STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

May 16, 2011

Lee D. Hoffman, Esq.
Bonnie L. Heiple, Esq.
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103-3702

RE: **PETITION NO. 980** - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut.

Dear Attorney Hoffman and Attorney Heiple:

By its Decision and Order dated May 12, 2011, the Connecticut Siting Council (Council) denied this petition, finding that the visual effects associated with the construction, operation, and maintenance of this wind electric generating facility at the proposed site are in conflict with the policies of the State concerning such effects and are sufficient reason to deny the petition.

Enclosed are the Council's Findings of Fact, Opinion, Decision and Order, Conclusions of Law, and Dissent on Conclusions of Law § B.

Very truly yours,

Linda Roberts

Linda Roberts
Executive Director

LR/RDM/laf

Enclosures (5)

CONNECTICUT SITING COUNCIL

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

May 16, 2011

TO: Parties and Intervenors

FROM: Linda Roberts, Executive Director

RE: **PETITION NO. 980** - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut.

By its Decision and Order dated May 12, 2011, the Connecticut Siting Council denied this petition, finding that the visual effects associated with the construction, operation, and maintenance of this wind electric generating facility at the proposed site are in conflict with the policies of the State concerning such effects and are sufficient reason to deny the petition.

Enclosed are the Council's Findings of Fact, Opinion, Decision and Order, Conclusions of Law, and Dissent on Conclusions of Law § B.

LR/RDM/laf

Enclosures (5)

c: State Documents Librarian

STATE OF CONNECTICUT)

ss. New Britain, Connecticut :

COUNTY OF HARTFORD)

I hereby certify that the foregoing is a true and correct copy of the Findings of Fact, Opinion, Decision and Order, Conclusions of Law, and Dissent on Conclusions of Law § B, issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:

Linda Roberts
Executive Director
Connecticut Siting Council

I certify that a copy of the Findings of Fact, Opinion, Decision and Order, and Conclusions of Law in Petition No. 980 has been forwarded by Certified First Class Return Receipt Requested mail, on May 16, 2011, to all parties and intervenors of record as listed on the attached service list, dated May 13, 2011.

ATTEST:

Lisa Fontaine
Fiscal Administrative Officer
Connecticut Siting Council

LIST OF PARTIES AND INTERVENORS
SERVICE LIST

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Applicant	☒ E-Mail ☒ U.S. Mail	BNE Energy, Inc.	Lee D. Hoffman, Esq. Bonnie L. Heiple, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 (860) 424-4312 (860) 424-4370 fax lhoffman@pullcom.com bheiple@pullcom.com Paul Corey, Chairman BNE Energy Inc. Town Center, Suite 200 29 South Main Street West Hartford, CT 06107 (860) 561-5101 (888) 891-6450 fax pcorey@bneenergy.com
Party *(granted on 01/06/11)*	☒ U.S. Mail	Town of Prospect	The Honorable Robert J. Chatfield Mayor Prospect Town Office Building 36 Center Street Prospect, CT 06712-1699 (203) 758-4461 Town.of.prspct.@sbcglobal.net
Party *(granted on 01/06/11)*	☒ U.S. Mail	Save Prospect Corp (SPC)	Jeffrey J. Tinley, Esq. Anthony J. Interlandi, Esq. Tinley, Nastri, Renehan & Dost, LLP 60 North Main Street Waterbury, CT 06702 (203) 596-9030 (203) 596-9036 fax jtinley@tnrdlaw.com noisyprospect@comcast.net
Party *(granted 02/08/2011)*	☒ E-Mail	FairwindCT, Inc. P.O. Box 225 Colebrook, CT 06021 (860) 379-6425 info@fairwindct.com	Nicholas J. Harding Emily A. Gianquinto Reid and Riege, P.C. One Financial Plaza, 21st Floor Hartford, CT 06103 (860) 240-1011 (860) 240-1025 nharding@rrlawpc.com egianquinto@rrlawpc.com

