



REID AND RIEGE, P.C.  
COUNSELLORS AT LAW

Emily A. Gianquinto  
(860) 240-1025  
egianquinto@rrlawpc.com

ONE FINANCIAL PLAZA  
HARTFORD, CT 06103  
Voice: (860) 278-1150  
Fax: (860) 240-1002

234 CHURCH STREET  
9TH FLOOR  
NEW HAVEN, CT 06510-1819  
Voice: (203) 777-8008  
Fax: (203) 777-6304

January 25, 2011

Connecticut Siting Council  
Attn: Hon. Daniel F. Caruso, Chair  
10 Franklin Square  
New Britain, CT 06051

**Re: Petition No. 980, BNE Energy, Wind Project, Prospect**

Dear Judge Caruso:

FairwindCT, Inc., a Connecticut non-profit corporation run by Colebrook residents and comprised of residents of Colebrook, Norfolk, Winchester and other surrounding towns, opposes the siting of industrial wind turbine projects in close proximity to residential areas in Connecticut, and specifically opposes the two industrial wind turbine projects that are proposed for residential areas in Colebrook and one industrial wind turbine project that is proposed for a residential area of Prospect, all of which are currently pending before the Connecticut Siting Council (the "Council").

BNE Energy, Inc. ("BNE") has filed three petitions with the Council asking for declaratory rulings approving industrial wind turbine sites located on land in two towns that is zoned residential and surrounded by residences. The effects of these proposed industrial facilities will be dramatic. Despite the obvious scope of these petitions, BNE asks the Council to consider its petitions for all three sites based on only preliminary assessments of the projects' impact on the environment and the health, safety and general quality of life of nearby residents. BNE also asks the Council to approve its petitions in the complete absence of any applicable regulations and without an established public policy about wind farms in the State of Connecticut. FairwindCT submits that the Council must consider the broader implications of considering projects of this scope without any established regulations and policy for guidance.

FairwindCT, Inc. hereby seeks party status in the Petition of BNE Energy Inc. for a Declaratory Ruling for the Location, Construction and Operation of a 3.2 MW Wind Renewable Generating Project in Prospect, Connecticut, dated November 17, 2010 ("Wind Prospect").

Request for Party Status

January 25, 2011

Page 2

**Contact information for proposed party**

Proposed party: FairwindCT, Inc.  
Address: P.O. Box 225  
Colebrook, CT 06021  
Phone: 860-379-6425  
Email: info@fairwindct.com

**Contact information for representatives of proposed party:**

Attorneys: Nicholas J. Harding  
Emily A. Gianquinto  
Address: Reid and Riege, P.C.  
One Financial Plaza, 21st Floor  
Hartford, CT 06103  
Phone: 860-240-1011  
860-240-1025  
Email: nharding@rrlawpc.com  
egianquinto@rrlawpc.com

**I. Manner in which proposed party claims to be substantially and specifically affected**

FairwindCT, Inc. ("FairwindCT") is a Connecticut non-profit corporation formed and run by Connecticut residents for the purpose of promoting conservation and natural beauty, protecting the environment, personal health and biological values, preserving historical sites, promoting consumer interests and promoting the orderly development of Colebrook and the surrounding area. To accomplish its purposes, FairwindCT is educating the general public and the community about industrial wind energy projects, lobbying for wind energy regulations and advocating for the protection of the environment and the health, safety, and quality of life of Connecticut residents. FairwindCT's members live in Colebrook, Norfolk, Winchester and other Connecticut towns. Although FairwindCT was created to focus on Colebrook and the surrounding area, FairwindCT is concerned with the adverse effect that siting industrial wind turbine projects in proximity to residential areas will have on residents of all Connecticut towns, including Prospect. Moreover, because the Council has indicated that its consideration of the Wind Prospect petition will be a model for its consideration of the two Colebrook petitions, FairwindCT will be substantially and specifically affected by decisions the Council will make in considering this petition.

