

*Jeffrey & Mary Stauffer
21 Brightwood Drive
Woodbridge, Connecticut 06525*

March 14, 2011

Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RECEIVED
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CONNECTICUT
SITING COUNCIL

Re: **Petition No. 984**
BNE Energy
Wind Project
Winsted-Norfolk Road, Colebrook

Pre-Filed Testimony of Jeffrey and Mary Stauffer

1. Please state your names and address

Jeffrey and Mary Stauffer
We live at 21 Brightwood Drive, Woodbridge, CT 06525.

2. Why did you apply for party status in this petition?

We are an abutting property owner to the proposed Wind Colebrook North facility, with an existing plan to build our future home at 49 Rock Hall Road (please see attached site plan approved by the Town of Colebrook, driveway permit issued November 16, 2009). Our property is located to the north of the proposed facility, and is identified in the Abutters Map at page 2 of Exhibit F to Petition No. 984. We choose to build our home in Colebrook for several reasons, many of which would be impacted by the siting of a commercial wind farm.

3. When did you hear about BNE's petition?

We learned of BNE's petition 984 when we received a letter notifying us of a public hearing in November of 2010. We received a certified letter notifying us of BNE's intent to petition for a declaratory ruling with the siting council for the placement of the three wind turbines on Route 44 and Rock Hall Road in December 2010.

4. What made you choose the site for your future home?

We chose this site for the building of our home for several reasons. The land has been in Jeff's family for over 30 years. We like the small town atmosphere of Colebrook. The serenity and beauty of Colebrook evident in its vast natural resources struck us as the ideal setting for the raising of our home and family, despite the fact that we will be an hour away from our immediate families. Back in August of 2007, Jeff placed the majority of our property into forestry land, leaving out a 3-acre lot for the building of our

future home. Placing the land into forestry preserves open space by hindering development. We decided that building in Colebrook would be beneficial to our health and the health of our future family.

5. What are your feelings about renewable energy, specifically wind energy?

We plan to use green building products in the building of our home. By using native locally sawn lumber, high efficiency windows, doors, and appliances, and insulating to an R-value well above the industry standard we hope to reduce our carbon footprint. Although we support renewable energy, we are concerned with the lack of regulations Connecticut has for wind energy. Wind energy has the potential to produce energy while reducing air pollutants. There are many benefits to wind energy, but wind energy should be sited in a manner that will protect the health and safety of residents and communities.

6. Define health.

We agree with the World Health Organizations definition of health. According to the World Health Organization, "health is a state of complete physical, mental, and social well being and not merely the absence of disease or infirmity" (WHO). Furthermore we believe that health is affected by many factors including our physical and social environments, and personal behaviors.

7. What are your concerns related to this petition?

We feel that the wind turbines are not being sited in a manner that would protect the health and safety of our family and neighbors. We also feel that siting the wind turbines in the proposed location will adversely affect the wildlife habitat and splendor of the town.

We push for adequate setbacks because of the hazards posed by large wind turbines. The size of the proposed wind turbines creates many risks for residents including, noise, shadow flicker, and ice throw. Because Colebrook is in an area with significant icing it would be important to take ice throw warnings seriously. GE recommends setbacks due to ice throw, in order "to mitigate these hazards" (GE Energy, 2009). Turbines have the potential to throw ice up to 1,750 feet and blades can be thrown 2,500 feet (Wind Energy Systems Licensing Ordinance, 2008). Ice throw can be very dangerous to nearby residences. Noise is also a factor that can adversely affect health. Noise pollution causes stress, sleep disturbance, and headaches. Research noted in the Town of Union Wisconsin's Wind Energy Systems Licensing Ordinance, states that the percentage of irritated individuals significantly dropped when 1 mile from the site (Wind Energy Systems Licensing Ordinance, 2008). Shadow flicker is also a concern we have. In BNE's Shadow Flicker Analysis dated February 2011, it is stated that, "the intensity

of the shadow flicker is strongest near the wind turbine and diminishes with distance from the turbine” (Shadow Flicker Analysis, February 2011, page 2). On page 3, it is stated that flicker distances range from 1,000 feet to 0.9 miles (Shadow Flicker Analysis, February 2011). Besides the impact of these concerns on our health and safety, we fear that the turbine installation would devalue our property. Proper setbacks, which are not being met by BNE, would adequately address these concerns.

8. Do you feel that your concerns are being adequately met with BNE’s mitigation measures?

We do not feel that BNE has made the appropriate mitigation measures to address our concerns. As stated above, we do not feel that our health and safety are being adequately considered. We do not believe that our existing site plan is being considered a residence by BNE, despite the fact that our site plan has been approved with the town and we have made steps in building.

