STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition of BNE Energy Inc. for a Declaratory Ruling for the Location, Construction and Operation of a 3.2 MW Wind Renewable Generating Project on New Haven Road in Prospect, Connecticut	**Docket/Petition No. 980**
	May 2, 2011

SAVE PROSPECT CORP'S POST-HEARING BRIEF

Save Prospect Corp. ("SPC") hereby submits its post-hearing brief in the above-captioned matter. BNE Energy, Inc. ("BNE") seeks a declaratory ruling for the approval of a 3.2 MW wind energy facility in Prospect, Connecticut called "Wind Prospect." The last evidentiary hearing was held on March 31, 2011. SPC opposes Wind Prospect and requests that this Council deny BNE's petition. In addition to the arguments set forth below, SPC adopts and incorporates by reference the arguments contained in the briefs filed by parties FairwindCT and Messrs. Lamontagne and Satkunas.

I. Factual Background

See SPC's Proposed Findings of Fact dated April 28, 2011, which is incorporated by reference herein.

II. The Siting Council Must Re-Examine its Founding Principles, its Statutory Mandate and its Jurisdiction

This is the first Siting Council review of a petition for declaratory ruling concerning a wind energy facility. It has proceeded in the absence of any pre-existing regulations or standards that are specific to siting wind energy facilities. It has proceeded in a fashion that the parties have been told repeatedly is in accordance with the Siting Council's "usual" procedures and rules.

Before taking the historic step of siting a wind energy facility on residentially zoned property, adjacent to an existing neighborhood, the Siting Council should step back and consider whether the "usual" procedures that the Siting Council has grown accustomed to applying in administering a docket dominated by cell tower applications are: (1) consistent with the legislative findings and purposes underlying the creation of the Siting Council and the Siting Council's jurisdiction; and (2) adequate to protect the environment and the public interest in a case that is unlike any other that has preceded it.

A. Application of the Legislative Findings that Underlie the Creation of the Siting Council

The legislative findings that resulted in the creation of the Council are, in pertinent part, as follows:

> The legislature finds that power generating plants . . . have had a significant impact on the environment and ecology of the state of Connecticut; and that continued operation and development of such power plants . . . if not properly planned and controlled, could adversely affect the quality of the environment and the ecological, scenic, historic and recreational values of the state.

Conn. Gen. Stat. § 16-50g. Thus, the Siting Council's duty is, first and foremost, to ensure that the development of power plants is "properly planned and controlled" so that they do not "adversely affect the quality of the environment and the ecological scenic, historic and recreational values of the state." Id. The Siting Council exists, not to push through energy projects and overcome local rules and local resistance, but to protect the environment and the people of the State in the siting process.

It is also wise to consider all of the important ways that proper siting of industrial wind energy turbines that stand 492 feet tall is unlike the process of siting the cell phone towers. Not the least of these is the fact that there is no federal overlay of mandates relating to wind energy;

there is no inherent need to establish a "network" of such facilities; and there is no need to site such facilities in or near neighborhoods. If the Siting Council approves such a plan, it will do so because it chooses to do so and elects to elevate an opportunity for a wind developer to construct a facility that will contribute a negligible amount of power and requires massive government loans, subsidies and credits over the established property rights and interest of the neighboring property owners.

BNE's Wind Prospect is a project that represents a potential investment on the order of $10 million that is not economically viable without many millions of dollars in government subsidies. BNE's only existing property interest in the 67.5 acre, residentially zoned project site is an option to purchase the property, the terms of which are not in evidence. BNE has no existing right or entitlement to build wind turbines on the Wind Prospect site. Nor does the present owner of this residentially zoned site have any such existing right or entitlement to transfer to BNE.

In contrast, the many hundreds of property owners whose property values and right to the peaceful use and quiet enjoyment of their property will be undermined represent existing property rights and interests that may be conservatively valued on the order of $100 million. The supposed rights of the wind developer cannot be given precedence over the homeowners' rights and their efforts to raise legitimate issues and concerns must be taken seriously.

B. <u>Application of the Statutory Purposes of the Siting Council</u>

Before taking the historic step of siting a wind energy facility on residentially zoned property, adjacent to an existing neighborhood, the Siting Council also should revisit the statutory expression of the purposes for which it was formed. Those purposes are, in relevant

part:

> To provide for the balancing of the need for adequate and reliable public utility services at the lowest reasonable cost to consumers with the need to protect the environment and ecology of the state and to minimize damage to scenic, historic, and recreational values; to provide environmental quality standards and criteria for the location, design, construction and operation of facilities for the furnishing of public utility services at least as stringent as the federal environmental quality standards and criteria, and technically sufficient to assure the welfare and protection of the people of the state . . . .

Conn. Gen. Stat.§ 16-50g.

The first part of this statement of purpose speaks to the need to "provide for the balancing" of various "needs." One stated need is "the need for adequate and reliable public utility services at the lowest reasonable cost to consumers." Id.

It is indisputable that wind energy does nothing to fulfill this need. Wind energy is inherently unreliable. It contributes nothing to the peak demand capacity of the grid, because at moments of peak demand, there may be no wind. Thus, for every kilowatt-hour of wind energy capacity built there must be a redundant source that can be relied upon to satisfy peak demand regardless of whether the wind is blowing.

Another stated need is the need for utility services "as the lowest reasonable cost to consumers." Id. Wind energy also in inherently uneconomical, as this project and others like it could not be built and could not survive in operation without massive government subsidies.

