

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
November 17, 2010

TABLE OF CONTENTS

I.	INTRODUCTION				
	A. B.	Purpose and Statutory Authority	2		
	C.	Key Project Elements			
		 Site			
		3. Community Relations			
		4. Development Strategy and Schedule	5		
II.					
III.	DESC	CRIPTION OF PROPOSED PROJECT	7		
	A.	Property Description			
	В.	Project Description			
		1. The Turbines			
		2. Access Road	8		
		3. Ground Equipment	8		
		4. Interconnection	9		
	C.	Service Life and Capacity Factor			
	D.	Control Systems	10		
IV.	PRO.	JECT BENEFITS	10		
V.	RELI	ABILITY AND SAFETY INFORMATION	12		
VI.	SITE	IDENTIFICATION AND EVALUATION PROCESS	13		
VII.	POTI	ENTIAL ENVIRONMENTAL EFFECTS	14		
	A.	Public Health and Safety	14		
	В.	Local and State Land Use, Conservation and Development Plans			
		1. The State Conservation and Development Policies Plan			
		2. Local Regulations and Plan of Conservation and Development			
	C.	Existing and Future Development			
	D.	Adjacent Land Use			
	E.	Visual Resources Evaluation			
	F.	Scenic, Historic and Recreational Values			
	G.	Ecological, Vegetation, Wildlife Habitat and Natural Diversity Database			
	Н.	Bat and Bird Studies			
	I.	Noise			
	J. K.	Storm Water Management			
	17.	Diolii valui ivialiagoiiicii			

VIII.	PROJECT SCHEDULE		30	
IX.	GOVI	ERNMENT APPROVALS	30	
		Storm Water Permit		
X.	COM	MUNITY RELATIONS	32	
XI.	PETIT	TION FILING FEE	33	
XII.	BULK	X FILING OF MUNICIPAL DOCUMENTS	33	
XIII.	CONC	CLUSION	33	

LIST OF FIGURES

Figure 1.	Site Location Map	Page 4
Figure 2.	Weekly Bat Activity	Page 24
Figure 3.	Summary of Overall Bird Use	Page 25
Figure 4.	Wetland Resources Map	Page 28

LIST OF VOLUMES AND EXHIBITS

VOLUME 1: (Petition and Exhibits A-E):

G.E. 1.6 MW Factsheet	Exhibit A
State Historic Preservation Office Correspondence	Exhibit B
FAA Preliminary Determination.	Exhibit C
Abutters Certification	Exhibit D
Certification of Service	Exhibit E
VOLUME 2 (Site Engineering Information):	
Site Plans	Exhibit F
Storm Water Management Plan	Exhibit G
Soil Erosion and Sedimentation Control Plan	Exhibit H
VOLUME 3 (Environmental Assessment Information):	
Terrestrial Habitat and Wetland Impact Analysis	Exhibit I
Visual Resource Evaluation	Exhibit J
Eastern Box Turtle Survey	Exhibit K
Interim Bat Acoustical Study	Exhibit L
Breeding Bird Study	Exhibit M
Noise Study	Exhibit N

I. INTRODUCTION

A. Purpose and Statutory Authority

Pursuant to Section 16-50k(a) and Section 4-176(a) of the Connecticut General Statutes ("CGS") and Section 16-50j-38 *et seq.* of the Regulations of Connecticut State Agencies ("RCSA"), BNE Energy Inc. ("BNE") requests that the Connecticut Siting Council ("Siting Council") issue a declaratory ruling for BNE's proposed location, construction, operation and maintenance of two GE Energy ("GE") 1.6-megawatt ("MW") wind turbines, and associated ground equipment, an access road, an ancillary building and a 13.8-kiloVolt ("kV") electrical interconnection (together, the "Project" or "Wind Prospect") at 178 New Haven Road in Prospect, Connecticut (the "Property").

CGS § 16-50k(a) provides:

Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling . . . (B) the construction or location of any . . . grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Environmental Protection . . .

Pursuant to CGS § 16-50k(a), the Siting Council should approve the Project by declaratory ruling since it is a grid-side distributed resources facility under 65 MW that complies with the air and water quality standards of the Connecticut Department of Environmental Protection ("DEP"). Further, CGS § 16a-35k establishes the State's energy policies, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum extent possible." As demonstrated from the extensive information included in this petition, Wind Prospect will result in no air emissions, have minimal impacts that comply with DEP's water quality standards and will further the State's energy policy by developing renewable

energy resources. Additionally, the Project will not have a substantial adverse environmental effect.

B. Project Overview

BNE is based in West Hartford and was founded 2006 for the purpose of constructing and operating commercial wind generation projects in Connecticut, New England and beyond. Wind Prospect is an exciting, state-of-the-art wind generation project located in the electrical capacity-constrained southwest portion of the state. The Project is located on approximately 67.50 acres of undeveloped land, portions of which are over eight hundred (800) feet above sea level.

The Property is ideally situated for a wind generation project due to its elevation, orientation and topographical characteristics. The Property is located fifteen miles from Long Island Sound and sits high on a ridge adjacent to and overlooking water company property including a sizable reservoir. The Property faces west with a ridgeline open 180 degrees. During the colder months, the prevailing winds are northwest to north over Connecticut, while from April through September southwest or south winds predominate. The Property is unobstructed and overlooks a valley corridor approximately three hundred feet below the ridge. As the wind travels through the valley corridor over the reservoir and is forced up the ridge, it accelerates as it merges with higher altitude winds where the turbines will be located at more than eleven hundred (1,100) feet above sea level. The wind acceleration increases wind shear and wind power density, which in turn will improve the turbine performance of Wind Prospect.

Renewable energy offers societal benefits which are increasingly recognized with each news story relating to the United States' continued dependence on foreign oil and the environmental impacts associated with fossil fuels. Local renewable energy projects reduce dependence on foreign fuel sources, reduce or eliminate emissions of pollutants and greenhouse

gases and reduce the environmental harm that can result from the extraction and use of fossil fuels.

The State of Connecticut has recognized the benefits of local renewable energy development and implemented renewable portfolio standards ("RPS") to encourage the development of renewable energy resources not only to lessen the country's dependence on foreign oil but also to reduce the environmental impacts associated with fossil fuel sources. The RPS require that 14 percent of electric generation in the State is produced via renewable sources for 2010. By 2020, the State RPS requirements will increase to 27 percent, a minimum of 20 percent of which must derive from Class I renewable energy sources, including wind. Further, many of the State's cities and towns have pledged to obtain 20 percent of their electricity from renewable sources by 2020.

Wind Prospect will play an important role in the State's renewable energy goals and provide numerous benefits to the Town of Prospect. The value of the Project to the Prospect community is significant and will be long lasting. The Project will provide a significant source of clean, renewable energy produced locally. The Project will meet the annual electric power needs of approximately 25 percent of the Town's residential electric users on average over the course of a year, and will generate 85 percent of the Town's residential electric use when the turbines are operating at full capacity. Wind Prospect will produce 100 percent clean, renewable electricity with zero emissions and no water consumption and will result in significant environmental benefits. The power is domestic to Connecticut and located in New Haven County, in and around some of the most constrained capacity areas in New England. Further, the Project reduces the demand on interstate transmission lines and will act as a symbol of Connecticut's commitment to generating clean reliable energy. Wind Prospect offers significant

economic, environmental and societal benefits to the citizens of the Town of Prospect and the State of Connecticut.

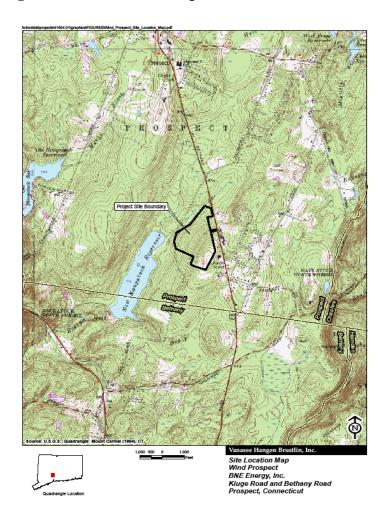
C. Key Project Elements

The Project consists of the construction and installation of two GE 1.6 MW wind turbines on the Property and electrical interconnection of the same.