We feel that BNE has disregarded recommended setbacks (from the industry, and manufacturer), as well as the safety of area residences. It is recommended by GE in their document, Setback Considerations for Wind Turbine Siting, that the turbines have at least a 1.5 times turbine height fall zone to the boundary of the site, an estimate supported by BNE’s own consultant in exhibit M of petition 984 (GE Energy, 2009). Yet, when asked about these setback recommendations in the Siting Council’s interrogatories to BNE dated February 24, 2011, BNE makes vague, unclear statements and concludes they are following GE recommendations when they are clearly not (question 14). According to BNE’s proposed turbine location for turbine 3 on petition 984, the fall zone to the boundary of the site is approximately 100-200 feet from our property line (according to drawing C-100 overall site plan in Exhibit F). In addition, in question 4, BNE states “While there are a few homes near the project, BNE has provided for appropriate setbacks from residential properties to ensure safe and reliable operations”. BNE also states that, “BNE has consulted with the Town of Colebrook and the project will not interfere with any existing or future development plans known in the area” (Petition 984, page 18). BNE describes the property as being “bound on three sides by undeveloped woodlands” (Shadow Flicker Analysis, February 2011, page 1). We are also conflicted by BNE’s clear disregard for the industry’s standard for spacing of turbines. In BNE’s response to question 15, they state, “a general rule of thumb in the industry is one turbine per sixty acres to provide adequate spacing for the turbines”. This estimate would require 180 acres for three turbines where BNE has approximately 125 acres. Due to these statements by BNE, we fear that BNE has not considered our future home in their setback from residential properties. Our property site is not considered as a receptor location in BNE’s noise or flicker analysis.

It does not seem that BNE has seriously considered the impact of placing the three turbines on this site.

9. Do you feel that the Siting Council is adequately prepared to handle these concerns?

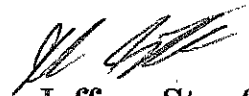
Since there are no regulations for wind farms in Connecticut, I am not sure the siting council can adequately address these concerns to the public's satisfaction. However, it is my belief that the siting council will take these concerns seriously and professionally. I am hopeful that the council will ensure that the siting of this project will minimize risk to neighboring property owners.

10. What recommendations can you make to address these concerns?

Since the turbines are being proposed in residentially zoned areas, it is important to consider property lines, as any property in the area has the possibility for a residence. We are in the process of building our residence on our property that immediately abuts the BNE proposed site. The recommended setbacks throughout the United States are anywhere from 1,000 feet to a mile. Recently the Wisconsin Governor proposed to increase setbacks of windmills from property lines from 1,250 feet to 1,800 feet. Because of the wide variety of setback regulations throughout the United States, it would be wise to examine the impact of these regulations when determining a proper setback. We hope that proper setbacks will be drawn by example from other states in similar geographic areas. Many states that have had the presence of wind energy for several years have been able to draw proper setbacks based on their own experience with the turbines. Having proper setback regulations will minimize the affect of ice throw, flicker, and noise.

11. Any closing arguments?

Wind energy is a new frontier for Connecticut and should be approached with caution and care in order to protect public health and safety. The benefits of wind energy would be meaningless if public health and safety were ignored.



Jeffrey Stauffer


Mary Stauffer

1. GE Energy. (2009). Retrieved from <http://documents.dps.state.ny.us/public/Common/ViewDoc.aspx?DocRefId=%7BF6A567D4-3F56-4125-968F-28CBF62BD6F6%7D>
2. WHO. (n.d.). *WHO Constitution*. Retrieved from <http://apps.who.int/gb/bd/PDF/bd47/EN/constitution-en.pdf>
3. Wind Energy Systems Licensing Ordinance. (2008, November 13). Union, Wisconsin.

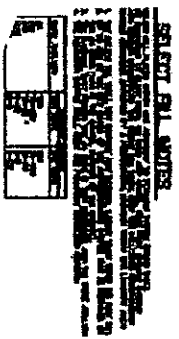
Certification:

I hereby certify that a copy of the foregoing document was electronically mailed and sent by U.S. mail to the following service list on 3/15/11.