LIST OF PARTIES AND INTERVENORS
SERVICE LIST

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor *(granted on 02/24/11)*	☒ U.S. Mail	*Grouped with Save Prospect Corp./FairwindCT, Inc.* Eric Bibler 31 Old Hyde Road Weston, CT 06883 (203) 454-7850 (203) 246-2997 – cell ebibler@gmail.com	
Party *(granted on 01/20/11)*	☒ E-Mail	John and Cheryl Lamontagne 225 New Haven Road Prospect, CT 06712 (203) 509-4158 John.lamontagneconstco.com Thomas and Eileen Satkunas 232 New Haven Road Prospect, CT 06712 (203) 592-1344 Tom.satkunas@snet.net	Thomas J. Donohue, Jr., Esq. Killian & Donohue, LLC 363 Main Street Hartford, CT 06106 (860) 560-1977 (860) 249-6638 tj@kdjlaw.com
Party *(granted on 02/24/11)*	☒ U.S. Mail	Connecticut Water Company **STATUS WITHDRAWN 03/30/11**	Andrew W. Lord, Esq. Murtha Cullina LLP CityPlace I – 185 Asylum Street Hartford, CT 06103 (860) 240-6000 alord@murthalaw.com Cindy Gaudino Manager Source Protection & Real Estate Connecticut Water Company 93 West Main Street Clinton, CT 06413 (800) 428-3985

LIST OF PARTIES AND INTERVENORS
SERVICE LIST

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor *(granted on 01/20/11)*	☒ E-Mail	The Connecticut Light and Power Company	John R. Morissette Manager – Transmission Siting and Permitting Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-2036 (860) 665-6933 fax morisjr@nu.com Christopher R. Bernard Manager, Regulatory Policy (Transmission) The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5967 (860) 665-3314 fax bernacr@nu.com Joaquina Borges King Senior Counsel Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-3678 (860) 665-5504 fax borgej@nu.com

PETITION NO. 980 - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut.	}	Connecticut
	}	Siting
	}	Council

May 12, 2011

FINDINGS OF FACT

Introduction

1. On November 17, 2010, BNE Energy Inc. (BNE), pursuant to Connecticut General Statutes (CGS) §16-50k and §§16-50j-38 to 16-50j-40 of the Regulations of Connecticut State Agencies, submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation (Petition) of a 3.2 megawatt (MW) Wind Renewable Generating facility at 178 New Haven Road in Prospect, Connecticut. The proposed project is referred to as "Wind Prospect." (BNE 1, Vol. 1, p. 1)

2. BNE proposes to install two General Electric (GE) 1.6 wind turbines at the site, referred to as the northern turbine and southern turbine. During the proceeding, BNE developed an alternative northern turbine location. (BNE 1, Vol. 1, pp. 7-8; BNE 18b)

3. Pursuant to CGS §16-50k(a), the project is eligible to be approved by a declaratory ruling since it is a grid-side distributed resources facility under 65 MW that is in compliance with air and water quality standards of the Connecticut Department of Environmental Protection (DEP). (BNE 1, Vol. 1, p. 1)

4. Pursuant to CGS § 16a-35k, Connecticut state energy policy includes the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum extent possible." (BNE 1, Vol. 1, p. 1)

5. BNE is a Delaware corporation with a principal place of business at 29 South Main Street in West Hartford, Connecticut. BNE was founded in 2006 for the purpose of constructing and operating commercial wind generation projects in Connecticut and elsewhere. (BNE 1, Vol. 1, pp. 2, 6)

6. The State of Connecticut implemented renewable portfolio standards (RPS) that required 14 percent of electric generation within the state be produced by renewable resources by 2010. By 2020, RPS requirements increase to 27 percent, 20 percent of which must be from Class I renewable energy sources, which include wind. (BNE 1, Vol. 1, p. 3)

7. The parties in this proceeding are the Petitioner (BNE), the Town of Prospect (Town), Save Prospect Corp. (SPC), FairwindCT, Inc., John and Cheryl Lamontagne, Thomas and Eileen Satkunas, and the Connecticut Water Company (CWC). Intervenors to the proceeding include Eric Bibler and The Connecticut Light and Power Company (CL&P). SPC, FairwindCT, Inc. and Eric Bibler were grouped for the purpose of these proceedings. CWC withdrew its party status on March 30, 2011. (Transcript 1, 02/23/11, 6:40 p.m. [Tr. 1], p. 7; Transcript 2, 02/24/11, 2:35 p.m. [Tr. 2], pp. 4-5, 10; CWC letter withdrawing party status dated March 30, 2011)