Request for Party Status

January 25, 2011

Page 3

The proposed facility will have an immediate negative impact on the area surrounding the planned site. Wind Prospect will be an industrial facility located in proximity to hundreds of homes and adjacent to undeveloped forest land. BNE proposes to clear more than 5 acres of forested land, "disturb" more than 8 additional acres, build access roads adjacent to wetlands, and construct industrial wind turbines, which will be 200 feet taller than the Statue of Liberty and will have a blade diameter that will stretch nearly the length of a football field, on land that is primarily preserved in its natural state and is surrounded by residential neighborhoods.

These actions will harm the environment, destroy natural beauty and set back the conservation efforts that local residents and the State of Connecticut have worked to promote for decades. The industrial turbines will result in wildlife casualties, especially for the bird and bat populations. The bat population is particularly vulnerable to any additional casualties because it has been and continues to be decimated by White Nose Syndrome. The recommendations of the U.S. Fish and Wildlife Service Wind Turbine Guidelines Advisory Committee ("Wind Turbine Guidelines Advisory Committee"), submitted to the Secretary of the Interior in March 2010, state: "As with all responsible energy development, wind energy projects should adhere to high standards for environmental protection." BNE's proposed facility does not adhere to any standards for environmental protection, let alone high standards.

Wind Prospect also poses significant threats to the health and safety of residents who live in close proximity to the proposed sites. Studies of similar projects have shown that people living in proximity to industrial wind turbines suffer from ailments including headaches, tinnitus, nausea, sleep deprivation, dizziness, vertigo, ear pressure or pain, irritability, fatigue, memory and concentration problems, racing heartbeats, visual blurring and panic episodes. These symptoms have been attributed to the noise, vibration and shadow flicker caused by the industrial turbines. The shadow flicker may also impact drivers on Route 69, which is traveled at all times of day. GE's own literature warns that the massive rotating blades of the industrial wind turbines can throw ice at least several hundred meters, and recommends that industrial turbines be sited "a safe distance from any occupied structure, road, or public use area." FairwindCT submits that the turbines proposed for Wind Prospect are not sited a safe distance from houses, roads or lands held in the public trust, and cannot be sited safely given the small size of the property. The "potential" locations of both of BNE's proposed turbines will be less than 600 feet from Route 69. BNE proposes to site one turbine less than 100 feet from a property line and approximately 300 feet from an existing cell tower and another turbine less than 200 feet from a property line. The two turbines will be located less than one half mile from more than 200 homes and less than 1.25 miles from approximately 900 homes. Those distances are not safe.

Industrial wind turbines also pose other safety risks. Similar turbines have caught on fire. If that occurred in Prospect, local firefighters do not have either the fire safety equipment that

Request for Party Status

January 25, 2011

Page 4

could reach the top of the 328-foot turbine hub or the necessary training to suppress a fire at that height. Nor could the town alone control a fire that might spread through the undeveloped area adjacent to Wind Prospect. Blades from similar turbines have dislodged and traveled several hundred feet from the hub. Turbines have collapsed. In BNE's petition, its wind assessment consultant states that the turbine model chosen by BNE "does not meet fall zone requirements from the project boundary." (See Petition No. 980, Ex. N, Prospect, CT Wind Assessment, page 3.) These safety concerns show the need for appropriate regulation of the siting of these industrial projects and their incompatibility with residential areas.

Approval of BNE's petition to site an industrial wind turbine project on a property zoned residential with no regulation and in the absence of appropriate setbacks will also negatively impact the property values in Prospect and the surrounding area. Industrial wind turbine projects, with their accompanying noise, visual impact and associated health and safety concerns, will depress real estate values in the area.

Based on these and other concerns, some of which are detailed below, FairwindCT asks the Council to deny BNE's petition or to exercise its authority under General Statutes § 4-176(e) to decide not to issue a declaratory ruling and to initiate regulation-making proceedings. Alternatively, FairwindCT asks the Council to defer BNE's petition, impose a statewide moratorium on industrial wind turbine projects and adopt regulations providing for appropriate setbacks and other siting criteria, including environmental siting standards, that will protect the health and safety of Connecticut's residents and preserve its natural and historic resources.