1. Site

The Property is located at 178 New Haven Road and consists of 67.5 acres. The Property is located approximately 1,760 feet from the Prospect and Bethany town line and approximately 430 feet from the New Naugatuck reservoir.

Figure 1. Site Location Map



2. Electrical Interconnection

The Project will be interconnected to the Connecticut Light and Power Company ("CL&P") 13.8 kV distribution system at Kluge Road in accordance with CL&P technical standards and State of Connecticut, ISO-New England ("ISO-NE"), and the Federal Energy Regulatory Commission ("FERC") requirements. The interconnection will be made pursuant to CL&P and United Illuminating Company ("UI") Guidelines for Generator Interconnection and will include Company Scoping, an Application Request, Application Review, a Feasibility Study, a System Impact Study, a Transmission Study, an Interconnection Agreement, Interconnection Authorization, Installation, Commissioning Test(s), and final approval to energize.

3. Community Relations

BNE has developed a good relationship with the Prospect community by pursuing a multi-faceted communications approach, including:

- Obtaining local approval for the installation of a meteorological ("Met") tower at the
 Property on October 1, 2008;
- Regular discussions with local officials;
- An informational filing submitted to the Town of Prospect on October 1, 2010 (*see* copy of informational filing included in the bulk filing);
- A legally noticed, public informational meeting held on October 18, 2010, which numerous members of the public attended; and
- Public access to information on the internet at: http://www.bneenergy.com.

4. Development Strategy and Schedule

BNE is committed to establishing and solidifying the strength and viability of the Project. BNE has (1) met with the Siting Council; (2) consulted with representatives of the Department of Environmental Protection ("DEP") and filed Project information concerning the Natural

Diversity Database ("NDDB"); (3) filed information with the Federal Aviation Administration

("FAA"); (4) filed Project information with the State Historic Preservation Office ("SHPO"); (5)

completed a pre-petition consultation with the Town of Prospect including a public informational

session held on October 18, 2010 in the Town of Prospect; and (6) contracted with qualified

environmental, engineering and construction firms to ensure timely and accurate completion of

the Project.

BNE anticipates receipt of permits by May, 2011 and commencement of construction

shortly thereafter with commercial operation anticipated in late 2011.

LEGAL NAME AND ADDRESS OF PETITIONER AND CONTACT II.

INFORMATION

The legal name of the petitioner is BNE Energy Inc. BNE is a Delaware corporation with

a principal place of business in West Hartford, Connecticut.

Mailing address:

BNE Energy Inc.

Town Center, Suite 200 29 South Main Street

West Hartford, CT 06107

Internet address:

http://bneenergy.com/

Correspondence and other communications concerning the Project are to be addressed to,

and notices, orders and other papers may be served upon the following:

Paul Corey

Chairman

BNE Energy Inc.

Town Center, Suite 200

29 South Main Street

West Hartford, CT 06107

Telephone: 860.561.5101

Fax: 888.891.6450

Email: pcorey@bneenergy.com

6

Carrie L. Larson

Pullman & Comley, LLC

90 State House Square

Hartford, CT 06103-3702

Telephone: 860.424.4312

Fax: 860.424.4370

Email: clarson@pullcom.com

III. DESCRIPTION OF PROPOSED PROJECT

> A. **Property Description**

The Property is located at 178 New Haven Road, assessor's map 112, block 96, lot 178

and consists of 67.5 acres. The Property is located approximately 1,760 feet from the Prospect

and Bethany town line and approximately 430 feet from the New Naugatuck reservoir.

Currently, the majority of the Property is undeveloped. There is an existing 160-foot tall

telecommunications tower constructed in the southeast corner of the Property. The Property is

abutted by the New Naugatuck Reservoir property, which consists of approximately 500 acres of

undeveloped land. The surrounding land uses are mixed, consisting of both commercial and

residential development.

В. **Project Description**

The Project consists of the installation of two GE 1.6 MW wind turbines and associated

ground equipment, an ancillary building (which will provide storage, office space and an

educational area), upgrading and installation of an access road and an electrical interconnection.

A copy of the site development plans are included as Exhibit F.

1. The Turbines

The Project consists of two GE 1.6 MW wind turbines. Each turbine consists of a hub

(tower), nacelle and rotor. The turbine hub is 100 meters (approximately 328 feet) in height. All

of the equipment used to operate the turbines is contained within the nacelle, including the

gearbox, a magnet generator and an automatic lubrication system. The rotor blades are 40.3

7

meters in length, have an 82.5 meter diameter and consist of three blades. However, BNE is requesting approval for rotor blades up to 50 meters in length and 100 meters in diameter. A copy of the GE 1.6MW turbine factsheet is attached hereto as Exhibit A.

2. Access Road

The Property can be accessed off of Kluge Road. BNE proposes to continue to utilize the existing road, which it intends to upgrade, for access during construction and operation of Wind Prospect. As shown on the site plans attached as at Exhibit F, the existing road will be extended so that both turbines are accessible.

3. Ground Equipment

An electrical collector yard will be constructed on the Property. At the point of common coupling with CL&P, BNE will provide a 600-amp, 15-kV class circuit breaker or recloser equipped with a multifunctional relay to serve as the Interconnection Interruption Device. Revenue metering will be provided on the utility side of the breaker. A gang operated disconnect switch will be provided on the utility side of the metering. Additional equipment to monitor circuit voltage and to disconnect the facility from the grid will also be installed as needed on existing grid circuits to protect the system during system outage.

An ancillary building will be constructed on the Property to provide storage, office space for operations and maintenance personnel and an area for education and tours by appointment for schools, organizations or members of the public (*see* Exhibit F). The ancillary building will contain restroom facilities and will utilize an on-site well to meet sanitary and drinking needs. BNE will dispose of wastewater to an on-site septic system designed in accordance with

upgrades.

8

¹ While BNE is committed to using GE turbines, BNE has not signed a contract to purchase these specific turbines. GE has approved the proposed Project layout and has been kept apprised of the regulatory approval process of Wind Prospect. Due to ever-evolving technological advances, a longer blade length of up to 50 meters may be employed. Therefore, the visual resources evaluation utilizes a 50 meter blade length to account for potential technological

applicable standards to accommodate wastewater loading rates and soil conditions. As a result, BNE submits that its proposed minimal water consumption and disposal will not have a substantial adverse effect on groundwater resources. This construction is necessary for the ongoing operations and maintenance of the Project, and will also provide additional community benefits.

4. Interconnection

Interconnection will be made to CL&P's 13.8-kV distribution system at Kluge Road in accordance with all applicable CL&P technical standards and State of Connecticut, ISO-NE and FERC requirements. The interconnection will be made pursuant to CL&P's and UI's Guidelines for Generator Interconnection. BNE is fully engaged in the generator interconnection process and has successfully completed a Scoping Meeting, an Application Request, Application Review and a Feasibility Study, and is now completing a System Impact Study with CL&P. The System Impact Study includes Circuit Modeling, Power Flow Analysis, Voltage Impact Study, Thermal Impact Study, Short Circuit Study, Review of Distribution Equipment Interrupting Ratings, Protection Coordination Review, Assessment of Transfer Trip Requirements and Review of Protection Schemes. Upon completion of the System Impact Study, BNE will engage in the Transmission Study as a final step for an Interconnection Agreement, Interconnection Authorization, Installation, Commissioning Test(s) and final approval to energize.

C. Service Life and Capacity Factor

To optimize turbine reliability and availability, BNE has selected technology with availability that exceeds 98 percent, a 20+ year service life, rapid Return-to-Service (RTS) and an expected annual capacity factor of approximately 30 percent.

D. Control Systems

The proposed turbines can be controlled automatically or manually from either an interface located inside the nacelle or from a control box at the bottom of the tower. Control signals can also be sent from a remote computer via a Supervisory Control and Data Acquisition (SCADA) System with local lockout capacity provided at the turbine controller.

Service switches at the tower top prevent service personnel at the bottom of the tower from operating certain systems of the turbine while service personnel are in the nacelle. To override any machine operation, emergency stop buttons located in the tower base and in the nacelle can be activated to stop the turbine in the event of an emergency.

The rotor utilizes independent electric pitch motors for each blade to provide adjustment of the blade pitch angle during operation. The pitch controller enables the turbine rotor to brake and regulate speed by allowing the blade to spill excess aerodynamic lift when needed. The turbine is also equipped with a mechanical brake located at the output shaft of the generator. This brake is only applied as an auxiliary brake to the main aerodynamic brake and to prevent rotation during certain service activities.