8. On November 17, 2010, BNE provided notice of its filing to all adjacent landowners via certified mail, return receipt requested. BNE received return receipts for all abutting property owners except for one, which is U.S. Cap, Inc. BNE sent a second notice to this property owner via first class mail. (BNE 1, Vol. 1, Tab D; BNE 2, R. 12)

9. Pursuant to § 16-50j-21 and 16-50j-40 of the Regulations of Connecticut State Agencies, the Council, after giving due notice thereof, held a public hearing on February 23, 2011 beginning at 6:30 p.m., and on February 24, 2011, beginning at 3:00 p.m. and continuing at 6:30 p.m., at the Long River Middle School Gymnasium, 38 Columbia Avenue, Prospect, Connecticut. (Tr. 1, p. 3; Tr. 2, p. 3; Tr. 3, p. 3)

10. Evidentiary hearings were continued on March 3, March 15 and March 31, 2011 at the office of the Connecticut Siting Council, 10 Franklin Square, New Britain, Connecticut. (Transcript 4, March 3, 2011, 11:11 a.m. [Tr. 4], p. 3; Transcript 5, March 15, 2011, 12:10 p.m. [Tr. 5], p. 3; Transcript 6, March 31, 2011, 11:20 a.m. [Tr. 6], p. 3)

11. The Council and its staff inspected the proposed site and surrounding area on February 23, 2011. (Hearing Notice dated January 24, 2011)

12. BNE published notice of the petition filing in the Republican American on October 31, 2010. (BNE 1, Vol. 1, p. 32, Tab D)

13. The Council published a legal notice announcing the date, time and place for this hearing in the Waterbury Republican-American on January 26, 2011 and in the Citizen's News on January 28, 2011. (record)

14. BNE installed a sign at the edge of the host property that presented information regarding the petition and the Council hearing. (Pre-hearing conference memorandum dated February 4, 2011)

15. BNE expects the proposed project to be completed and ready for commercial operation in late 2011 if approved by May 2011. (BNE 1, Vol. 1, p. 30)

16. The Town of Prospect is approximately 14.3 square miles with a total population of approximately 8,707. The population density of Prospect is approximately 608 people per square mile. (Council Admin. Notice 15, Prospect Mail-A-Map)

17. There are approximately 738 people per square mile in the State of Connecticut and approximately 87 people per square mile in the United States. (Council Admin. Notice 44, United States Census 2010)

State Agency Comment

18. Pursuant to CGS § 16-50j (h), on January 21, 2011, March 22, 2011 and April 1, 2011, the following state agencies were solicited by the Council to submit written comments regarding the proposed facility: DEP, Department of Public Health (DPH), Council on Environmental Quality (CEQ), Department of Public Utility Control (DPUC), Office of Policy and Management (OPM), Department of Economic and Community Development (DECD), Department of Agriculture (DOAg) and the Department of Transportation (DOT). (Letter to state agencies dated January 21, 2011, Letter to state agencies dated March 22, 2011, Letter to state agencies dated April 1, 2011)

19. The DPH Drinking Water Section provided comments on January 5, 2011. The DPH comments noted that the proposed project is located within the public water supply watershed of Long Hill Reservoir, which is an active source of drinking water for the Connecticut Water Company Naugatuck Central System. The proposed project would also be within 45 feet of a wetlands tributary leading to that water supply. DPH recommended the following.
    a. Erosion and sediment controls should be used and maintained as necessary.
    b. A responsible party should be named for maintenance, inspection, repair, replacement and incorporation of new erosion and sediment controls.
    c. Construction machinery should be serviced outside of the watershed.
    d. Vehicles and machinery should be refueled on an impervious pad with secondary fuel containment controls.
    e. A fuel spill remediation kit should be kept on-site.
    f. The Connecticut Water Company should be notified prior to commencement of the proposed project construction.
    g. The Connecticut Water Company should be granted permission to periodically inspect the project to ensure that drinking water is not being affected.