## **II. Contention of the petitioner**

FairwindCT contends that industrial wind turbine facilities are, as a general matter, inappropriate for residentially zoned areas. More specifically, FairwindCT contends that the BNE's proposed facility is fundamentally incompatible with the area surrounding Wind Prospect. FairwindCT's contentions regarding BNE's petition can be summarized as follows:

Point I. The Council should not consider petitions for declaratory rulings before it has engaged in the rule-making process and adopted appropriate regulations that will balance the State's goal of increasing renewable energy resources with the interests of its residents and the goals of the State Plan for Conservation and Development. The Council has never before considered industrial wind turbine projects. The State has no law or regulation specific to this technology. BNE is asking the Council to approve three similar petitions with no consideration of the environmental, health, safety and economic effects of the proposed industrial use.

BNE Energy has never before constructed an industrial wind turbine project. BNE's inexperience with these projects is of particular concern given its lack of attention to detail in

Request for Party Status

January 25, 2011

Page 5

proceeding with its agenda of siting industrial wind turbines throughout Connecticut. In similar petitions, BNE failed to inform the Council that its two proposed Colebrook sites are within 1.5 miles of a historic residence that is on the National Register of Historic Places, and similarly failed to inform the Council that one of its proposed Colebrook facilities is adjacent to a National Natural Landmark. State and federal agencies are required to give special consideration to the potential adverse effects of projects funded by state and federal money on historic and natural resources. BNE's apparent disregard for the adverse effect of its activities on natural resources is echoed in its recent clear-cutting of 2.3 acres of state forest in North Canaan, where it is preparing to install a meteorological tower.

In light of these facts, FairwindCT asks that the Council either reject or defer BNE's petition until such time as the Council has had time to consider all aspects of siting nearly 500-foot tall rotating structures in residential areas. The residents of Prospect, Colebrook and the surrounding areas should not be used as guinea pigs in BNE's experiment. To proceed in the absence of any regulation at all is to risk the health, safety and welfare of the State's citizens. Moreover, all of Connecticut's citizens deserve the opportunity to be heard on these issues, which will only happen if the Council denies or defers BNE's petitions and initiates rule-making pursuant to its authority under General Statutes § 4-176(e).

Point II. Petition No. 980 should be denied because industrial wind turbines should not be sited in proximity of residences. The experiences of other communities in the United States and in Europe, where industrial wind turbines have been sited for decades, show that this technology and residences are incompatible with each other. Living in proximity to industrial wind turbines endangers residents' health and safety and infringes on their property rights. Residents living in proximity to similar projects are subjected to constant audible noise, measurable infrasound noise and what is known as a shadow flicker, which results from the sun passing through the rotating blades of the turbines. Documented effects on residents include sleep deprivation, headaches, tinnitus, lapses in concentration and memory, nausea, dizziness, vertigo, ear pressure or pain, irritability, fatigue, racing heartbeats, visual blurring and panic episodes.

Resident safety is also an issue, as BNE proposes to site its massive structures close to property lines, in violation of the manufacturer's own recommended "fall zone requirements." (See Petition No. 980, Ex. N, Prospect, CT Wind Assessment, page 3.) If a fire starts in the hub of one of BNE's turbines, no firefighting equipment in the area can reach it – basically, the fire must burn itself out, which may result in the collapse of the entire structure and may cause fire as burning debris falls. Massive industrial wind turbines are known to throw ice hundreds of feet from their blades. Those blades, each of which is more than 160 feet long, have been thrown hundreds of feet from turbine hubs. These safety risks have prompted turbine manufacturers to recommend safety zones of more than 1000 feet from each turbine. The turbines proposed for

Request for Party Status

January 25, 2011

Page 6

Wind Prospect do not meet even that minimum, manufacturer-recommended safety setback requirement. The proximity of Route 69, within less than 600 feet from the “potential” location of one turbine and within less than 500 feet of the other turbine, is of particular concern.

In short, BNE’s brief and detail-free description of why its project is “fully expected” to “be reliable and safe” and will “meet or exceed all health and safety requirements applicable for electric power generation” is contradicted by past safety incidents with similar industrial wind turbine projects and by GE’s own safety recommendations. (See Petition No. 980, pages 12-15.)

