testimony Feb. 23 pp.45-46) but since it takes 3 decibels to hear a difference, there was no subjective or objective benefit.(p.46).

CONCLUSIONS OF LAW:

GMP's project will create noise that greatly impacts the Nelsons. Living here for over 40 years, most of their lives, the Nelsons expect a quiet rural background, whose "noise", especially at night, comes from the sounds of nature. There is nothing existing that compares to the noise these turbines are reported to make. They have the right to sleep with their windows wide open and to not be disturbed to the level proposed here by GMP.

Given that GMP found 16 decibels as existing background level, (Kaliski Rebuttal p.9), even supposing the turbines are capable of meeting the Board's prior 45 decibel standard, this means an increase of nearly 30 decibels over existing background. Looking at Mr. Blombeg's exhibits concerning noise and audibility makes clear the gravity of impact the Nelsons are facing. Even with the existing 30 decibel interior standard, the averaging allows the turbines to be louder than the maximum for a large amount of time. This does little to protect health. The 45 exterior standard in no way guarantees a 30 interior standard, as acknowledged by Dr. McCunney, and since its noise

fluctuates, the effects may be even greater. (See Kaliski Testimony Feb.22 p.156; McCunney Testimony Feb. 10 pp. 165; 56-57; James Pre Filed Testimony pp. 4, 17).

As with safety, GMP is using the Nelsons' property as a buffer. This means we will not be able to use our property as we should be able to but will be restricted by safety and health reasons. In addition to the undue adverse impacts we will endure in our house, we will also endure them mostly everywhere on our property. Unlike Mr. Raphael's hypothetical person who can "turn away" or "go elsewhere", we cannot.

Finally, GMP has failed to give the Board any evidence that the NRO will protect the Nelsons' health or the aesthetics from the impacts of noise. Only on cross examination of Mr. Kaliski, did it become clear the extent that GMP will need NRO. (Testimony pp. 210-211). Given the strong possibility that the noise will exceed the ability of NRO to effectively quiet the turbines, this omission by GMP should cause the Board concern, especially when compounded by the numerous other aspects of this project that GMP has failed to divulge, study, and/or plan.

THIS PROJECT WILL HAVE AN UNDUE ADVERSE EFFECT ON ECONOMICS

FINDINGS OF FACT:

1. Due to the proposed turbine project, the Nelsons' property was appraised only for agricultural use. (Testimony Feb. 2 pp 181-182).
2. DPS states that a conservative approach should be used in determining value reduction dues to proximity of turbine projects. (Becker pre Filed Testimony p.9).
3. DPS notes two critical reviews of the study on which GMP's witness Kavet relies. (Becker Pre Filed Testimony p.5).
4. The critics note a 20% reduction in value due to proximity to the turbines. (Becker Pre Filed Testimony p.9).

5. DPS disagreed with GMP's witness's conclusion that there would not be measurable decreases in property values for properties located closest to the project (Becker Pre Filed Testimony p.6; DPS-JB-2 (assessing properties within 3 miles of the turbines)). He assessed the losses at 10%. (Pre Filed Testimony p.9).

CONCLUSIONS OF LAW:

The Nelson property has already shown evidence of decline in value based on the attempted purchase by GMP. The appraisal this was based on was only for agricultural use, and not the full value of the land. (Testimony Feb. 2 pp 181-182). Given the criticisms of the Berkeley Study and that those critics find a 20% reduction in value, it follows that the Nelson property would be among the most extreme losses.

THIS PROJECT WILL HAVE AN UNDUE ADVERSE EFFECT ON VISUAL AESTHETICS AND ON AESTHETICS DUE TO NOISE.