The statutory statement of purpose continues to identify "the need to protect the environment and ecology of the state and to minimize damage to scenic, historic, and recreational values; to provide environmental quality standards and criteria for the location, design, construction and operation of facilities for the furnishing of public utility services at least as stringent as the federal environmental quality standards and criteria, and technically sufficient to

assure the welfare and protection of the people of the state." Id. This need – in particular the need "to assure the welfare and protection of the people of the state" – although by far the most important statutory mandate, has not been given adequate consideration in these proceedings.

The Siting Council's proposed Findings of Fact include a partial restatement of the energy policy of the State, as express in Conn. Gen. Stat. § 16a-35k. A more complete statement of the policy is that renewable energy sources are to be developed "consistent with other essential considerations of state policy to improve and coordinate the plans, functions, programs and resources of the state to attain the objectives stated herein without harm to the environment, risk to health or safety or other undesirable or unintended consequences." Conn. Gen. Stat. § 16a-35k.

As a siting agency, the Siting Counicil's role is to ensure that a proposed site is appropriate and consistent with legislative findings and statements of purpose that emphasize protecting the environment, the health and safety of the citizenry. The importance of this limited role cannot be gainsaid, as the Siting Council serves as a bulwark between energy project developers and potential harm to "the welfare and protection of the people of the state." Conn. Gen. Stat. 16-50g. A preference to develop clean and renewable energy, while laudable in the abstract, cannot transform a plainly inappropriate site for an industrial wind project into an appropriate site. Nor can such a preference transform wholly inadequate plans to develop a project into adequate plans. Such a preference cannot justify bending the rules to allow a developer to fundamentally alter such plans on the fly or to gloss over the evident deficiencies in such plans.

C. The Petition Process: the Need for Both Fairness and the Appearance of Fairness.

There is no fundamental right to proceed under the Siting Council's expedited statutory Petition process. The question presented for decision on this Petition is, as dictated by statute, a yes or no question. BNE seeks a declaration that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance and operation of a 3.2 mW wind renewable generating facility at the Wind Prospect site. The question is whether Wind Prospect qualifies for such a declaratory ruling, based on the petition submitted by BNE. Conn. Gen. Stat. § 16-50k.

The answer to this question clearly is "No." BNE's petition, by the admission of its own witnesses, had numerous flaws that required correction. Its site plans were inadequate and not in compliance with drainage, runoff and water quality standards; its studies of birds and bats were flawed and inadequate; its noise and shadow flicker studies did not consider the final siting of the turbines and the impacts at the property line. The list could go on and on.

BNE claims to have fixed some of these problems in the plans submitted near or after the close of evidence. It claims it will fix others in the future, in a "D&M" phase that is not provided for either in the statutes or regulations applicable to petition proceedings.

Again, a petition for declaratory ruling must be judged as submitted. Given the statutory timetable and the requirements of due process for all parties concerned, it cannot be not a fluid process. Fairness, and a fair reading of the applicable statutes, must consider the basic fact that the Siting Council is charged with processing petitions to conclusion within six months of filing. It must also consider the statutory purposes to protect the environment and public health and safety in the siting process, as well as the statutory grant to all parties of "the right to present such

oral or documentary evidence and to conduct such cross-examination as may be required for a full and true disclosure of the facts." Conn. Gen. Stat. § 16-50o.

The statutory time frame cannot be read in isolation from these rights. A Petition proceeding that emphasizes and focuses only on the deadlines at the expense of "the right to present such oral and documentary evidence and to conduct such cross-examination as may be required for a full and true disclosure of the facts," is a fatally flawed proceeding. The petition was not suitable for approval when filed. It cannot properly be substantively and materially changed throughout the course of the proceedings. The petition is, notwithstanding such changes, still not suitable for approval. The petitioner cannot properly be permitted to address the remaining deficiencies after approval.

Moreover, it is a universal and fundamental tenet, applicable to court proceedings as well as quasi-judicial administrative proceedings that "[t]o maintain the respect of the public, the system must not only be fair, but must appear to be fair." Santaniello v. State, Case No. CV04-0834015 (Super Ct., Judicial District of Hartford, Dec. 23, 2005) (D. Lavine, J.) As Justice Frankfurter stated nearly sixty years ago: "The guiding consideration is that the administration of justice should reasonably appear to be disinterested as well as be so in fact." Public Utilities Comm'n v. Pollak, 343 U.S. 451 (1952).

More recently, in the specific context of proceedings before administrative agencies, the Court stated:

> The maintenance of proper standards on the part of administrative agencies in the performance of their quasi-judicial functions is of the highest importance and in no way cripples or embarrasses the exercise of their appropriate authority. On the contrary, it is in their manifest interest. For, as we said at the outset, if these multiplying agencies deemed to be necessary in our complex society are to serve the purposes for which they are created and endowed with vast powers, they must

> accredit themselves by acting in accordance with the cherished judicial tradition embodying the basic concepts of fair play.

Morgan v. United States, 304 U.S. 1, 22 (2001). Virtually all courts have recognized this fundamental principle.[1]

These are the principles that SPC has fought to see upheld in this case. SPC has tried mightily to convince the Siting Council not merely that its correct in its position, but that it is in the Council's "manifest interest" to, at a minimum, fully and fairly consider all of the evidence and arguments. SPC has sought to present facts and evidence that will help the Siting Council in the proper execution of its important function. It has tried repeatedly to convince the Council that according a reasonable measure of due process and allowing a full and fair opportunity to present evidence that probes and rebuts the petitioner's evidence is necessary to avoid a serious error that will adversely affect many homeowners and their families.