Point III. Petition No. 980 should be denied because Wind Prospect contradicts both the State Conservation and Development Policies Plan and Prospect’s local zoning and inland-wetland regulations.

BNE claims that Wind Prospect is consistent with the State Conservation and Development Policies Plan because the area of Prospect in which BNE wants to site its industrial wind turbines is “either a ‘conservation area’ or a ‘preservation area.’” (Petition No. 980, page 16.) According to BNE, Wind Prospect complies with State policies associated with such land because its industrial facility will be a use “compatible with the identified conservation value” that is “directly consistent with the preservation value.” (See id., page 17.) BNE believes that its industrial use of residential conservation land is more consistent with State goals than “the development of up to 47 residences that could be approved on the Property.” (Id.)

The development of “multiple residences” has not been proposed for that area, a fact acknowledged by BNE. (See id., page 18 (“BNE has consulted with the Town of Prospect and the Project will not interfere with any existing or future development plans known in the area.”).) Moreover, were a subdivision proposed for the property (which under current zoning regulations could contain only one residence), the town of Prospect, not the Siting Council, would have authority to approve or deny those plans. BNE insists that local officials have no such control over Wind Prospect, which will include not only two massive turbine structures, but also an “electrical collector yard,” “[a]dditional equipment” to be installed “as needed,” an “ancillary building” to include storage space, office space, an “education” area and restroom facilities, a septic system, and an extended and “upgrade[d]” access road. (Id., page 8.) This type of industrial development is not consistent with either conservation or preservation designations.

Wind Prospect also violates local zoning and wetlands regulations. The industrial project is proposed for property that is zoned RA-1, which means that it is zoned for residential use and that lots must be a minimum of one acre to permit the construction of single-family detached dwellings, and must meet certain frontage, access and coverage requirements. The permitted uses of RA-1 zone not only do not include wind turbines, but they also do not include any electrical generation or industrial use at all. Any use not specifically approved in RA-1 is

Request for Party Status

January 25, 2011

Page 7

deemed prohibited. Thus, the siting of this industrial project in an RA-1 zone would expressly violate Prospect's zoning regulations based on both the proposed use for the site and the failure to comply with the 35-foot height requirement for structures within an RA-1 zone. BNE's claim that it satisfies the regulations because its project would comply with the minimum setback and coverage requirements applicable to residences is ludicrous. (See Petition No. 980, page 17.) The 50- and 25-foot setbacks detailed for RA-1 zones are applicable to homes and related residential structures. They do not permit siting a 492-foot tall industrial wind turbine only 50 feet from a property line in a residential area. For BNE to suggest that it should be permitted to put such a massive structure only 50 feet from a property line is irresponsible, and yet another reason for the Council to deny or defer this petition and initiate the rule-making process to establish appropriate setback guidelines for industrial projects of this type and scope.

Wind Prospect would also violate Prospect's wetlands regulations. BNE claims only that its development "will not result in any direct wetland impacts," but that statement is irrelevant to the issue of whether BNE has complied with the applicable regulations. (See Petition No. 980, page 18.) Under Prospect's wetlands regulations, "Regulated Activity" includes "any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing or removal of material or discharge of storm water on the land within 100 feet measured horizontally from the boundary or any wetland or watercourse." BNE's submission demonstrates that at least 26,319 square feet of land within 100 feet of wetlands will be impacted by its proposed project. (See Ex. F to Petition No. 980, Sheet C-002.) Wind Prospect therefore involves "Regulated Activity." Under Section 6 of the wetlands regulations, BNE is required to obtain a permit from the Prospect Inland-Wetlands Commission in order to conduct a Regulated Activity. It has not obtained such a permit, nor has it applied for such a permit. BNE has therefore not complied with Prospect's wetlands regulations.