FINDINGS OF FACT:

1. The turbines are nearly 50% of the height of the mountains. (Raphael Testimony Feb. 8 p.210)
2. The Nelsons have picture windows on the back of their house facing the Lowell Mountains; they have a pretty unobstructed view of the ridgeline;. (Raphael Testimony Feb. 8 pp.209-210).
3. The project would completely destroy the aesthetics and serenity of the Nelsons' property. (Nelson Pre-Filed Testimony p.2).
4. The Department of Public Service agreed that this project would have an undue adverse impact on the Nelsons' land. (See DPS-KANE Surrebuttal).
5. GMP's noise expert admitted that this project would have an undue adverse impact on the Nelsons' land because of noise. (Kaliski Testimony Feb.22 p.135).
6. At the Nelson property, the turbines would offend the sensibilities of an average person. (Kaliski Testimony Feb. 22 p.256).

7. The average person within the area would be shocked and offended by this project. (Kane Surrebuttal p.9).
8. The project is the background element; it will be visually dominant from the area near the Nelsons' property. (Kane Surrebuttal p.10).
9. This project will become part of the daily visual fabric. (Kane Surrebuttal p.5).
10. The turbines would impact the character of the area within 200 feet. (Kaliski Testimony Feb. 22 pp. 145-146).
11. GMP's visual aesthetics expert's conclusion that the project would not create an undue adverse impact on the Nelsons is not credible. (Raphael Testimony Feb. 8 p.241).
12. Most noise regulations in this country are at the property line. (Blomberg Testimony Feb.22 pp. 256-257).
13. Even if the population is relatively low, these people should not be discounted. (Kane Surrebuttal p.6).

CONCLUSIONS OF LAW:

Given the extent of the noise, and the experts' agreement that this project will cause an adverse impact on the Nelsons' property, and the agreement not only by DPS and Blomberg, but also by GMP's expert Kaliski that it will cause an undue adverse impact, it seems incredulous that GMP's visual aesthetics expert would not admit this. Even GMP's historical witness admitted she might change her conclusion given the aggravated noise level of some of GMP's newly proposed turbines.

As the above facts make clear, the turbines, at 50% of the height of the mountains, less than one mile from the Nelsons' home, and only about 200 feet from the Nelsons' property line, will dominate. To add other language to this effect: "offend the sensibilities of an average person," and "shock or offend the average person". As so

perfectly stated by DPS witness Kane, this project will become part of the daily visual fabric of the Nelsons' lives.

Since most noise regulations in this country are at the property line, and given the severity of impact to the Nelsons' property, a property line standard is appropriate in this case where noise affects the Nelsons' health and aesthetics.

THIS PROJECT WILL HAVE AN UNDUE ADVERSE EFFECT ON HISTORIC RESOURCES

FINDINGS OF FACT:

1. According to Pritchett, the Project will be located .83 of a mile from the Nelson buildings. (Report p.17).
2. The Nelson farm is listed on the historic register. (Pritchett Report p.14)
3. The Nelson farm is significant because it was built in 1810, marking it as an early dwelling in northern Vermont. (Pritchett Report p.17).
4. The Nelson farm is significant because the house has rare plank construction building method (Pritchett Report p.17).
5. The Nelson farm is significant because the Bayley Hazen Military Road crosses the Nelson farm. (Pritchett Report p.17).
6. The Nelson farm is significant because the intact appearance of the surrounding landscape (Pritchett Report p.17).
7. "The landscape surrounding the Nelson farm is significant because it continues to reflect the historic agricultural context of the property as it was used throughout most of the 19th and much of the 20th century." (Pritchett Report p.14).
8. A map dating back to 1878 shows the Nelson farm as representing "typical agricultural trends of the time" (Pritchett Report p.15).
9. The setting of the property rises even above the significance of the buildings on the property. (Pritchett Report p.15).
10. "The historic context of the Nelson farm is intact, and from many vantage points near the buildings as well as approaching them from the southwest along the Bayley Hazen Road, the viewshed is remarkable in its integrity." (Pritchett Report p.15).