It is SPC's intention to assist the Council in properly executing its duties and to reach a fair and correct decision. SPC has stressed the fact that ensuring a fair process is, as the Court stated, of the "highest importance and in no way cripples or embarrasses the exercise of [the Council's] appropriate authority."

---

[1] See, e.g., Beddow v. Jones, 149 Wn. App. 1057 (2009) (Citation and internal quotation marks omitted) ("A judicial proceeding must appear to be fair and"is valid only if a reasonably prudent and disinterested observer would conclude that all parties obtained a fair, impartial, and neutral hearing."); In re McLean, 135 N.C. App. 387, 399, 521 S.E.2d 121, 127 (1999) ("[I]n order that our trial courts retain the confidence of the citizens who bring their cases there for decision, the process of decision making must not only be fair, but must appear to be fair."); Pisano v. Shillinger, 835 P.2d 1136, 1138-39 (Wyo. 1992) (Citation and internal quotation marks omitted) ("It has been said, government action must not only be fair, it must appear to be fair. . . .one of the best procedural protections against arbitrary exercise of discretionary power lies in the requirement of findings and reasons that appear to reviewing judges to be rational."); Farley v. Jester, 257 Ark. 686, 520 S.W.2d 200 (1975)(court proceedings must not only be fair and impartial, they must appear to be fair and impartial. ")

The Siting Council has a fundamental statutory duty to recognize the rights of parties to participate meaningfully in these proceedings. Specifically, the relevant statute mandates:

> Every party or group of parties as provided in section 16-50n shall have the right to present such oral or documentary evidence and to conduct such cross-examination as may be required for a full and true disclosure of the facts.

Conn. Gen. Stat. § 16-50o. No objective observer could conclude that this mandate has been fulfilled in this case.

A proper remedy is to give such a petitioner a choice: either to stand on both the statutory deadline and the petition as filed; or to agree to an extension of the deadline in order to respect the rights of all parties to present contrary evidence, cross-examine and achieve a full and true disclosure of the facts.

Nor its it a proper answer that rejection of inadequate petitions will discourage applicants from fixing deficiencies or improving their applications. Quite the contrary is true. The Siting Council must not encourage applications that are deficient when filed, with the deficiencies papered over on the fly and late in the process, so as to avoid close scrutiny of claimed "fixes" and improvements. The result of such a process would be as unfair to the Siting Council as it is to opponents.

III. BNE'sPetition Fails to Propose Reasonable Setbacks

Many countries, states and towns have implemented setback standards for wind turbines in the last five years. Neither the Connecticut State legislature nor the Connecticut Siting Council has implemented any such regulations.

In this proceeding, BNE asserts that 920 feet is an "adequate buffer . . . to the nearest residential dwelling to protect the public and safety." (BNE Exhibit 20, Supplemental Pre-filed

Testimony of Joel Rinebold dated March 24, 2011, at p. 1.) The evidence in the record clearly demonstrates that much larger setback standards, measured to property lines, are necessary to protect the public health and safety and to respect the vested property rights of nearby property owners.

The proposed location of the southern turbine is approximately 415 feet from the closest southern property line and 545 feet from the closest eastern property line. These distances do not take into account the fact that the turbines rotate such that at various times the blade tips will point toward adjacent properties and will be up to 164 feet closer (a net distance of 253 feet) to the nearest adjacent property line. The proposed alternative location of the northern turbine, as referenced in Mr. Cline's supplemental testimony dated March 8, 2011, is approximately 860 feet from the base of the turbine to closest eastern property line. (March 31, 2011 Hr'g Tr. 115-117.)

In other jurisdictions, setback distances most often are measured from the base of the turbine to surrounding property lines, not to dwellings. Because measurement from the base of turbines does not take into account the reach and varying length of turbine blades, moreover, some of the more recent enactments employ a setback formula based upon a multiple of blade diameter.

In the case of a property whose property line is 415 feet from the base of the turbine and the dwelling on the property is 920 feet from the base of the turbine, simple math tells us that 405 feet of the subject property is closer to the base of the turbine than what Mr. Rinebold claims is a safe distance. Is the property owner therefore expected to give up the right to use a substantial portion of his property? Must he and his family wear hard hats when using their yard?

Statutes and ordinances in states such as Delaware, Illinois, Ohio, South Dakota, and

Wyoming and various towns in Maine specifically require measurements to begin at the turbine and end at adjoining property lines. (SPC Proposed Findings of Fact ("FOF") 75-78, 82.) Some jurisdictions, such as Wyoming, apply the setback distance to public roads in addition to surrounding property lines. (SPC FOF 82.)

While some jurisdictions do measure to the nearest residence, their setback standards exceed the "buffer" proposed by BNE for Wind Prospect. For instance, a 2006 report prepared by the California Wind Energy Collaborative for the California Energy Commission lists the following safety setback requirements of five California counties: (1) Alameda County requires the greater of 3 times the overall turbine height or 500 feet, (2) Contra Costa County requires 1,000 feet, (3) Kern County requires the greater of 4 times the overall turbine height or 1,000 feet, (4) Riverside County requires the greater of 3 times the overall turbine height or 500 feet (measured to lot line with dwelling), and (5) Solano County requires the greater of 3 times the overall turbine height or 1,000 feet. (SPC FOF 81.)