Planetary yaw drives are provided to steer the turbine. A controller activates the yaw drives to align the nacelle to the average wind direction based on a wind vane sensor mounted on the nacelle. Automatic yaw brakes engage to prevent overloading from turbulent wind.

IV. PROJECT BENEFITS

The Project will provide substantial benefits to the State of Connecticut and the Town of Prospect, including:

 Generation of 100 percent renewable energy – New England has an abundant, inexhaustible amount of wind created naturally in the atmosphere, and the Project is sited in an area of the State ideally situated to capitalize on natural wind power;

- Energy generation without any air emissions;
- Energy generation without any water consumption or pollution;
- A reliable source of energy that diversifies the State's generation portfolio mix and contributes Class I renewable energy to meet the State's RPS standards;
- Numerous economic benefits to the Town and the area, including significant tax revenue to the Town of Prospect;²
- Creation of jobs; and
- Significant environmental benefits with minimal impact to the land.

Based on the output from two 1.6 MW GE turbines at a capacity factor of 30 percent, approximately 8,410 MWh of Class I renewable energy would be generated annually. To put this into perspective, the Project would meet the annual electric power needs of approximately 25 percent of the Town's residential electric users on average over the course of the year, and nearly 85 percent of the Town's residential electric needs when the turbines are operating at full capacity. The Project would provide the following reduction of air pollutants when compared to conventional fossil fueled generation:

- 2,355 lbs/yr total nitrogen oxides reduction
- 4,794 lbs/yr total sulfur oxides reduction
- 8,443,640 lbs/yr total carbon dioxide (greenhouse gas) reduction

The electricity generated by the wind turbines will provide power equivalent to the following carbon emission reductions:

• 1,154 cars taken off the road;

² While economic issues are not relevant to the Siting Council's jurisdiction and decision-making criteria, economic benefits associated with the Project are included for illustrative purposes.

- 14,046 barrels of oil not combusted for electric generation;
- 154,866 tree seedlings grown for 10 years; or
- 1,288 acres of pine or fir forest.

In summary, Wind Prospect is an exciting state-of-the-art project that offers significant economic, environmental and societal benefits to the citizens of the Town of Prospect and the State of Connecticut. Wind Prospect will exclusively generate 100 percent clean, green, renewable wind energy adding much needed wind-generated electricity to Connecticut's fuel mix and increased access to renewable electricity in the region.

V. RELIABILITY AND SAFETY INFORMATION

Wind turbines are extremely reliable and safe with an availability often exceeding 98 percent. Wind turbines are by definition intermittent electric energy generation facilities that operate only when there is sufficient wind to turn the rotor and produce electricity from the electric generator. However, through careful selection of the Property and generation technology, the capacity factor of the Project is expected to be approximately 30 percent. The technology selected is manufactured by GE and has been tried and proven as one of the most reliable systems used worldwide with an expected availability of 98 percent. GE wind turbine technology features robust designs for long-lasting and reliable performance, variable speed control, independent blade pitch for reduced loads and cost-effective operation. GE is one of the world's leading wind turbine suppliers with more than 13,500 GE wind turbine installations operating worldwide to provide clean renewable energy. The proposed unit is one of the world's most widely-used wind turbines in its class with operation in 19 countries, 170+ million operating hours and 100,000+ gigawatt-hours (GWh) produced.

GE's design includes a reinforced tower design to enable reliable and safe operation that meets product and regulatory compliance expectations. Operational maximum extreme gust for a three second period is 56 m/s (over 125 mph) and for ten minutes is 40 m/s (over 89 mph) according to International Electrotechnical Commission (IEC) standards. GE's reinforced tower sections have the same length and external diameter as the standard GE North American modular system and are specially built to handle seismic loads.

BNE will complete the Project with electrical engineering under review by CL&P and facility construction under review by GE. With the proposed technology, the expected capacity factor, construction by proven professionals, interconnection developed with utility grade equipment consistent with utility standards and utility oversight and with the wind resources on the Property, it is fully expected that the Project will be reliable and safe.

VI. SITE IDENTIFICATION AND EVALUATION PROCESS

As a developer of wind energy, BNE is familiar with the wind resources in the State of Connecticut. The Town of Prospect has the highest elevation in New Haven County and has potential wind resources to provide sufficient fuel for electrical generation. Once BNE identified the Town of Prospect as potentially having the necessary wind resources, BNE focused its search for available property with sufficient acreage to support several turbines. In addition, BNE focused its search on property in favorable locations to interconnect with the electrical grid and in areas with relatively low residential populations nearby. BNE identified the Property as being high in elevation and abutting vast amounts of water company land, thus minimizing potential residential impact. BNE obtained an option to purchase the Property from the landowners.

On or about October 1, 2008, BNE obtained a zoning permit from the Town of Prospect to install its Met tower on the Property to collect wind data. The Met tower was installed on November 3, 2008 and has been collecting wind data for two years. That data has established

that the Property is an ideal location for the placement of wind turbines due to wind speed, direction, shear and density.

VII. POTENTIAL ENVIRONMENTAL EFFECTS

BNE and its consultants conducted a comprehensive environmental assessment of the Project. The Project has been designed to minimize environmental impacts. BNE worked carefully through numerous iterations of potential turbine locations and spacing to balance capturing optimum wind conditions while avoiding/minimizing effects to the existing environment and habitat. For example, one of the highest quality wetland resources on the Property, Wetland 1, was avoided through relocation of the turbines to ensure that Wind Prospect will not have an impact on this wetland. In fact, the Project will have minimal adverse environmental impacts including impacts on scenic, historic or recreational values, as mandated by C.G.S. § 16-50g and as discussed in more detail below.

A. Public Health and Safety

The Project represents a clean and safe method of electricity generation in a manner consistent with state and federal policy to protect public health and safety. In terms of public health, the Project will generate electricity in a cleaner and more environmentally acceptable manner compared to conventional generation such as nuclear, natural gas, coal, or oil as fuel.

In terms of safety, the Project will meet all applicable safety requirements for construction, operation and electrical interconnection. As discussed above, the technology selected is manufactured by GE, one of the world's leading wind turbine suppliers, with over 13,500 GE wind turbine installations operating safely worldwide providing clean, renewable energy. Variable speed control and independent blade pitch will be used for aerodynamic braking to reduce blade speed during high winds. The reinforced tower design will enable reliable and safe operation that meets product and regulatory compliance expectations up to

operational maximum extreme gusts for a three second period of 56 m/s (over 125 mph) and for ten minutes of 40 m/s (over 89 mph) according to IEC standards. The wind turbine machine can be controlled automatically or manually from either an interface located inside the nacelle or from a control box at the bottom of the tower. Control signals can also be sent from a remote computer via a SCADA. BNE expects to enter into an operations and maintenance agreement with GE to remotely monitor and maintain the turbines. BNE operations and maintenance personnel will also be located on-site to supplement the services provided by GE. Service switches at the tower top prevent service personnel at the bottom of the tower from operating certain systems of the turbine while service personnel are in the nacelle. To override any machine operation, emergency stop buttons located in the tower base and in the nacelle can be activated to stop the turbine in the event of an emergency. The rotor blades are also equipped with lightning receptors mounted in the blade and the turbines are grounded and shielded to protect against lightning. The turbines are also specially built to handle seismic loads.

Furthermore, the Project will not burn fuel such as natural gas, coal or oil for operation. Consequently there will not be any need to consider release and ignition of combustible fuels at pipelines, compressors or storage facilities. The absence of combustible fuels for facility operation completely eliminates the risk of environmental damage due to fuel spillage or explosion due to inadvertent ignition of natural gas or other fossil fuels.

Overall, the Project will meet or exceed all health and safety requirements applicable for electric power generation.

B. Local and State Land Use, Conservation and Development Plans

The Project will be consistent with the State Conservation and Development Policies Plan as well as the Town of Prospect's local regulations and plan of conservation and development.