11. "From many vantage points on the property, near or adjacent to the historic structures, the Project will be visible on the ridge of the Lowell Mountains to the west." (Pritchett Report p.15).
12. The farmstead is sited near the center of the string of turbines. (Pritchett Report p.17).
13. "When approaching the farm from the south on the Bayley Hazen Road, the turbines will be visible before one crosses the Albany/Lowell town line. With the historic landscape visible on both side of the road from the town line to the Nelson farm buildings and beyond where the Bayley Hazen Road becomes a 2-lane track and enters wooded land, the turbines will remain generally constant at the upper range of one's viewshed, and at the close distance of approximately .83 miles, the turbines will appear large in the landscape... and have the potential for an adverse impact on the Nelson Farm" (Pritchett Report p.18).
14. Pritchett admitted the project would meet Criteria 6, 7, 10 because they would have an indirect impact: ie "create a significant intrusion (a)into important public views of an important historic building or group of buildings... (b) into the hillside backdrop of this farmstead..."(Pritchett Report p.21); (c) historic Nelson Farm landscape, especially when viewed from the south when the turbines will be part of a hillside backdrop;...(Pritchett Report pp.21-22).
15. The turbines would be dramatically out of scale when viewed as a backdrop and could visually overwhelm the farmstead. (Pritchett Report p.22).
16. Despite the findings of undue adverse impact found by other GMP experts, GMP's historic expert declined to admit that this project would have an undue adverse affect on historic resources. (See Pritchett Report).
17. Since GMP's historic expert neglected to study the acoustic effect of one of the proposed turbines, on the Nelson property-- a required part of the Middlebury analysis which makes her analysis defective. (Testimony Feb 9 p17).
18. She did not know that one of the proposed turbine models would violate the Board's prior maximum noise standard if not operated in NRO. (Testimony 2/9/11 p.17).
19. Pritchett admitted that were she to incorporate this information about the higher noise level, her recommendation might change. About the Nelson property (Testimony 2/9/11 pp.21-22).
20. Pritchett admitted that "if the noise level was high enough, it could conceivably create an intrusion into a historic district or historic landscape with a high degree of integrity that could make a difference...."(Testimony Feb.9 p.25).

21. Similar to GMP's expert Raphael, part of Pritchett's faulty conclusions stem from the belief that since you can turn away from the turbines and face east, the presence of the turbines to the west as a backdrop will not cause an undue adverse effect (Pritchett Report p.20).

CONCLUSIONS OF LAW

Given the impacts shown to be borne by the Nelson property, the written conclusion of GMP's historic expert is questionable. What makes it even more suspect is the many places throughout the report that she mentions the importance of the surrounding landscape: "the intact appearance of the surrounding landscape" (Pritchett Report p.17) and that the landscape "continues to reflect the historic agricultural context of the property as it was used throughout most of the 19th and much of the 20th century." (Pritchett Report p.14), "The historic context of the Nelson farm is intact, and from many vantage points near the buildings as well as approaching them from the southwest along the Bayley Hazen Road, the viewshed is remarkable in its integrity." (Pritchett Report p.15).

Regarding the presence of the turbines, Pritchett also states that the turbines will be visible from many places approaching and throughout the property (Report p.s 17-18). Further, that they would be "dramatically out of scale" (Report p. 22). Since the other experts (except Raphael) agree that the project would cause an undue adverse effect on the Nelson property, and given Ms. Pritchett's concession that the newly learned noise level could make a difference in her analysis, the Board should find that GMP's project will cause an undue adverse impact to the historic resource of Breezy Acres, the Nelsons' property.

THIS PROJECT WILL HAVE AN UNDUE ADVERSE IMPACT ON NATURAL RESOURCES

FINDINGS OF FACT:

1. It is indisputable that "there will be significant and profound fragmentation effects from a project of this scale in nature, in an environment like this." (Austin Testimony Feb.7 p.177).