The trend throughout the world is to site large, industrial turbines much further away from residences than what BNE proposes for Wind Prospect. Many states and countries have recently attempted to enact laws for siting wind turbines. The Vermont legislature has proposed minimum setback requirements of 2,640 feet for wind energy plants that exceed 0.49 megawatts. (SPC FOF 87.) The New Jersey legislature has proposed that no "state entity may approve any plan, proposal, or permit application for a wind energy structure if that wind energy structure will be erected or installed at a site that is closer than 2,000 feet from any residence or residentially zoned property." (SPC FOF 88.). Similarly, the United Kingdom Parliament has proposed a minimum distance requirement of 6,562 feet for wind turbines greater than 328 feet in height but

less than 492 feet. (SPC FOF 89.) Furthermore, the French Academy of Medicine recommends a setback distance of 4,921 feet from utility scale wind turbines and the United Kingdom Noise Association recommends 5,249 feet. (SPC FOF 90.)

Various towns in the United States have implemented ordinances to ensure appropriate distances between commercial wind turbines and residences. In Dixmont, Maine, turbines must be set back at least 2,500 feet from the property line of any non-participating property (unless waived by the property owner in writing) and at least 1,500 feet from any public way. (SPC FOF 83.) In Jackson, Maine, turbines greater than or equal to 1 MW, or a turbine height greater than or equal to 300 feet, must be set back from the property line of any non-participating landowner a distance of no less that 13 times the turbine height (unless waived by the property owner in writing) and set back from any public road a distance no less than 4 times the turbine height. (SPC FOF 84.) In Thorndike, Maine, turbines must be set back at least 1,800 feet from the property line of any non-participating property (unless waived by the property owner in writing) and at least 1,500 from any public way. (SPC FOF 85.) In Montville, Maine, turbines the size of those proposed for Wind Prospect must be setback at least one mile (5,280 feet) from the wind farm property boundary and no less than 4 times the turbine height from any public road. (SPC FOF 86.)

The Cape Cod Commission in Massachusetts recently approved proposed regulations for the siting and review of land-based wind turbines. The new regulations were prompted by "lessons learned" in Falmouth, Massachusetts. Included among the proposed regulations is a setback of 10 times the diameter of the turbines blades, as measured from the base to the nearest receptor. (SPC FOF 109.)

Even GE recognizes that their turbines must be setback at a "safe distance" from any occupied structure, road or public use area. (SPC FOF 91.) Although GE generally follows the formula of 1.5 times the hub height plus rotor diameter, it recognizes that the actual distance is dependent upon "turbine dimensions, rotational speed and many other potential factors." (SPC FOF 91.). GE has not approved a particular setback distance for Wind Prospect. Furthermore, it is unknown whether GE is fully aware of the close proximity of the turbines to Route 69. Instead, GE is claimed to have merely deemed the proposed site "suitable" for its own turbines, but no GE representative appeared to explain further or to be cross-examined. Clearly, GE's economic benefit if Wind Prospect is approved must be considered on this issue.

The supplemental pre-filed testimony of Joel Rinebold, which covers topics such as setback standards and wind turbines located at Phoenix Press (New Haven, CT) and Forbes Park (Chelsea, MA) is disingenuous. As an initial matter, Mr. Rinebold limited his testimony to the standards in various states and failed to acknowledge that towns within states that have enacted regulations or ordinances. He also failed to account for recently proposed legislation regarding setback standards both near and far. With regard to New Hampshire and California, the OLR report that was supposed to be attached to Mr. Rinebold's supplemental testimony provides that the regulations in those states are limited to "small wind systems" or "small projects." Even more concerning is Mr. Rinebold's misleading testimony in which he ignores that many of the setback standards he cited are actually measured to surrounding property lines and not residences.

Here, BNE cannot demonstrate that Wind Prospect will satisfy any of the so-called standards relied on by Mr. Rinebold. It is an indisputable fact, acknowledged by BNE's very own

expert, Michael Libertine, that the southern turbine is less than the total height of the wind turbine (492 feet) to the nearest southerly property boundary. (SPC FOF 66.) Furthermore, Mr. Libertine confirmed that the southern turbine is less than 600 feet from the nearest easterly property boundary. (SPC FOF 66.)

Moreover, BNE has failed to produce a shred of credible evidence to contradict the fact that if Wind Prospect is approved, it will be the most densely populated residential area in the United States within 0.6 miles (3,168 feet) of a wind turbine. (SPC FOF 64.) There will be 234 residences within 3,168 feet and 129 residences within 2,640 feet (.5 mile) of the proposed turbines. (SPC FOF 65.).

The Phoenix Press and Forbes Park examples cited in Mr. Rinebold's supplemental testimony completely miss the mark. Those turbines are hundreds of feet shorter and have far less electrical output than the behemoths proposed for Wind Prospect. The Phoenix Press wind turbine has a 100 kW capacity, which is only 3% of the generation capacity for Wind Prospect). The Forbes Park wind turbine has a 550 kW capacity, which is only 16% of the generation capacity for Wind Prospect.

Finally, the wind turbine in Templeton, Massachusetts is an anomaly. GE, the manufacturer of the turbines proposed for Wind Prospect, declined to participate in Templeton because of setback considerations. (BNE Exhibit 20, Supplemental Pre-filed Testimony of Joel Rinebold dated March 24, 2011, at p. 2.) Adverse effects, such as shadow flicker, have impacted the quality of life of nearby residents to the Templeton wind turbine. (See Thomas Casella Written Statement to Siting Council.)

The setbacks proposed by BNE for Wind Prospect are wholly inadequate to protect the

public health and safety. Not only will they fail to adequately protect Prospect residents, they will fail to protect all travelers on Route 69, including school buses, public transportation, and commuters.