Point IV. Petition No. 980 should be denied because Wind Prospect will have significant adverse effects on the environment. BNE claims in its petition that its project "will result in significant environmental benefits," "offers significant . . . environmental . . . benefits to the citizens of the Town of Prospect and the State of Connecticut" and offers "[s]ignificant environmental benefits with minimal impact to the land." (Petition No. 980, pages 3-4, 11-12.) That claim is likely absurd, but the paucity of data provided by BNE in support of its petition makes it nearly impossible to assess its validity.

As a whole, the studies and data provided by BNE in its attempt to establish that Wind Prospect will have no adverse impact on the environment are preliminary and therefore inadequate. For example, the bat acoustic study submitted as Exhibit L is only an "interim report" – the study was apparently to continue through October 2010, but BNE has not provided a final report to the Council. (Ex. L to Petition No. 980, page i.) BNE's consultant, Western EcoSystems Technology, Inc. ("Western EcoSystems"), expressly states in its report that the

Request for Party Status

January 25, 2011

Page 8

results are subject to change. Moreover, Western EcoSystems did not conduct any mist netting to actually capture and record the species of bats in the area. Instead, Western EcoSystems relies solely on the results of its sound recordings, which it acknowledges do not identify individual bats or even individual species of bats.

BNE's breeding bird study suffers from similar flaws. Western EcoSystems spent a total of three days in very late June and early to mid-July 2010 making observations on the Wind Prospect property. (See Ex. M to Petition No. 980, page i.) The timing of Western EcoSystems' "final report," late in the birding season, means that its observations lack value because (1) the vegetation would have been very dense, preventing effective identification at the observation points located in forest-dominated areas, and (2) many birds would have already been in nesting mode, particularly given the extremely hot summer Connecticut experienced. Western EcoSystems' surveys were conducted after the peak birding season. Although there were 12 survey points occupied on each day, a biologist was located at each survey point for only 5 minutes each day – meaning that the total observation period for this study was approximately three hours. The superficial nature of this "study" explains its sparse findings of only 35 species of birds and 525 unique individuals. It also explains the significant percentage of unidentified birds recorded by Western EcoSystems. The Council cannot rely on such a preliminary and incomplete study to determine the effect of Wind Prospect on the bird population.

Another example of the preliminary nature of BNE's data can be found in its terrestrial wildlife habitat and wetlands impact analysis. BNE's environmental consultant, VHB, conducted its three wetland delineation report field studies in January and March, when the snow depth was 2 to 4 inches and the frost depth was zero to 3 inches. These field studies were conducted before the vernal pool season, so VHB's statement that no vernal pool habitats were identified on the Wind Prospect property is hardly surprising. (See Ex. I to Petition No. 980, pages 4, 10.) Nearly all of VHB's discussion of wildlife on the property is based on a desktop wildlife evaluation instead of actual observation, which is understandable since VHB's biologists only conducted their field investigations in the winter of 2010. (See id., page 8.) Thus, VHB's discussion of wildlife focuses on species that have the "potential" to occur on the property or are "likely" to live on the property. (See id., pages 8-12.) VHB's analyses may be adequate for a preliminary feasibility or planning level study, but do not provide the Council with the data necessary to analyze the actual wildlife and habitat impact of BNE's proposed industrial site.

Point V. BNE's petition should be denied based on its failure to provide the Council with reliable and accurate information. These failures can only be seen as part of BNE's attempt to get the Council to "rubber stamp" a project of unprecedented scope with little to no scrutiny. Among BNE's failures and misrepresentations are the following:



Request for Party Status

January 25, 2011

Page 9

- Misrepresenting its relationship with the local community. BNE told the Council that it has established a “good relationship with the Prospect community” through a “multi-faceted communications approach” that allegedly included regular discussions with local officials, an informational filing at the Town Hall and public access to information on BNE’s website. (Petition No. 980, page 5.) BNE has not established a good relationship with the Prospect community, as demonstrated by the opposition to this project by residents of Prospect. Even Prospect’s mayor, who initially supported BNE’s proposal as a way to bring in tax revenue to the town, now opposes Wind Prospect.

- Failure to provide approval from the Federal Aviation Administration for the larger turbines that BNE is asking the Council to approve. In fact, BNE has not even finally selected the turbine model it plans to use at this site, yet asks the Council to approve its project by declaratory ruling.