Carrie L. Larson
Paul Corey
Nicholas J. Harding and Emily A. Gianquinto
Thomas D. McKeon
Kristen M. Mow and Benjamin C. Mow
John R. Morissette
Christopher R. Bernard
Joaquina Borges King
David R. Lawrence and Jeannie Lemelin
Walter M. Zima

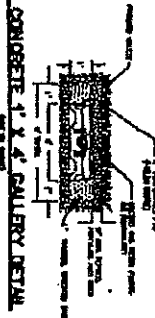


Jeffrey Stauffer



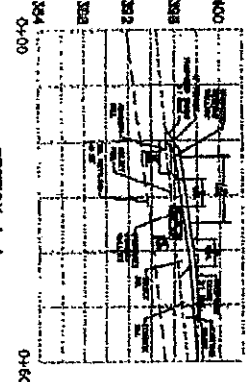
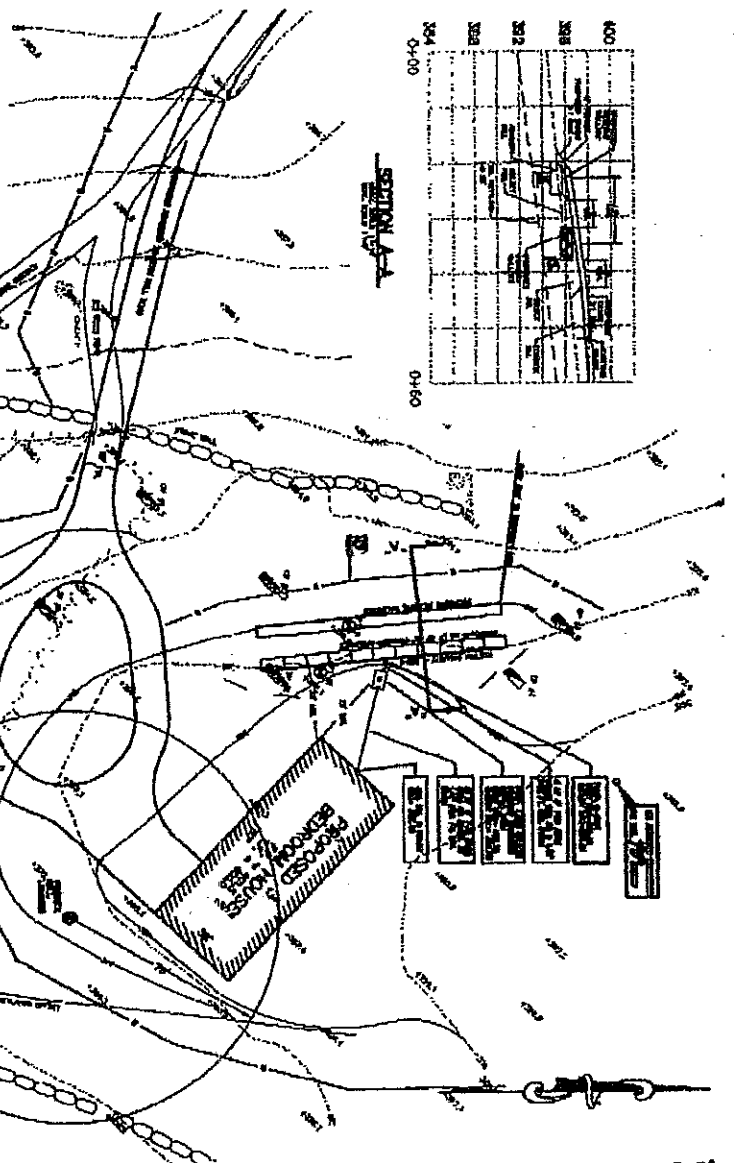
GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND STRUCTURES, AND THE MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES STANDARD SPECIFICATIONS FOR SEWERAGE AND SANITATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
3. ALL UTILITIES SHOWN ON THIS PLAN SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND PUBLIC ROADS AT ALL TIMES.
5. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
7. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND STRUCTURES, AND THE MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES STANDARD SPECIFICATIONS FOR SEWERAGE AND SANITATION.
8. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND PUBLIC ROADS AT ALL TIMES.
9. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.



CONCRETE 1' X 4' GALLERY DETAIL

1. ALL CONCRETE SHALL BE 3000 PSI STRENGTH.
2. ALL REINFORCEMENT SHALL BE #4 BARS.
3. ALL JOINTS SHALL BE REINFORCED WITH #4 BARS.
4. ALL SURFACES SHALL BE FINISHED TO A SMOOTH, EVEN SURFACE.
5. ALL DIMENSIONS SHALL BE AS SHOWN ON THIS DETAIL.



DESIGN DATA

1. NUMBER OF MANHOLES: 1
2. TYPE OF MANHOLE: 18" DIA. CONCRETE
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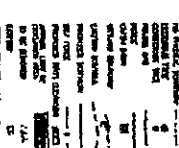
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10. TYPE OF MANHOLE: 18" DIA. CONCRETE



SOIL TEST DATA

1. LOCATION: []
2. DATE: []
3. TESTER: []
4. TEST TYPE: []
5. TEST RESULTS: []
6. TEST RESULTS: []
7. TEST RESULTS: []
8. TEST RESULTS: []
9. TEST RESULTS: []
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