1. The State Conservation and Development Policies Plan

The State Conservation and Development Policies Plan was adopted in 2005 and will stay in effect until 2013 due to recent legislative changes (the "Plan").³ The Plan highlights six major growth management principles including "concentrating development around transportation nodes" and "conserve and restore the natural environment, cultural and historic resources and traditional rural lands." See Plan at 41, 55. The location of the Project on the transportation corridor of Route 69, along with its proposed generation of 3.2 MW of 100 percent renewable energy is consistent with these overriding growth management principles. Further, in reference to the need to redevelop and revitalize regional centers, the Plan notes that "[t]he State of Connecticut imports most of its current energy supply, including oil, coal, natural gas and uranium. In addition, the state continues to be particularly dependent on oil, which is generally imported from foreign countries" and then goes on to delineate the ability to "[s]ecure a sustainable supply of energy at the best possible cost and promote its efficient use" as a policy to further the interests of the citizens of the State. The Plan also advocates a policy to reduce the risk of global climate change by reducing the statewide carbon dioxide emissions to 1990 levels by 2010 and to 10 percent below 1990 levels by 2020 and lists the development and use of renewable energy projects such as solar, hydroelectric, wood and wind as means to accomplish this goal. The development of Wind Prospect will be consistent with these goals and will assist in the State achieving the reduction in carbon dioxide emissions delineated in the Plan.

Further, the locational guide map that accompanies the Plan indicates that the area of Prospect in which the Property is located is either a "conservation area" or a "preservation area." Id. at Locational Guide Map for Prospect. The Plan identifies the goals associated with

³ Available at www.ct.gov/opm/cwp.

"conservation areas" as "plan for the long-term management of lands that contribute to the state's need for food, fiber, water and other resources and environmental quality by ensuring that any changes in use are compatible with the identified conservation value." *See* Plan at 6. The Plan identifies the goals associated with "preservation areas" as "[p]rotect significant resource, heritage, recreation and hazard-prone areas by avoiding structural development, except as directly consistent with preservation value." BNE believes that the development of Wind Prospect on the Property – as opposed to the development of up to 47 residences that could be approved on the Property – is consistent with the goals associated with both preservation areas and conservation areas.

2. Local Regulations and Plan of Conservation and Development

While the Project is not required to obtain local zoning approval(s), Wind Prospect will be consistent with all applicable local regulations including the Town of Prospect's zoning regulations, wetlands regulations and plan of conservation and development.

The Town of Prospect's zoning regulations were amended on December 1, 2008 (the "Regulations"). A copy of the Regulations is included in the bulk filing filed herewith. The Property is zoned residential RA-1, which requires the minimum lot area of 40,000 square feet (1 acre) to develop single family residences. Section 3.2 of the Regulations discuses zone RA-1 and section 3.1 delineates the permitted uses in this zone. Of note, wind turbines – along with electric generating facilities of any kind – are not discussed in the Regulations and not included as a permitted use in this or any zone in the Town. Section 3.2 requires a 50 foot front yard setback, a 25 foot side yard setback and a rear yard setback of 50 feet. In addition, Section 3.2 permit a maximum lot area coverage of 15 percent and maximum impervious surface of 30 percent of the total lot area. As can be seen from the plans included in Attachment 1 at Exhibit A, Wind Prospect will comply with all of these setback and coverage requirements.

Prospect's inland wetlands and watercourses regulations were last amended on September 1, 2009 (the "Wetlands Regulations"). A copy of the Wetlands Regulations is included in the bulk filing filed herewith. The Wetlands Regulations define "Regulated Activity" as "any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution of such wetlands or watercourses. . . ." Additionally, 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 is a regulated activity. As can be seen from the attached Terrestrial Wildlife Habitat and Wetlands Impact Analysis Report attached as Exhibit I, development of Wind Prospect will not result in any direct wetland impacts.

Finally, the Town's plan of conservation and development was last amended on May 1, 2002 (the "Town Plan"). A Copy of the Town Plan is included in the bulk filing filed herewith. The Town Plan indicates that the Property is vacant and is developable and is listed as a possible location for the development of a new town school. *See* Town Plan at Map 7, Map 17. The Town Plan also points out the development along Route 69 is mixed use with commercial, industrial, public/institutional and residential uses. *Id.* at Map 12, page 50. While the Town Plan does not specifically address infrastructure development or electric generation, the Town Plan does indicate a desire to curtail residential development. *See id.* at 64. BNE believes that its development of Wind Prospect at the Property – as opposed to 47 residences that could otherwise be developed there – is consistent with the Town Plan.

C. Existing and Future Development

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.

D. Adjacent Land Use

Connecticut Water Company owns a large undeveloped parcel that that is used as the New Naugatuck Reservoir and abuts the Property. The majority of this parcel is Class I watershed land and portions of it are Class II watershed land. The remaining area surrounding the Property is a mix of commercial/industrial uses and residential uses.

E. Visual Resources Evaluation

BNE's retained Vanasse Hangen Brustlin, Inc. ("VHB") to conduct several environmental impact analyses including the visual resources evaluation. VHB has developed a predictive computer model to provide a preliminary assessment of potential visibility of the wind turbine facilities during "leaf-on" conditions throughout a 5-mile Study Area. Using ArcGIS Spatial Analyst, a computer modeling tool developed by the Environmental Systems Research Institute, VHB can calculate the areas from which the tops of the facilities (including both the hub height and blade tip height at its zenith) are expected to be visible. This is based on information entered into the computer model, including the hub and blade heights, each facility's ground elevation, the surrounding topography and existing vegetation. Data incorporated into the predictive model includes a digital elevation model (DEM) and a digital forest layer for the Study Area. The DEM was derived from the Connecticut LiDAR-based digital elevation data. The LiDAR data was produced by the University of Connecticut Center for Land Use Education and Research (CLEAR) in 2007 and has a horizontal resolution of 10 feet. In order to create the forest layer, digital aerial photographs of the Study Area are incorporated into the computer model. The mature trees and woodland areas depicted on the aerial photos are manually traced in ArcGIS and then converted into a geographic data layer. The aerial photographs were produced in 2006 and have a pixel resolution of one foot.

Once the data layers are entered, a series of constraints are applied to the computer model to achieve an estimate of where the facilities will be visible. A conservative average tree canopy height of 50 feet was overlaid on the DEM and the visibility calculated. As a final step, the forested areas are extracted from the areas of visibility, with the assumption that a person standing among the trees will not be able to view the facility beyond a distance of approximately 500 feet. Depending on the density of the vegetation in these areas, it is assumed that at least portions of the Project will be visible at some locations within this range. Also included on the map is a data layer, obtained from the State of Connecticut Department of Environmental Protection ("DEP"), which depicts various land and water resources such as parks and forests, recreational facilities, dedicated open space and other categories.

The results of the analysis are attached hereto as Exhibit J. These results indicate that a total of 160 acres within the Study Area would have some visibility of the turbine hub above the tree canopy during leaf-on conditions. This represents less than one-half of one percent of the 51,692-acre Study Area. At its apex, the blade(s) may be visible from within approximately 347 acres (less than one percent of the Study Area). The majority of potential views would occur on the Property itself and the adjacent New Naugatuck Reservoir. In addition, the analysis indicates that approximately 50 residential properties may have at least partial views of the turbine hub during leaf-on conditions and an additional 58 residential properties may have at least partial views of the turbine blade at its apex. The analysis indicated that a total of 1,164 acres (two percent of the Study Area) will have potential views of the turbine hub during leaf-off conditions along with an additional 248 residential properties that could have partial views of the turbine hub during leaf-off conditions.

F. Scenic, Historic and Recreational Values

VHB also completed a review of the Project with the SHPO. The SHPO has rendered a determination that the Project will have no adverse impact on historic and cultural resources in the State of Connecticut. *See* SHPO correspondence attached hereto as Exhibit B. In addition, the Project is not anticipated to have any impact on scenic or recreational values in the area. The Project will not be visible from the Naugatuck Trail, which is part of the Connecticut Blue-blaze system. However, the Project may be visible from a brief portion of the Beacon Cap Trail, which is a spur trail off of the Naugatuck Trail. *See* Visual Resources Evaluation attached hereto as Exhibit J.

G. Ecological, Vegetation, Wildlife Habitat and Natural Diversity Database

The attached Terrestrial Wildlife Habitat and Wetlands Impact Analysis Report describes in detail the existing habitat at the Property. *See* Exhibit I. The report indicates that the Property occupies a drumlinoid landform situated west of New Haven Road (State Highway 69) and south of the Prospect town center. The majority of the Property is covered by second growth upland forest. The Property also features several forested hillside seep wetlands and watercourses as well as nine acres of early old field meadow habitat situated at the highest elevation on the Property. The existing telecommunications facility on the Property is located within this hilltop meadow.