IV. BNE's Petition Fails to Present an Appropriate Shadow Flicker Study and Shows that Nearby Properties Will Be Subject to Unreasonable Shadow Flicker

BNE submitted a Shadow Flicker Analysis in this proceeding, which its consultants, VHB and Michael Libertine, prepared using the SHADOW module of the WindPRO software. (SPC FOF 118.) This is VHB's first Shadow Flicker Analysis for any application or petition. (SPC FOF 119.) Indeed, Mr. Libertine acknowledged that this is the first matter, other than practicing with the WindPRO software, that he has done a shadow flicker study. (SPC FOF 3.) BNE's Shadow Flicker Analysis is anything but an accurate depiction of the worst case scenario for flicker at nearby public roads, residences and other occupied structures and its analysis inappropriately relies on the probable case, rather than the worst case. The limitations of the software and questionable inputs by Mr. Libertine support this conclusion.

One limitation of the WindPRO software is that it does not allow for any type of opacity factor. VHB assumed a 65-foot average tree height throughout the 2,000 meter study area. As a result, an inaccurate depiction of blocks of vegetation - at uniform density and height - is rampant throughout the study area. The WindPro software treats an input of such "wall-like" vegetation as keeping shadow flicker away from receptors, thereby reducing the number of "receptors" impacted. (SPC FOF 125.) Moreover, the receptors were assigned a default value of one square meter (3 feet by 3 feet). The default value is set by the greenhouse mode of the WindPRO software. VHB could have entered a larger receptor size but chose not to do so. (SPC FOF 125.) These limitations, and others, fail to accurately predict the true impact of shadow flicker on

nearby receptors. Other arbitrary data and values deserve additional scrutiny.

For example, VHB entered receptors as point data centrally located on each home or structure within the study area. Vacant, residential land without homes within the study area was excluded as a receptor location. (SPC FOF 120.) VHB assumed that receptors were only one meter off the ground (approximately 3 feet). (SPC FOF 122.) VHB further assumed no two-story houses or structures within the study area. (SPC FOF 123.) VHB then arbitrarily applied a 50% reduction factor to the results to account for probable case scenario. (SPC FOF 126.)

Other jurisdictions have taken notice of the shadow flicker effect produced by wind turbines. In Dixmont, Maine, an application for a wind energy facility must be denied if the applicant's study estimates that the duration and location of flicker will be more than 10 hours of flicker per year at any occupied structure located on a non-participating property. (SPC FOF 129.) Similarly, the Maine towns of Jackson and Montville require that each wind turbine is designed and sited so that shadow flicker and/or blade reflection will not fall on a shadow flicker receptor more than 10 hours per year. (SPC FOF 131 & 133.) The standard in Thornidke, Maine, is even more stringent. There, an application must be denied if the applicant's study estimates that the duration and location of flicker will satisfy any of the following conditions: (1) there are more than 10 hours of flicker per year on any Non-participating Parcel, (2) there are more than 10 hours of flicker per year on any roadway, and (3) flicker is possible at intersections of any roadways. (SPC FOF 132.)

Although two spinning turbines may not trigger photosensitive epilepsy, they can still have adverse health effects to nearby people. For instance, a report prepared by the Rensselaerville Wind Power Committee ("RWPC") Report states:

> A field trip taken by the wind committee to the Maple Ridge Wind Farm in Tug Hill, New York in January 201 demonstrated that even though one turbine may be turning at a frequency less than that needed to trigger photosensitive epilepsy, the contribution of two of them may cause an [sic] different sensation. This effect was experienced when two turbines were turning at about the same rotational velocity but were slightly out of phase with each other. The result was a flicker which was twice that of one turbine but still less than the frequency needed to trigger photosensitive epilepsy. Standing at the site for a few minutes caused a disorienting, dizzying sensation in at least two of the team members.

(SPC FOF 130.) Surely gardeners and children playing outdoors will be susceptible to similar health effects experienced by the RWPC team members in Tug Hill, New York.

The flickering effect may have its worse impact on Tyler Nitsch, an 11 year-old boy who lives at 11 Lee Road in Prospect, which approximately 1,400 feet from the nearest turbine. Tyler suffers from various medical disorders, including epilepsy. He has a service dog named Safforn, who can sense his seizures, assist with his anxiety and handle his autism. Tyler's parents moved to Prospect because of the quiet and peace it presented to their family. Tyler's mother, Marissa, is concerned about the potential impact the turbines will have on her young boy. (SPC FOF 92.) BNE's late photo simulations contain a direct western view of Wind Prospect that was taken less than 100 feet from Tyler's front yard. The Lee Road picture demonstrates the absurdity of VHB's Shadow Flicker Analysis, which predicts approximately 23 hours per year of flicker at 9 Lee Road (worst-case) but zero hours per year at 11 Lee Road.

The Siting Council cannot properly rely on BNE's Shadow Flicker Analysis to determine the impact of Wind Prospect on the public health and safety. Wind Prospect would not meet the Maine town ordinances discussed above. Furthermore, the "worst case" numbers determined by VHB actually exceed the standard cited in a number of other cases for shadow flicker exposure cited in Mr. Libertine's testimony. The standard applied in other cases has been a "worst case"

exposure, as it should be, because it would be unfair to allow BNE, as a property owner, to subject its neighboring residential property owners to even "worst case" exposure that is excessive. (SPC FOF 128.)

All that BNE has demonstrated is that the actual impact of shadow flicker – whether inside during breakfast, outside in a garden or pool on a summer's day, or at the intersection of a public road during commuting hours – will not truly be known until the wind turbines are operational. (SPC FOF 134.) The public health and safety deserves much more protection than flawed exposure estimates from a wind developer's hired gun.