2. Re-establishment of this forest is unlikely due to the level of site disturbance. (Sorenson Pre Filed Testimony p.29).
3. -This project will degrade the Montane Spruce Fir Forest to the degree that it will no longer be considered state significant. (Sorenson Testimony Feb.24 p.194; Pre Filed Testimony p.14). This will cause an undue adverse impact on the environment. (Sorenson Testimony p.194).
4. Headwaters cover the project site .(Nelson Testimony Feb.24 pp 257-258).
5. High elevation wetlands will be permanently impacted. (Jewkes Testimony Feb.3 p.221).
6. The impacted wetlands are critical to water quality. It is possible to lose function in an ecosystem if these features are consistently altered and not compensated for. (Morrison Surrebuttal p.4).
7. The wetlands along the ridgeline act as functional headwaters and are a critical transition between groundwater and surface water Headwater wetlands moderate water temperature and contribute organic matter to the stream, both of which are critical to stream biota. Impacts that occur at the beginning of a stream can affect the quality and aquatic biota downstream.(Morrison Surrebuttal p.3).
8. This project will have a severe impact on wildlife due to its scale and its direct and secondary effects. (See generally the testimony of Austin (Feb.7), and Sorenson (Feb.24)).
9. The undue adverse impact remains and does not go away because of the MOU. (Sorenson Testimony Feb.24 p.194).
10. GMP has not met all of ANR's concerns because the proposed ridgeline easement does not protect the entire ridgeline where the turbines will be. (Sorenson Testimony Feb. 24 pp.208-209).
11. If ANR and GMP cannot agree on the details of the plans, the undue adverse impacts will remain, and the project should not go forward. (Sorenson Testimony Feb. 24 pp.207-208).

CONCLUSIONS OF LAW:

The environmental impact on this project cannot be disputed. It includes blasting mountaintops, clearcutting hundreds of acres, building miles of new roads, and creating significant impervious surface. It results in severe habitat fragmentation which will have

undue adverse effects on wildlife, both direct and indirect., on forest, and on wetlands. Again, given that the Nelsons own 600 abutting acres, these impacts greatly and severely affect them. Directly, the Nelsons may be impacted by the effects on headwaters and creation of impervious surface. Indirectly, the wildlife that frequents their land will be displaced and their ability to survive: to maintain health and stability will be threatened by this displacement. Bears, moose, deer, birds and bats, as well as small mammals and amphibians will all suffer because of the vastness of this project. Just how much they will suffer and whether the species will recover, remains unknown. Scientific studies around the globe have documented the impact of turbines on bats; and have documented the impact of development on wildlife. This is not new. We know that there will be casualties. How many will we permit, especially given the fact that this is the 5th project seeking approval, but the largest yet. Moreover the already compromised status of bat species makes permitting ANY deaths ethically as well as scientifically suspect.

CONCLUSION

Throughout this case, GMP has bragged about the benefit of this project to Vermont and to Vermonters. However, they have failed to show proof of many of these claims. In fact, through testimony, just the opposite has become more and more clear. This project, while it may produce some electricity from wind, is by no means “green”. Nor is the wind “free”. The costs are great and many are permanent. Costs to the environment, to aesthetics, to the character of Vermont, and to many of her people. While this might not be the most populated place in Vermont, and while our brief focuses on the impacts to us, only two people, every person should matter. The impacts to our state should matter. Part of the unique nature of the Northeast kingdom is that it is pristine. Once that has been destroyed by placing 21 459 foot tall industrial turbines on four miles of scarred mountain range, there is no turning back. In 20 or 50 years, we will

look back on the promises and on what was delivered and realize that all of this was for very little.

We are not experts on “economic benefit” and “speed legislation” but it seems pretty clear to us that this project cannot be called environmentally beneficial by any definition. The “benefit” to jobs is few; the “benefit” to our electricity is far from constant; the true benefit after weighing all the costs is pretty close to Zero. The impacts are awful. Proclaiming to the people of Vermont that this project will benefit them is misleading. Vermonters deserve more and so do we. We are looking to this Board to do the right thing. Despite all the pressure from the Governor, despite all the money GMP is throwing at this project, despite all the hollow claims of “renewable energy”, please, look beyond all this to what this project really is, a large-scale industrial development on thus far pristine mountains in a quiet, rural area, where the people have few resources to fight it. GMP has not met the Section 248 Criteria, and this Board should reject their project.

Dated in Lowell, Vermont on March 20, 2011.

Respectfully,
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