The report indicates that the Property does not provide any unique or exceptionally valuable terrestrial wildlife habitat, though it does have the potential to be used by several dozen species common throughout Connecticut. The Project may temporarily disturb some terrestrial wildlife species during construction activities and would convert or eliminate approximately 5.15 acres of forest to meadow habitat or gravel access road. The loss or conversion of this small amount of forest habitat will not have a significant or long-term negative impact on local

terrestrial wildlife populations. The Project will likely provide benefits to local wildlife populations by preserving open space and protecting existing habitat from suburban development and habitat fragmentation.

A Natural Diversity Database Request Form and supporting materials were submitted to DEP. Written confirmation was received indicating that the eastern box turtle, a State Species of Special Concern, occurs in the vicinity of the Property. As a result, an eastern box turtle habitat survey detailing the likelihood that this species may occur on the Property, as well as various protection measures to prevent mortality during construction activities, were proposed. Written concurrence from DEP was received acknowledging that the proposed protection measures are adequate. *See* Exhibit K.

If utilized, federal funding available for projects such as Wind Prospect typically requires a full review pursuant to the National Environmental Policy Act to further ensure that the Project will comply with all applicable environmental regulations.

H. Bat and Bird Studies

1. Bat Studies

Western EcoSystems Technology, Inc. ("West") initiated surveys in June, 2010 on behalf BNE to assess bat activity within the proposed Prospect Wind Resource Area (PWRA) in both the maternity season and the migratory season. Bat activity was surveyed using AnabatTM SD1, AnabatTM SD2 and Wildlife AcousticTM Song Meter SM2BatTM ultrasonic detectors from June 25, 2010 through November 1, 2010. *See* interim report attached hereto as Exhibit L. A copy of the complete report, including the fall migratory season data, will be supplied upon completion. As can be seen from a review of this interim report, the objective of the acoustic bat surveys was to characterize seasonal and spatial activity by bats within the PWRA during the maternity season. Bat activity was monitored at two fixed stations: (1) in the open field on the Property

("PA1"), and (2) at the location for turbine 2 in the forested portion of the Property ("PA2"). The two Anabat detectors recorded 1,751 bat passes during 123 detector-nights. Averaging bat passes per detector-night across stations, a mean of 14.11 bat passes per detector-night was recorded – a value within the range of the five facilities in the eastern United States where preand post-construction data is available (range: 0.3-38.3; mean: 19.58).

As demonstrated, the PWRA is not in the vicinity of any known bat colonies or features likely to attract large numbers of bats. The Property is located along a forested ridge with little variation in vegetation or topography relative to the surrounding landscape. Overall bat activity between June 25 – August 31 was over 1.5 times higher at station PA1 (located in the open field) compared to station PA2 (located in the forested portion of the Property). This is likely the result of habitat differentiation – PA1 is located in an existing forest clearing, whereas PA2 is located below canopy cover within a deciduous forest. The open field surrounded by edge habitat at PA1 provides increased foraging opportunities for bats relative to the surrounding forest.

Bat activity levels peaked in mid-July and again in late August. Comparing peak bat activity between frequency groups within any given seven-day period during the maternity season, high-frequency bat activity peaked during the period July 16 - 22, and mid-frequency activity peaked during the period July 17 - 23. Low-frequency activity peaked during the last seven days of the study period, August 25 - 31. The mid-summer peak in bat activity likely corresponds to the time when pups are being weaned and have joined the adult population in foraging, while the increase in activity in late-August may represent movement of migrating bats through the area, which may also explain the greater number of low-frequency bat passes during this period.

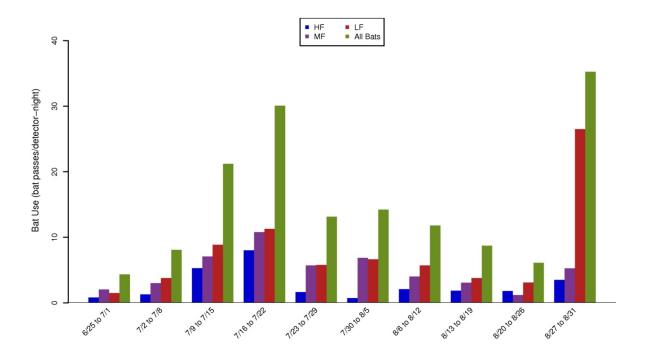


Figure 2. Weekly Bat Activity. Weekly activity of high-frequency (HF), mid-frequency (MF), and low-frequency (LF) bats within the Prospect Wind Resource Area, based on 52 weeks during the calendar year beginning January 1, 2010 and, corresponding to the start and end dates of the study period, June 25 – August 31, 2010.

There appears to be some latitudinal variation in the eastern United States, such that higher numbers of fatalities are estimated for more southerly sites compared to those further north. Bat fatality patterns observed at facilities within the region in similar forest-dominated landscapes have been low to moderate based on regional study results. If latitudinal, landscape and patterns of bat activity rates relative to fatality rates for the PWRA are consistent with regional study results, predicted fatality rates for bats will be low to moderate.

2. Breeding Bird Study

West also conducted surveys in June 2010 to assess breeding bird activity within the proposed Project area. The principal objectives of the study were to: (1) provide site-specific bird resource and use data that would be useful in evaluating potential impacts from the Project;

(2) provide information that could be used in Project planning and design to minimize impacts to birds; and (3) recommend further studies or potential mitigation measures, if warranted. A copy of the breeding bird study is attached hereto as Exhibit M.

As can be seen, breeding bird surveys were conducted three times between June 28, 2010 and July 12, 2010, for a total of 36 surveys. A total of 525 individual bird observations within 476 separate groups were recorded, representing 35 unique bird species. Cumulatively, three species (8.6 percent of all species) comprised 29.9 percent of the individual observations: unidentified passerine (58 observations), eastern towhee (56 observations) and American robin (43 observations). Each other species individually composed less than ten percent of the observations. No state or federal listed sensitive species were recorded during the breeding bird surveys.

Figure 3. Summary of Overall Bird Use

Table 1. Summary of overall bird use (number of birds/plot/5-min survey), species richness (species/plot/5-min survey), and sample size during the breeding bird surveys in the Prospect Wind Resource Area, June 28 – July 12, 2010.

	# of	Mean	Species	-	# Surveys
Survey	Visits	Use	Richness	# Species	Conducted
June 28, 2010	1	10.92	6.00	27	12
July 5, 2010	1	17.75	9.33	30	12
July 12, 2010	1	14.92	8.17	24	12
	3	14.58	7.89	35	36

Thirty bird species, totaling 58 individuals within 47 groups, were recorded incidentally. Three mammal species, two amphibian species and a single reptile species were also recorded incidentally. No state or federal listed sensitive species were recorded as an incidental observation.

Open grassland and forest edge areas contained both greater species richness and relative abundance compared with the forested areas that dominate the Property and that are proposed for turbine locations. Bird abundance and species richness at survey points proximate to proposed turbine locations was low to moderate relative to the open meadow and forest edge points.

The most probable direct impact to birds from wind energy facilities is direct mortality or injury due to collisions with turbines or guy wires of met towers. Collisions may occur with residents foraging and flying within the Project area or with migrants seasonally moving through the Project area. Common species such as eastern towhee and American robin comprised the majority of identified species observed during breeding bird surveys. Direct impacts to individuals may result from operation of the Project. Currently there is no evidence that observed impacts to individual birds resulting from collisions with wind turbines have an effect on the population as a whole. Post-construction mortality studies conducted at 12 wind facilities throughout the nation indicate a national avian mortality rate of 2.3 birds per turbine per year (birds/turbine/year). Of those, two thirds of fatalities documented during post-construction mortality monitoring studies were assumed to be migrants. Breeding bird habitats at the Project are regionally common and no high value bird habitats are located within proposed development As previously mentioned, the highest breeding bird relative abundance and species richness were recorded within the grassland and forest edge portion of the study area, not within the proposed development area for the Project.