V. The Siting Council Has Made Inappropriate Use of Epsilon Associates, Inc.

One month prior to the filing of Petition 980, the State of Connecticut hired Massachusetts-based Epsilon for a $175,000 contract to provide technical and environmental expertise to the Council. Pursuant to Conn. Gen. Stat. § 16-50n(e), the Council "shall direct such consultant or consultants to study any matter that the council deems important to an adequate appraisal of the application." Moreover, "[a]ny such study and any report issued as a result thereof shall be part of the record of the proceeding." (emphasis added) Under accepted evidentiary rules, the advice given by such technical advisors must be fully disclosed and made a part of the record and the advisor must be subject to cross-examination. See, e.g., Federal Trade Commission Com'n v. Enforma Natural Products, 362 F.3d 1204 (9th Cir. 2004); Federal Rules of Evidence, Rule 706.

In the context of administrative hearings, Connecticut superior courts hold that parties have a right to cross-examine court appointed experts and offer rebuttal evidence when necessary. In Bostrom v. Comm. of Motor Vehicles, the court held that the plaintiff, a party in a

license revocation hearing, had the right to cross-examine an expert witness appointed by the agency. No. CV 960564639, 1997 Conn. Super LEXIS 1153, *6-*7 (Apr. 30, 1997). In Bostrom, the plaintiff sought to cross-examine a witness with expert knowledge of a breathalyzer to question the validity of the toxicity test and comment on other experts' skepticism concerning the reliability of the breathalyzer. Id. at *5. The hearing officer stopped this line of questioning, declaring it to be irrelevant to the hearing; however, the court held that it violated the plaintiff's due process rights to cross-examine and present rebuttal evidence since the hearing officer's final decision relied on the findings directly related to the outcome of the breathalyzer test. Id. at *6-*7; see Giaimo v. City of New Haven, 257 Conn. 481, 512-13 (2001) ("Hearings before administrative agencies . . . although informal and conducted without regard to the strict rules of evidence, must be conducted so as not to violate the fundamental rules of natural justice. . . . Due process of law requires not only that there be due notice of the hearing but that at the hearing the parties involved have a right to produce relevant evidence, and an opportunity to know the facts on which the agency is asked to act, to cross-examine witnesses and to offer rebuttal evidence."); Norooz v. Inland Wetlands Agency of Town of Woodbury, 26 Conn. App. 564, 569 (1992) ("Due process of law requires that the parties involved have an opportunity to know the facts on which the [agency] is asked to act, to cross-examine witnesses and to offer rebuttal evidence."); Bryan v. Sheraton-Hartford Hotel, 62 Conn. App. 733, 733 (2001) (denouncing secret evidence at administrative hearings)

Epsilon's history as a consultant to and advocate for the wind industry should not be ignored. Furthermore, Epsilon’s principals have submitted testimony before the New Hampshire Site Evaluation Committee and other siting authorities on behalf of wind energy developers.

Next month at the American Wind Energy Association's WindPower 2011 Conference and Exhibition in Anaheim, California, Epsilon will present an updated noise study supportive of the wind industry's position. The Siting Council knew, or should have known, that Epsilon is not an unbiased and objective consultant and would be obligated to take positions in its advice to the Siting Council that is consistent with the advice it has given and the public positions it has taken on behalf of its wind developer clientele.

The GE 1.65 MW wind turbines proposed for Wind Prospect are designed after the "flagship" GE 1.5 MW model. (March 3, 2011 Hr'g Tr. 81:11-13.) Epsilon's opinion concerning the noise emitted from the GE 1.6 MW model (and related setback distance from residences) as provided to the Siting Council is extremely relevant to this proceeding. The parties should be privy to this advice and whether it is consistent with the position Epsilon has taken in other venues. Similarly, Epsilon has opined publicly with respect to shadow flicker reasonable duration of exposure in *worst case* projections in a manner that would rate the worst case duration of exposure in the present case unacceptable. The parties should be privy to the advice given the Siting Council and Epsilon should be subject to cross examination on this issue as well.

To date, no study or report prepared by Epsilon has become part of the record in this proceeding. However, SPC is fully aware that Epsilon has provided the Council with various comments and reports concerning Wind Prospect. For instance, Epsilon provided the Council with a spreadsheet comparing Wind Prospect to the "application requirements contained in the Siting Council Guide for Renewable Energy Facilities." In addition, Epsilon commented on compliance with air and water quality standards and recommended a shadow flicker webinar for Council members and staff at which it was a presenter. At that webinar, Richard Lampeter, a

Senior Scientist at Epsilon, provided an overview of shadow flicker regulations and some of the various guidance documents available on the subject. To take the position, as the Siting Council has, that there is no "report" or "study" from Epsilon is simply word play designed to evade the requirements of the statute.

Despite requests pursuant to the Connecticut Freedom of Information Act, the Siting Council failed to produce Epsilon's documents such as reports, comments and draft interrogatories prior to the close of evidence. Although certain additional documents were produced today, such documents clearly could not have been offered in evidence or reviewed in time to be included in the post-hearing briefing. The unavailability of Epsilon and its reports and other documents during this proceeding and the on-going ex parte communications between Epsilon and Council members and/or staff is severely prejudicial to SPC. SPC objects to the Council's relationship with Epsilon and its failure to timely make any and all documents prepared by Epsilon a part of the record in this proceeding.