- Failure to adequately measure and predict noise levels. The noise study provided by BNE’s consultant establishes sound levels in Prospect based on two days of data in the spring of 2010. That data is not adequate to provide an accurate picture of the average noise level in the surrounding area. BNE’s noise analysis is also devoid of any consideration of the cumulative noise caused by siting six industrial wind turbines within less than one half mile of each other.

- Inaccurate representation of the project site as not supporting state-listed species. In fact, BNE’s data documents the actual presence of the Red Bat and Hoary Bat at the site, as well as the potential presence of the Silver-haired Bat and Indiana Bat on the site. The CT DEP confirmed the presence of the Eastern Box Turtle at the site, but BNE has no plans to perform a property-specific survey for the site.

- Failure to conduct adequate on-site surveys for mammals, reptiles, amphibians, or plants.

- Reliance on data collected on a snow-covered site to support the representation that no vernal pools or significant amphibian habitat is present at the site.

- Failure to conduct a fish survey at the site, despite the presence of a perennial watercourse in which at least one fish (a young brook trout) was observed.

- Failure to provide a Stormwater Pollution Prevention Plan (SWPPP) that meets the requirements of the CT DEP’s Stormwater General Permit.

Request for Party Status

January 25, 2011

Page 10

### **III. Relief sought by the petitioner**

FairwindCT requests that the Siting Council deny BNE's petition for a declaratory ruling regarding Wind Prospect or exercise its authority to decide not to issue a declaratory ruling and instead to initiate rule-making under General Statutes § 4-176(e). It further asks the Council to impose a moratorium on all industrial wind generation projects in areas zoned residential or which are located within 1.5 miles of historic structures or National Natural Landmarks until appropriate laws and regulations may be put in place by the State, the Council and local regulatory bodies.

### **IV. Statutory or other authority therefore**

FairwindCT is entitled to party status in this proceeding pursuant to Sections 4-177a, 16-50l, 16-50n, 22a-19 and 22a-20 of the Connecticut General Statutes and Sections 16-50j-13 through 17 of the Regulations of the Connecticut Siting Council.

### **V. Nature of the evidence that the petitioner intends to present**

FairwindCT will present evidence including but not limited to:

- studies, surveys and expert opinion regarding the deleterious visual and noise effects of siting wind turbines in close proximity to residential buildings, including but not limited to negative health effects such as headaches, sleep disturbances, nausea, dizziness and tinnitus;
- studies, surveys and expert opinion regarding the preliminary and incomplete nature of the evidence provided by BNE regarding the environmental effects of its proposed industrial wind turbines on nearby wetlands and other natural resources, wildlife including but not limited to rare wetland plants, amphibians, bats and birds;
- studies, surveys and expert opinion regarding the deleterious safety effects of siting wind turbines in residential areas, including the potential for fire, ice throw and turbine collapse;
- studies, surveys and expert opinion regarding the deleterious economic effects of siting wind turbines in residential Prospect, including the adverse effects on real estate values;

Request for Party Status

January 25, 2011

Page 11

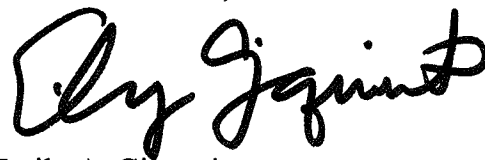
- studies, surveys and expert opinion regarding the inefficiency and unreliability of industrial wind power;
- testimony by residents living in proximity to the proposed sites about the adverse effect the industrial wind turbines will have on their lives.

**VI. Other comments for the Siting Council's consideration**

None.

Very truly yours,

REID and RIEGE, P.C.

A handwritten signature in black ink, appearing to read "Emily A. Gianquinto". The signature is written in a cursive, flowing style.

Emily A. Gianquinto

cc: Carrie L. Larson, Esq.  
Paul Corey  
Jeffrey J. Tinley, Esq.  
Hon. Robert J. Chatfield  
Thomas J. Donohue, Jr., Esq.  
John R. Morissette  
Christopher R. Bernard  
Joaquina Borges King