    (DPH comments dated January 5, 2011)

20. On January 20, 2011, DOT submitted comments regarding a concern that access to the proposed project would require an encroachment permit if it were to extend from Route 69. (DOT comments dated January 20, 2011)

21. On March 14, 2011, DEP submitted comments regarding the proposed project, which are referred to in various portions of the Environmental section of these findings. (DEP comments dated March 14, 2011)

22. The project would be consistent with the State Conservation and Development Policies Plan, which advocates the reduction of statewide carbon dioxide emissions, and the development of renewable energy sources, including wind, to help achieve this goal. (BNE 1, Vol. 1, p. 16; DEP comments dated March 14, 2011)

23. The following agencies did not respond with written correspondence: CEQ, DPUC, OPM, DOAg and the DECD. (record)

Municipal Consultation

24. On October 1, 2008, BNE received local approval from the Prospect Planning and Zoning Commission for the installation of a meteorological (Met) tower to be located on the property. (BNE 1, Vol. 1, p. 5; Tr. 5, p. 30)

25. On October 1, 2010, BNE submitted an informational filing for the proposed project with the Town of Prospect. (BNE 1, Vol. 1, p. 5)

26. On October 18, 2010, at the request of the Mayor of Prospect, BNE conducted a public informational meeting for the residents of Prospect. (BNE 1, Vol. 1, p. 5)

27. The Town of Prospect Planning and Zoning Commission expressed concerns about the proposed project: primarily the noise and ice throw from the proposed turbines and the project's impact on residential real estate values. (Tr. 5, p. 26)

28. The Planning and Zoning Commission suggested that wind turbines such as those proposed should be located within a commercial or industrial- zoned area of the town rather than within an area zoned residential. (Town of Prospect 4, Planning and Zoning Commission letter)

29. The Town of Prospect Inland Wetlands Commission expressed concern about the project's potential impacts on an existing underground plume of industrial contamination from an adjacent property, and on the wetlands that exist on the property. The Inland Wetland Commission has asked for permission to enter the property at reasonable times to inspect the proposed project as it goes forward, and has requested a list of contacts from BNE that would be available to call in the event of an emergency during project construction. (Tr. 5, pp. 27-39)

30. The Inland Wetlands Commission recommended consideration of standpipes to be installed in the ground between the proposed foundation pads and the wetlands to monitor the movement of groundwater. (Town of Prospect 3, Inland Wetlands letter)

31. The Inland Wetlands Commission recommended that no fuels or other hazardous materials be stored near or upland of the wetland areas on the property. Any hazardous materials to be stored on-site should be safely contained and in no greater volume than what would be used in a residential household. A fuel spill remediation kit should be kept on-site to immediately contain a spill and remove contamination. (Town of Prospect 3, Inland Wetlands letter)

State and Federal Permits

32. BNE would file for a General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities with the DEP. (BNE 1, Vol. 1, p. 30)

33. On November 4, 2009, the Federal Aviation Administration (FAA) issued a determination that the proposed turbines do not exceed obstruction standards and would not be a hazard to air navigation; however, the structures must be marked and/or lighted in accordance with FAA regulations. (BNE 1, Vol. 1, p. 31)

34. BNE would install flashing red lights on the nacelles of the turbines, which would be lit at night, and paint the towers white, which would eliminate the requirement of lighting the structures during the day. The proposed red flashing lights would light approximately 20 or 30 times per minute. BNE would also notify the FAA within five days after the installation of the blades on the proposed turbines. (BNE 1, Vol. 1, pp. 31-32; BNE 20; Tr. 6, pp. 217-218)

Proposed Site

35. The proposed site is located on a 67.5-acre parcel at 178 New Haven Road in Prospect, immediately north of Kluge Road and west of Route 69. The northern portion of the property abuts Route 69, whereas the southern portion is set back approximately 280 feet from Route 69. The property is located approximately 1,760 feet north of the Prospect/Bethany town line (refer to Figure 1). BNE 1, Vol. 1, pp. 4, 7, Vol. 2, Tab F)

36. The property is currently undeveloped, consisting of meadow and woodland areas. A 160-foot telecommunications tower owned by SBA Inc. is located in the southeast corner of the meadow area. BNE erected a 197-foot meteorological tower in the central portion of the meadow in 2008 to study weather conditions at the site (refer to Figure 2). (BNE 1, Vol. 1, p. 7, Vol. 2, Tab F, Vol. 3, Tab J; BNE 2, R. 19)