VI. Ice and Blade Throw

Ice and blades can be and have been thrown from wind turbines. (SPC FOF 110 & 112.) BNE did not submit a blade throw analysis in this proceeding. (SPC FOF 111.) BNE submitted an "Ice Throw Risk Assessment" for Wind Prospect as an exhibit to the Pre-filed Testimony of Pierre Heraud. (SPC FOF 113.) The Ice Throw Risk Assessment is limited by various assumptions, including: (1) receptor sizes of only one square meter, (2) only 8 days of icing per year, (3) ice fragments of only 1.1 and 2.2 pounds, and (3) no lift. (SPC FOF 114-115, 117) If the number of icing days increased, the risk level would have also increased. (SPC FOF 115.) Similarly, the risk level would have increased if Mr. Heraud increased the weight of ice

fragments or added lift to his calculations. (SPC FOF 117.)

Mr. Heraud testified that any ice thrown from a wind turbine is dangerous. Furthermore, he acknowledged a report prepared by his employer, GL Garrad Hassan, which references ice being thrown in the shape of a turbine blade. (SPC FOF 112.) According to Mr. Heraud, the risk of injury from Wind Prospect is not zero. With appropriate setback standards, the risk of injury from an ice thrown event from Wind Prospect can be reduced to zero. (SPC FOF 116.)

Simply put, there is no factual basis to support Mr. Heraud's assumptions. Moreover, Mr. Heraud ignores the possibility of ice being thrown at motorists on Route 69. As a result of these deficiencies, the Siting Council should not rely on the Ice Throw Risk Assessment in evaluating the potential impacts of Wind Prospect on the public health and safety.

VII. BNE's Shifting Positions and Misrepresentations Made to Obtain Funding Undermine its Credibility.

These proceedings have been characterized by BNE taking a series of unequivocal positions, repeatedly assuring the Siting Council and all parties that it is fully in compliance with all applicable standards, has "micro-sited" the turbines to meet safety requirements and has otherwise done much more than is required to obtain approval. Each time that BNE has been shown to be wrong, whether it is with respect to setbacks, spacing, birds, bats, slopes, or storm water, BNE has maintained it has fixed the problem, always taking the same adamant position that it is unassailably entitled to approval. BNE has been so sure, and so wrong, so many times that its credibility is shattered.

Credibility is critical to the Siting Council's task. If we know anything about Wind Prospect it is that there is much we do not know and the risk and jeopardy that a wrong assumption will create for hundreds of homeowners. A credible wind developer with experience

and a track record of candor and success might overcome these uncertainties. BNE is not such a wind developer, however.

Wind Prospect is BNE's first wind first project. It is also the first wind project for its principal consulting firm. The Siting Council has had first-hand exposure in these proceedings to BNE's serial proclamations of certainty that its position is unassailably correct, followed by a series of corrections or promised future corrections.

But the roots of BNE's credibility deficit are traceable to the very beginnings of Wind Prospect. Connecticut provides state assistance to developers of renewable energy by utilizing funds collected through surcharges included in consumers' electric rates. The Connecticut Clean Energy Fund ("CCEF") administers the funding programs available to developers of renewable energy. (SPC FOF 15.)

The main goals of the CCEF are to: (a) create clean energy supply for Connecticut, (b) accelerate the development of clean energy technologies, and (c) educate Connecticut consumers about the benefits and availability of clean energy. (SPC FOF 16.) Under the "Pre-Development Loan Program," the CCEF provided funding to early-stage projects "that had yet to begin siting, permitting, or feasibility analysis but may have ultimately been considered for Project 150, once all their milestones were met. The projects had to incorporate existing and proven clean energy resources for power production and must have had a high likelihood of successful development and commercialization." The CCEF discontinued the program for the FY11 and FY12 Plan period. (SPC FOF 17.)

The Pre-Development Loan Program provided tiered-funding based on the size of the project: (a) funding in the form of non-recourse loans of up to $250,000 was available for

projects under five (5) MW, and (b) funding in the form of non-recourse loans of up to $500,000 was available for projects of five (5) or greater. (SPC FOF 18.) By application dated November 19, 2007, BNE applied to the CCEF for pre-development funding for Wind Prospect. BNE's proposal included six Vestas V82-1.65 MW wind turbines for a total nameplate capacity of 10 MW. (SPC FOF 19.)

The CCEF approved BNE's proposal to construct a 10 MW wind farm in Prospect and recommended that the funding of the project occur in two phases. The first loan agreement between Connecticut Innovations ("CI") and BNE is dated February 19, 2009 and provides for a loan of up to $102,375.00. The second loan agreement between CI and BNE is dated June 24, 2010 and provides a loan of up to $397,625.00. (SPC FOF 20.) After November 19, 2007, but before November 11, 2010, BNE states that it reduced the number of wind turbines for this project from six (6) to four (4). The capacity of each turbine however, increased from 1.65 MW to 2.5 MW. The total nameplate capacity remained at 10 MW. (SPC FOF 21.)

BNE has never sought Siting Council approval for anything other than two (2) turbines of 1.6 MW each at the Prospect site. (SPC FOF 22.) BNE must have realized it was impossible to comply with GE's recommended setbacks while seeking approval of six (6) turbines of 1.6 MW each for this site. BNE also must have realized it was impossible to site four (4) turbines of 2.5 MW each for this site. (See BNE Exhibit 6, response to SPC interrogatory no. 7, Set I.) Wind Prospect as proposed is a two turbine wind farm with a total nameplate capacity of 3.2 MW that does not meet industry standard spacing requirements or reasonable setback requirements. To suggest that either four or six turbines could be built on this site is simply ludicrous.