I. Noise

The Project is designed to meet the Noise Regulations of the State of Connecticut. VHB has completed a comprehensive noise evaluation of the Project. *See* Exhibit N. The noise analysis evaluated the potential noise impacts associated with the proposed construction and operation of the Project. The analysis evaluated the existing and future sound levels at the Property. Existing condition sound levels were determined by conducting a noise monitoring program under calm conditions (0 to 10 miles per hour). The Project-generated sound levels

were calculated using manufacturer's sound data for the wind turbines and the principles of acoustical propagation of sound over distance. The Project-generated sound levels were calculated based upon a maximum sound level which occurs at wind speeds of 9 meters per second (m/s) and greater, roughly equivalent to 27+ miles per hour (mph). Wind data collected at the Property indicates that the average wind speed is 6.7 to 6.9 m/s (approximately 15 mph) at 100 meters, which results in lower wind turbine sound levels.

DEP's noise control regulations (RCSA 22a, §§ 22a-69-1 to 22a 69-7) and the Town of Prospect's Noise Ordinance were used to evaluate sound levels from the Project. Both state that the noise standards for a Class C Emitter (Utility) to a Class A Receptor (Residential) are 61 dBA in the daytime and 51 dBA in the nighttime.

Using a worst-case scenario analysis, the evaluation demonstrated that Wind Prospect will generate sound levels ranging from 25 dBA to 46 dBA under maximum sound level conditions at the nearest residential receptor locations during daytime hours and 23 dBA to 44 dBA during nighttime hours. Even utilizing this worst-case scenario, sound levels are below both the daytime and nighttime standards for residential receptor locations pursuant to both State and local standards. The results indicate that the Project will be in full compliance with both State and local noise regulations and therefore the Project will not have a substantial adverse impact on the surrounding area in terms of noise impacts.

J. Wetlands

As can be seen from the Terrestrial Wildlife Habitat and Wetlands Impact Analysis Report attached hereto as Exhibit I and as demonstrated in Figure 4 below, there are four wetland systems located on the Property.



Figure 4: Wetland Resources Map.

Wetland 1 is on a hillside where topographical gradient transitions from convex to concave. It contains permanently saturated depressions which generally provide higher wetland functions and values than the other hillside seep wetlands. It drains via well-defined and diffuse surface flows west before terminating at a drainage swale along a historic dirt road along the western Property boundary. Flows are then conveyed northerly within a swale along the road.

Wetland 2 is a forested hillside seep draining northerly off-site into a perennial watercourse which flows southwest into the New Naugatuck Reservoir. A watercourse flows into the southern tip of this system from beneath New Haven Road. While not shown as a perennial watercourse on USGS mapping, field observations indicate this watercourse may be perennial. It is characterized by a wide, deeply scoured channel, abundant sediment loading, lack of silty deposits and steeply incised banks. Flows within the channel appear to be extremely flashy.

Wetland 3 is a hillside seep that occurs where a gradual decrease in topographical gradient exists. This wetland boundary is diffuse and not clearly defined by a slope break, soil type or change in vegetation. The delineated wetland boundary generally captures a complex of somewhat poorly drained soil types and diffuse surface water drainage patterns. This wetland area drains via an intermittent watercourse towards an off-site perennial watercourse, which flows southwest into the New Naugatuck Reservoir.

Wetland 4 is a forested hillside seep complex consisting of three areas where groundwater exfiltration is occurring. Diffuse surface drainage patterns were observed connecting these delineated wetland systems. However, the diffuse surface flow patterns observed connecting these distinct wetland areas did not contain bank or channel characteristics and no wetland soil types were found in these areas. Therefore, these diffuse surface drainage areas were determined to be uplands and not regulated areas.

BNE worked carefully through numerous iterations of potential turbine locations and spacing to balance capturing optimum wind conditions while avoiding impacts to wetland resources on the Property. As a result, the proposed Project has successfully avoided any direct wetland impacts. Temporary disturbance activities in proximity to Wetland 3 are required in order to install Turbine Two and its associated gravel access road. These activities include clearing and grading associated with the Blade Laydown and Assembly Area, installation of Turbine Two and the associated utilities. Best Management Practices will be utilized in accordance with the 2002 Connecticut Guidelines for Erosion and Sediment Control throughout the course of construction activities on the Property and will be maintained until disturbed areas have been permanently stabilized. A Wildlife/Conservation seed mix containing native grasses and forbs will be used to stabilize exposed areas post-construction.

K. Storm Water Management

Attached hereto as Exhibit Gis a detailed storm water management analysis and plan. As shown, BNE will employ a storm water management plan that will result in no net increase in runoff to any surrounding properties.

VIII. PROJECT SCHEDULE

BNE anticipates obtaining approval from the Siting Council by May 2011. BNE expects to begin construction of the Project shortly after obtaining all required regulatory approvals. Wind farm construction can take as little as 3-6 months from groundbreaking to commercial operations. Wind Prospect is expected to begin commercial operations in late 2011.

IX. GOVERNMENT APPROVALS

A. Storm Water Permit

Since construction of the Project will disturb 5.15 acres, BNE will register under the DEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities at least thirty days prior to commencing any construction activities. BNE intends to request coverage under the existing Connecticut General Permit, DEP-PED-GP-015, by submitting a complete and accurate General Permit Registration Form and Transmittal prior to construction activities and in accordance with applicable rules at the time of filing. In connection with that registration, BNE will implement a storm water management plan to minimize any potential adverse environmental effects. *See* Exhibit G. These procedures have been outlined in the Storm Water Management Plan with Storm Water Pollution Prevention Plan ("SWMP" with "SWPPP") for the Project. Upon receipt, the Letter of Coverage will become part of the SWMP with SWPPP for the Project. In addition, an Erosion and Sediment Control Plan has been developed in accordance with Connecticut General Statutes §§ 22a-325 through 22a-329 and is attached hereto as Exhibit H.

B. Federal Aviation Administration

On September 22, 2009, BNE filed Form 7460-1 with the FAA requesting a Determination of No Hazard to Air Navigation for one turbine located on the Property. The FAA conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine Wind Prospect

Location: Prospect, CT

Latitude: 41-28-23.35N NAD 83

Longitude: 72-58-16.71W

Heights: 492 feet above ground level (AGL) 1292 feet above mean sea level (AMSL)

On November 4, 2009, the FAA issued its determination that the aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation. FAA's determination letter is attached hereto as Exhibit C.⁴

As a condition to this determination, the structure will be marked and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, 24-hr med-strobes – Chapters 4, 6 (MIWOL) & 12. Pursuant to this Advisory, light fixtures should be placed as high as possible on the turbine nacelle to be visible from 360 degrees. Flashing red (L864) or white (L-865) lights may be used to light wind turbines. The FAA has determined that studies have shown that red lights are most effective and should be the first consideration for lighting wind turbines. BNE anticipates utilizing red lights on the turbines as recommended by the FAA. Additionally, the FAA has determined that bright white or light off-white paint most often found on wind turbines has been shown to be most effective, and if used, no lights are required during the daytime. The turbines will be white and therefore no

_

⁴ The FAA determination letter was based on a filing indicating one turbine with a 100 meter hub and 100 meter diameter rotor blade. Based on the updated configuration of two turbines at Wind Prospect, BNE has re-filed with the FAA. BNE's updated FAA determination letter will be filed with the Siting Council upon receipt.

lights will be required during the daytime. BNE does not anticipate that the nighttime illumination will create any new areas of visibility. The FAA will also be notified via FAA Form 7460-2 ("Notice of Actual Construction or Alteration") within 5 days after the construction reaches its greatest height.

On October 24, 2010, BNE revised its filing with the FAA requesting a Determination of No Hazard to Air Navigation for two turbines at the proposed locations of the turbines on the Property. BNE will comply with all requirements imposed by the FAA.

X. COMMUNITY RELATIONS

As discussed, the Project was initially presented to the Town of Prospect in the fall of 2008 in order to obtain a zoning permit for the Met tower. Since that time, BNE has kept the Town and its elected local and state officials apprised of the Project's progress. In addition, while not legally required, in preparation of filing this petition, BNE and its representatives submitted preliminary information to the Town on October 1, 2010. A copy of this municipal report is included in the bulk filing filed herewith. At the request of the Mayor of Prospect, BNE and its representatives conducted a public informational presentation for the residents of Prospect on October 18, 2010. The informational meeting was well attended by members of the public. A copy of informational meeting presentation is also included in the bulk filing.