37. The property is zoned residential (RA-1), which requires 1 acre to develop a single-family residence. Based on the zoning, a maximum of 47 residences could be constructed on the parcel, not assuming any environmental or other local considerations. (BNE 1, Vol. 1, p. 17; Tr. 6, pp. 127-129)

38. Abutting properties include the following:

Property Owner	**Property Address**	**Zoning**	**Direction from site property**
CWC watershed land	-	Residential, RA-2	North and west
Kluge	15 Kluge Rd	Residential, RA-1	south
CL&P	(off Kluge Road)	Residential, RA-1	east
U.S. Cap Inc	214 New Haven Rd	Industrial	east
Demagistris	198 New Haven Rd.	Industrial	east
Visockis	190 New Haven Rd	Residential, RA-1	east
McCormack	184 New Haven Rd.	Residential, RA-1	east

(refer to Figure 2) (BNE 1, Vol. 2, Tab F; BNE 2a; SPC Administrative Notice 54; Lamontagne 4)

39. The abutting CWC property is Class I and II watershed land. (BNE 1, Vol. 1, p. 19)

40. The CL&P property is developed with a 152-foot telecommunications tower. The property at 15 Kluge Road is developed with a 190-foot telecommunications tower and a single-family residence. (BNE 1, Vol. 2, Tab F; BNE 2, Q. 16; BNE 2a; SPC Administrative Notice 54)

41. The approximate distance of the proposed turbines to nearby properties is presented in the following table.

	Southern Turbine	Northern Turbine	Alternative Northern Turbine
Distance to nearest property line	150 feet to west	360 feet to northwest	421 feet to north
Distance to nearest developed residential property line	410 feet to south	720 feet to east	820 feet to east
Distance to nearest residential building	910 feet to southeast	823 feet to east	920 feet to east
Distance to Route 69	1055 feet to east	984 feet to east	1055 to east

(BNE 1, Vol. 2, Tab F; BNE 9h; BNE 14, R. 46, BNE 22, Attachment 1)

42. Land uses in the area include watershed land, former industrial use, commercial properties, and residential development. There are approximately 860 buildings within 1.25 miles of the turbines (original northern location), most of which are residential. Of these, approximately 650 are east of Route 69 (including the abutters and properties on Kluge Road). There are approximately 840 buildings within 1.25 miles of the turbines with the alternative northern location. (BNE 1, Vol. 1, p. 7; BNE 2a; Tr. 6, pp. 112-113)

43. There are 51 residences within 2,000 feet of the proposed turbine locations and 129 residences within a half-mile, generally east of the turbines. (BNE 20, Q. 6; BNE 2, Tab 2; Tr. 2, p. 41)

Project Description

44. At the proposed site, BNE proposes to install an access road; an ancillary building for storage, office space and community education; an electrical collector yard; and two GE 1.6 MW wind turbines with associated equipment (refer to Figure 3). (BNE 1, Vol. 1, p. 7)

Proposed Access Road

45. The proposed access road would extend from the west end of Kluge Road and turn in a south to north direction, connecting the project entrance with the ancillary building nearby, proceeding on to the southern turbine, and from there downhill to northern turbine. The new road would be approximately 800 feet long, with slopes ranging from 640 feet above mean sea level (amsl) to 800 feet amsl. It would be constructed in accordance with all applicable guidelines, including the *2004 Connecticut Stormwater Quality Manual* and the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. Should the Petition be approved, detailed plans for the road would be submitted during the D&M phase of the process: this includes provisions for further review by parties and intervenors. Further access road details are found in the "Site Disturbance/Restoration" section of this document. (BNE 1, Vol. 2, Tab F)

46. Upgrades to Kluge Road would be designed after BNE assesses the road's condition and determines whether it is capable of withstanding the weight and size of the equipment that would travel over the road to the host property. Grading may be necessary along Kluge Road to accommodate the upgrades. (BNE 8, R. 82; Tr. 4, p. 86; Tr. 6, p. 173)

Ancillary Building

47. The proposed ancillary building would include restroom facilities and use an on-site well to meet sanitary and drinking needs. An on-site septic system would be required to dispose of wastewater. The precise location of the ancillary building on the property has not yet been determined. Detailed plans for this facility would be provided during the D&M phase, depending on Council approval. (BNE 1, Vol. 1, pp. 8-9)