The nameplate capacity of 10 MW was a critical element to BNE's ability to qualify for a

$500,000 loan, for several reasons. First, had BNE represented that it intended to construct only two turbines with a total capacity of 3.2 MW, it would have potentially qualified only for a loan of up to $250,000 under the loan program rules. Undoubtedly, had BNE inflated the proposed capacity by 50%, to 4.8 MW, BNE still would have fallen short of the 5 MW minimum required to apply for a loan of up to $500,000.

Second, CCEF relies on the represented capacity of approved projects in order to demonstrate responsible stewardship of the funds entrusted to CCEF. CCEF issues periodic reports describing its use of funds that include the capacity of pending projects and the claimed public benefit in areas such as the reduction of carbon emissions based upon the stated capacity.

Third, the loan agreements between BNE and CI clearly commit BNE, if the project qualifies to participate in CCEF's "Project 150," to deliver to the wholesale market "greater than fifty percent (50%) of the Project's nameplate rated capacity and energy produced." (March 31, 2011 Hearing Program, SPC Admin. Notice nos. 86 through 88, par. 2.3.) Clearly, BNE cannot sell 50% of 10 MW to anyone if the entire project has a nameplate capacity of only 3.2 MW.

Fourth, BNE is required to report to CCEF any material changes in the project plans or its business prospects. BNE also is required to provide financial reports to CI quarterly and is required to provide a "written progress report" together with each financial report that reflected "all significant current developments" relating to the project. The loan documents further provide that as of the date each advance is made under the loan, "there shall have occurred no change in the management, operations, financial condition or business prospects of the Company that has, or is reasonably likely to have, a Material Adverse Effect." As to any such advance, each of the representations and warranties made by BNE must be "true and correct in all

respects." There is no indication in the documents SPC has received that BNE reported the drastic reduction in the proposed capacity of Wind Prospect to CI or CCEF.

The documents provided to SPC to date reflect an absence of compliance with these requirements and are clearly relevant to the issues of site development impacts, equipment and capacity, as well as the various project "iterations" testified about by Mr. Corey at the hearings on March 3rd and March 31st. They demonstrate that BNE: (1) had no basis to initially propose a project of 6 wind turbines of 1.6 MW for Wind Prospect, (2) initially identified Vestas as the "world leader in wind technology" but now considers the "world leader" to be GE, and (3) obtained increased funding by representing the project as 10 MW. The history of Wind Prospect is important because it reflects the amazing lengths a first-time wind developer will go to get what it wants.

Given this history, the Siting Council cannot reasonably take BNE's assurances and representations at face value and cannot rely on BNE to put the public health and safety above corporate profits.

VIII. Conclusion

For all of the foregoing reasons, SPC respectfully requests that the Connecticut Siting Council deny the approval sought by BNE's Petition.

Respectfully submitted,
SAVE PROSPECT CORP

By: /s/ Jeffrey J. Tinley
Jeffrey J. Tinley, Esq.
Tinley, Nastri, Renehan & Dost, LLP
60 North Main Street
Waterbury, CT 06702
Tel. (203) 596-9030
Facsimile: (203) 596-9036
Email: jtinley@tnrdlaw.com
Its Attorneys

SERVICE LIST

This is to certify that a copy of the foregoing has been delivered via electronic mail and/or first class mail, postage pre-paid, on this 2nd day of May, 2011 to the following:

Carrie L. Larson, Esq.
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103-3702
E-Mail: clarson@pullcom.com
On behalf of Applicant BNE Energy, Inc.

Paul Corey, Chairman
BNE Energy, Inc.
Town Center, Suite 200
29 South Main Street
West Hartford, CT 06107
E-Mail: pcorey@bneenergy.com
On behalf of Applicant BNE Energy, Inc.

The Honorable Robert J. Chatfield, Mayor
Town Office Building
36 Center Street
Prospect, CT 06712-1699
E-Mail: Town.of.prspct@sbcglobal.net
On behalf of Party Town of Prospect

Thomas J. Donahue, Jr., Esq.
Killian & Donahue, LLC
363 Main Street
Hartford, CT 06106
E-Mail: tj@kdjlaw.com
On behalf of Parties John Lamontagne, Cheryl Lamontagne, Thomas Satkunas and Eileen Satkunas

Emily A. Gianquinto, Esq.
Nicholas J. Harding, Esq.
Reid and Reige, P.C.
One Financial Plaza, 21st Floor
Hartford, CT 06103
E-Mail: egianoquinto@rrlawpc.com
nharding@rrlawpc.com
On behalf of Party FairwindCT, Inc.

Robert S. Golden, Esq.
Carmody & Torrance, LLP
50 Leavenworth Street
Waterbury, CT 06721-1110
On behalf of Party Town of Prospect, as Town Attorney

Rosa L. DeLauro, State Representative
59 Elm Street
Second Floor
New Haven, CT 06510
On behalf of Limited Appearance

John R. Morissette
Manager - Transmission Siting and Permitting
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
E-Mail: morisjr@nu.com
On behalf of Intervenor CL & P

Christopher R. Bernard
Manager - Regulatory Policy (Transmission)
The Connecticut Light and Power Company
P.O. Box 270
Hartford, CT 06141-0270
E-Mail: bernacr@nu.com
On behalf of Intervenor CL & P

Joaquina Borges King, Esq.
Senior Counsel
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
Telephone: 1-860-665-3678
Facsimile: 1-860-665-5504
E-Mail: borgej@nu.com
On behalf of Intervenor CL & P

Eric Bibler
31 Old Hyde Road
Weston, CT 06883
Telephone: 1-203-454-7850
E-Mail: ebibler@gmail.com
Intervenor

/s/ Jeffrey J. Tinley

Jeffrey J. Tinley