Simultaneous with the filing of this petition, again while not legally required, BNE sent a certified mailing to all abutting property owners notifying such owners of the filing of this petition and published a legal notice in the Republican American. A copy of the list of abutting property owners, correspondence sent thereto along with the legal notice is attached hereto as Exhibit D. In addition, while not legally required, BNE has sent copies of this petition to all local and state officials included in Exhibit E.

XI. PETITION FILING FEE

In accordance with RCSA § 16-50v-1a, a \$625 filing fee is included with the filing of this petition.

XII. BULK FILING OF MUNICIPAL DOCUMENTS

Included in the bulk filing filed herewith are four copies of the Town of Prospect's zoning and wetlands regulations. In addition, four copies of the Town of Prospect's Plan of Conservation and Development are included in the bulk filing. In addition, BNE has included copies of the report filed with the Town of Prospect on October 1, 2010 as well as a copy of the presentation from the public informational meeting held on October 18, 2010 in the bulk filing.

XIII. CONCLUSION

Wind Prospect will provide numerous and significant benefits to the Town of Prospect, the State of Connecticut and its citizens, and will place the Town of Prospect at the forefront of green energy development while producing significant environmental benefits with minimal environmental impact. Pursuant to CGS § 16-50k(a), the Council shall approve by declaratory ruling the construction or location of a grid-side distributed resources project or facility with a capacity of not more than 65 MW, as long as such project meets DEP air and water quality standards. The Project meets these criteria. The Project is a "grid-side distributed resources" facility, as defined in CGS § 16-1(a)(43), because the Project involves "the generation of electricity from a unit with a rating of not more than sixty-five megawatts that is connected to the transmission or distribution system . . ." and, as demonstrated herein, the Project will meet DEP air and water quality standards. The Project will not produce air emissions, will not utilize water to produce electricity, was designed to minimize wetland impacts, will employ a storm water management plan that will result in no net increase in runoff to any surrounding properties and furthers the State's energy policy by developing and utilizing renewable energy resources. In

addition, as demonstrated above, the Project will not have a substantial adverse environmental effect in the State of Connecticut.

Accordingly, BNE Energy respectfully requests that the Siting Council approve the location, construction and operation of the Project by declaratory ruling.

Respectfully Submitted,

By: Cu 1 Le

Attorney For BNE Energy Inc.

Carrie L. Larson, Esq.

Pullman & Comley, LLC

90 State House Square

Hartford, CT 06103-3702

Ph. (860) 424-4312

Fax (860) 424-4370

clarson@pullcom.com

EXHIBIT A

1.6-82.5 50 Hz Wind Turbine

fact sheet

Introduction

GE continues to advance its 1.5 MW wind turbine series product line with the introduction of GE's 1.6-82.5 50 Hz wind turbine.

GE's 1.6-82.5 50 Hz wind turbine provides additional annual energy production relative to the 1.5-82.5 wind turbine. Coupled with industry-leading low cost of electricity, this additional output equates to higher customer value.

Focusing on performance, reliability, efficiency, and multi-generational product evolution, GE's 1.6-82.5 50 Hz wind turbine continues to deliver wind product leadership.

Applicable Platforms

GE's 1.6-82.5 wind turbine is available in both 50 and 60 Hz for use in IEC Class II environments.

Technical Description

GE's 1.6-82.5 50 Hz wind turbine has a rotor diameter of 82.5 meters. This wind turbine also incorporates advanced load controls which reduces the loads on the blades and other mechanical components to allow increased power production while maintaining a 20-year design life.

Enhancements to GE's 1.6-82.5 50 Hz wind turbine include: strengthened generator frames, an improved gearbox design and an upgraded pitch system.

GE's 1.6-82.5 50 Hz wind turbine utilizes GE Energy's proven Mark VIe* controller and advanced diagnostic capability to increase troubleshooting efficiency.



Features and Benefits

- A 15% increase in swept area relative to the 1.5-77 allows wind farms to be located in areas of lower average annual wind speeds, providing a strong return on investment.
- Based upon GE's 1.5 MW series turbine, the 1.6-82.5 50 Hz turbine offers the same industry workhorse reliability with increased output.
- A sophisticated set of grid friendly features enable operators to meet stringent grid requirements.

Product Specifications

GE's 1.6-82.5 50 Hz with advanced load controls offers the following technical specifications:

- 50/60 Hz
- 80 and 100 meter tower configurations
- Cold weather extreme configuration option
- IEC Class II

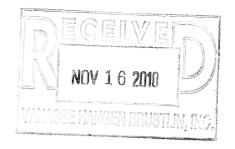


For more information, please visit www.ge-energy.com/wind.

EXHIBIT B

Transportation Land Development Environmental •







imagination innovation energy Creating results for our clients and benefits for our communities

REVISED September 30, 2010 Vanasse Hangen Brustlin, Inc.

Ref: 41604.01

Ms. Susan Chandler Commission on Culture & Tourism State Historic Preservation Office One Constitution Plaza, Second Floor Hartford, CT 06103

Re:

Proposed Wind Energy Facility

Wind Prospect 178 New Haven Road

Prospect, Connecticut

•

NO EFFECT Duis & Ballly BEPUTY SHPO

STATE HISTORIC PRESERVATION OFFICE

Date 11.2.10 Project no resources who an appear eligible

Dear Ms. Chandler:

Vanasse Hangen Brustlin, Inc. (VHB) has been retained by BNE Energy, Inc. ("BNE") to review historic and cultural resource information as part of a submission to the Connecticut Siting Council. BNE is proposing to construct a wind energy facility on portions of property located at 178 New Haven Road in Prospect, Connecticut. The proposed facility would include the construction of two (2) 1.6 megawatt GE wind turbines, associated access roads, and electrical utility interconnections. The turbine hubs (blade center) would be located at a height of approximately 100 meters (± 328 feet), onto which a 100 meter (± 328 foot) diameter blade would be affixed. The total turbine hub and blade length height is 150 meters (± 492 feet).

VHB reviewed historic/cultural resources within a 1.5-mile radius¹ of the two proposed ±492-foot tall wind turbines. Our Cultural Resources Map (attached) did not reveal the existence of any historic resources listed or eligible for listing on the National Register of Historic Places at or within 1.5-mile of the proposed wind turbines. In addition, no Archeological Sensitive Areas were identified at or within close proximity of the subject property. As a result, it is VHB's opinion that the proposed project will have no visual or direct effects upon historic or cultural resources.

We respectfully request a written opinion from your office regarding the proposed activities relative to historic and cultural resources. At your earliest convenience, please forward correspondence to my attention. Thank you in advance for your prompt consideration of this request.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.

Nicole Dentamaro

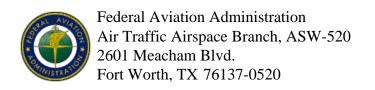
Environmental/GIS Analyst

Enclosure

Middletown, Connecticut 06457-1847

Although not specific to wind facilities, we have reviewed the Federal Communications Commission's Nationwide Programmatic Agreement regarding the Section 106 National Historic Preservation Act Review Process (NPA), which indicates the presumed area of potential effect (APE) for visual effects for the construction of new facilities with a tower height greater than 400 feet is 1.5 miles from the proposed tower site.

EXHIBIT C



Issued Date: 11/04/2009

Gregory Zupkus BNE Energy Inc 38 Colonial Drive Prospect, CT 06712

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Wind Turbine Wind Propsect

Location: Prosepct, CT

Latitude: 41-28-23.35N NAD 83

Longitude: 72-58-16.71W

Heights: 492 feet above ground level (AGL)

1292 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is marked and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, 24-hr med-strobes - Chapters 4,6(MIWOL),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

	At least 10 days prior to start of construction (7460-2, Part I)
X	Within 5 days after the construction reaches its greatest height (7460-2, Part II)

This determination expires on 11/04/2011 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights. Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-WTE-9004-OE.

Signature Control No: 655781-119956355
Michael Blaich

(DNE-WT)

Michael Blaich Specialist

EXHIBIT D

CERTIFICATION OF SERVICE TO ABUTTING PROPERTY OWNERS

I hereby certify that a copy of the foregoing letter sent by certified mail, return receipt requested, to each of the following abutting landowners:

<u>Abutter</u>	<u>Premises</u>	Mailing
The Connecticut Light &	18 Kluge Road	P.O. Box 270
Power Company	Prospect, CT 06712	Hartford, CT 06141
Connecticut Water	120 New Haven Road	93 West Main Street
Company	Prospect, CT 06712	Clinton, CT 06413
Derek D. McCormack	184 New Haven Road	184 New Haven Road
	Prospect, CT 06712	Prospect, CT 06712
Judy C. Visockis	190 New Haven Road	190 New Haven Road
	Prospect, CT 06712	Prospect, CT 06712
Luigi & Johanna	198 New Haven Road	198 New Haven Road
Demagistris	Prospect, CT 06712	Prospect, CT 06712
Luigi & Johanna	200 New Haven Road	198 New Haven Road
Demagistris	Prospect, CT 06712	Prospect, CT 06712
Michael Brunetti	210 New Haven Road	210 New Haven Road
	Prospect, CT 06712	Prospect, CT 06712
U.S. Cap, Inc.	214 New Haven Road	214 New Haven Road
	Prospect, CT 06712	Prospect, CT 06712

Dated November 17, 2010

By: Con I Lan

Attorney For BNE Energy, Inc.

Carrie L. Larson, Esq.

Pullman & Comley, LLC

90 State House Square

Hartford, CT 06103-3702

Ph. (860) 424-4312

Fax (860) 424-4370

clarson@pullcom.com



CARRIE L. LARSON
90 State House Square
Hartford, CT 06103-3702
p (860) 424-4312
f (860) 424-4370
clarson@pullcom.com
www.pullcom.com

October 29, 2010

Via Certified Mail/ Return Receipt Requested

To Whom It May Concern:

Please be advised that this office represents BNE Energy Inc. ("BNE"). This is to advise you that BNE will be filing a petition for declaratory ruling with the Connecticut Siting Council on or about November 3, 2010 concerning property located at 178 New Haven Road in Prospect (the "Property") in connection with the proposed development of two wind turbines at the Property. You are receiving this notice as a courtesy from BNE because your property abuts Property. Copies of the petition will be available as described in the attached legal notice, which will run in the Republican American on Sunday, October 31, 2010. Should you have any further questions or concerns regarding this matter, please contact our office or the Connecticut Siting Council.

Respectfully,

Culle

Carrie L. Larson

Enc.

cc: BNE Energy Inc.

ACTIVE/72955.3/CLARSON/2282901v1

NOTICE

Notice is hereby given of a petition for declaratory ruling to be submitted to the Connecticut Siting Council ("Siting Council") on November 3, 2010 or thereafter by BNE Energy Inc. ("Petitioner"). The Petitioner will file a petition for declaratory ruling that no certificate of environmental compatibility and public is needed from the Siting Council for the construction, maintenance and operation of a 3.2 MW wind electric generating project in Prospect, Connecticut. The Petitioner is proposing to construct two wind turbines at 178 New Haven Road in Prospect. The location, height and other features of the proposed facility are subject to review and potential change by the Connecticut Siting Council pursuant to Connecticut General Statutes § 16-50g et. seq.

Interested parties and residents of the Town of Prospect are invited to review the Application during normal business hours at any of the following offices:

Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Town of Prospect
Office of the Town Clerk, Prospect Town Hall
36 Center Street
Prospect, CT 06712

or the offices of the undersigned. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

Carrie L. Larson
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103-3702
Attorneys for the Petitioner

EXHIBIT E

CERTIFICATION OF SERVICE

I hereby certify that on this, the 17th of November, 2010, copies of the Petition for Declaratory Ruling and Attachments were sent by Federal Express to the following:

PROSPECT TOWN OFFICIALS

Mayor Robert J. Chatfield Town of Prospect, Town Hall 36 Center Street Prospect, CT 06712

Ms. Maryann C. Anderson Office of the Town Clerk Town of Prospect, Town Hall 36 Center Street Prospect, CT 06712

Mr. Donald E. Pomeroy Chairman, Planning and Zoning Commission Town of Prospect, Town Hall 36 Center Street Prospect, CT 06712

Ms. Marianne Byrne Chairman, Zoning Board of Appeals Town of Prospect, Town Hall 36 Center Street Prospect, CT 06712

Mr. Stephen Sackter Chairman, Inland Wetlands Commission Town of Prospect, Town Hall 36 Center Street Prospect, CT 06712

Ms. Jean Meehan Chairman, Conservation Commission Town of Prospect, Town Hall 36 Center Street Prospect, CT 06712

BETHANY TOWN OFFICIALS

Derrylyn Gorski, First Selectman Town of Bethany Bethany Town Hall 40 Peck Road Bethany, CT 06524

Nancy A. McCarthy Town Clerk Town of Bethany Bethany Town Hall 40 Peck Road Bethany, CT 06524

Sharon Huxley Chairman, Planning and Zoning Commission Town of Bethany Bethany Town Hall 40 Peck Road Bethany, CT 06524

Carol R. Goldberg Chairman, Zoning Board of Appeals Town of Bethany Bethany Town Hall 40 Peck Road Bethany, CT 06524

Patricia M. McGregor Chairman, Inland Wetlands Commission Town of Bethany Bethany Town Hall 40 Peck Road Bethany, CT 06524

Bruce G. Loomis
Acting Chairman, Conservation Commission
Town of Bethany
Bethany Town Hall
40 Peck Road
Bethany, CT 06524

STATE OFFICIALS

Office of the Attorney General State of Connecticut Attorney General Richard Blumenthal 55 Elm Street Hartford, CT 06106

Senator Joseph Lieberman One Constitution Plaza, 7th Floor Hartford, CT 06103

Senator Christopher Dodd 30 Lewis St Suite 101 Hartford, CT 06103

Congresswoman Rosa L. DeLauro Main District Office 59 Elm Street New Haven, CT 06510

State Representative Vicki Orsini Nardello 8 Laurel Lane Prospect, CT 06712

State Senator Joan Hartley Legislative Office Building Room 1800 Hartford, CT 06106

Council of Governments of the Central Naugatuck Valley c/o Director Peter Dorpalen 60 North Main Street, Third Floor Waterbury, CCT 06702-1403

State of Connecticut Department of Environmental Protection c/o Amey Marrella, Acting Commissioner 79 Elm Street Hartford, CT 06106

State of Connecticut
Department of Public Health
c/o J. Robert Galvin, M.D., M.P.H., M.B.A., Commissioner
410 Capitol Avenue, MS#13COM
Hartford, CT 06106

State of Connecticut
Department of Agriculture
c/o F. Philip Prelli, Commissioner
165 Capitol Avenue
Hartford, CT 06106

State of Connecticut Department of Public Utility Control c/o Kevin M. DelGobbo, Chairman Ten Franklin Square New Britain, CT 06051

State of Connecticut Office of Policy and Management c/o Acting Secretary Brenda L. Sisco 450 Capitol Avenue Hartford, CT 06106

State of Connecticut
Department of Economic and Community Development
c/o Joan McDonald, Commissioner
505 Hudson Street
Hartford, CT 06106

State of Connecticut
Department of Transportation
c/o Jeffrey A. Parker, Commissioner
2800 Berlin Turnpike
Newington, CT 06111

State of Connecticut Council on Environmental Quality c/o Karl J. Wagener, Executive Director 79 Elm Street Hartford, CT 06106

Connecticut Commission on Culture & Tourism State Historic Preservation Office c/o David Bahlman, Division Director One Constitution Plaza, 2nd Floor Hartford, CT 06103

Connecticut Siting Council Ten Franklin Square New Britain, CT 06051 Dale A. Hedman Acting President Connecticut Clean Energy Fund 865 Brook Street Rocky Hill, CT 06067

Peter V. Longo President and Executive Director Connecticut Innovations 865 Brook Street Rocky Hill, CT 06067

Marie O'Brien President Connecticut Development Authority 999 West Street Rocky Hill, CT 06067

ELECTRIC COMPANY

Connecticut Light & Power P.O. Box 270 Hartford, CT 06141-0270

By: Centre

Attorney For BNE Energy Inc. Carrie L. Larson, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 Ph. (860) 424-4312 Fax (860) 424-4370 clarson@pullcom.com