Electrical Collector Yard

48. The collector yard would be located in the southern portion of the property, near the existing cellular tower, but the final location of the collector yard would be coordinated with the electric utility company. Electrical equipment at the collector yard would include a 600-amp, 15-kV class circuit breaker or recloser with a multifunctional relay. (BNE 1, Vol. 1, p. 8, Vol. 2, Tab F)

49. Electrical interconnection from the yard onto CL&P's 13.8-kV distribution system would be made at a distribution pole on Kluge Road. (BNE 1, Vol. 1, p. 9)

50. Details of the electrical interconnection would be subject to an agreement with CL&P. (Tr. 6, pp. 215-216)

GE 1.6 Wind Turbines

51. Each turbine would include a 100-meter (328-foot) tall tower with a nacelle at the top. The nacelle contains the generator, other operational equipment, and the hub. Three 132-foot long blades (40.3 meters) connect to the hub, having a nominal rotor diameter of 82.5 meters (270 feet). The total height of the turbine when a blade is at its apex is 463 feet above ground level. (BNE 1, Vol. 1, pp. 7-8; BNE 14, R. 59)

52. GE also makes a 1.6 MW turbine with 160-foot (48.7 meter) blades. Although BNE initially sought approval of the petition using turbine blades of up to 160 feet, BNE does not believe GE would approve 160-foot blades for use at the site. Therefore, the 160-foot blade option will not be discussed further in this document except where necessary due to initial "worst case" environmental assessments. (BNE 14, R. 59)

53. BNE investigated the use of a shorter turbine tower, 80 meters (262 feet); however, due to the topography of the site, this change would increase the effect of wind turbulence on the blades, and decrease the turbine's performance. (Tr. 4, pp. 88-89)

54. The useful lifespan of the proposed turbines is approximately 20 to 30 years. At the end of that period, the equipment would be reviewed and a determination would be made to decommission or change out existing equipment. (BNE 1, Vol. 1, p. 9)

55. The following information regarding specific features of the turbine was filed subject to a Protective Order: Mechanical Loads Assessment, raw wind data, setback considerations, noise emission characteristics, Calculated Power Curve, technical description of turbine, and foundation load specifications. (Council Protective Order of February 24, 2011)

Turbine Locations

56. The southern turbine would be located in a wooded area along the west edge of the meadow at a ground elevation of 762 feet amsl (refer to Figure 4). (BNE 1, Vol. 2, Tab F)

57. The northern turbine would be located in a wooded area in the northwestern portion of the property, approximately 800 feet north-northeast of the southern turbine. The northern turbine and alternative northern turbine locations would both be at a ground elevation of approximately 640 feet amsl (refer to Figures 5 & 6). (BNE 1, Vol. 2, Tab F, Vol. 3, Tab J; BNE 18b, R. 12, Tab 1)

Facility Operation

Capacity

58. BNE began searching in Prospect for a site because of Prospect's ground elevation and potential for wind resources. BNE's search focused on available property with sufficient acreage to accommodate several turbines, with an electrical interconnection point nearby, and with a surrounding area of low-density development. (BNE 1, Vol. 1, p. 13; BNE 2, R. 5)

59. BNE obtained an option to purchase the property of the proposed site. (BNE 1, Vol. 1, p. 13)

60. BNE installed an approximately 197-foot (60 meter) Met tower on the property on November 3, 2008 to begin collecting wind data. The Met tower measured wind conditions at 131.2 feet (40 meters), 164 feet (50 meters) and 197 feet (60 meters) on the tower. (BNE 1, Vol. 1, p. 13; BNE 2, R. 3)

61. Data from the Met tower was collected for 14.7 months, from November 4, 2008 to January 24, 2010. The data from the Met tower for nighttime (6:00 p.m. to 6:00 a.m.) and daytime (6:00 a.m. to 6:00 p.m.) average wind speeds for each month are shown in the table below.

Month	Nighttime Average at 100 m	Daytime Average at 100 m
January	7.07 m/s (15.8 mph)	7.01 m/s (15.7 mph)
February	8.40 m/s (18.8 mph)	8.32 m/s (18.6 mph)
March	7.49 m/s (16.8 mph)	6.83 m/s (15.3 mph)
April	7.24 m/s (16.2 mph)	7.51 m/s (16.8 mph)
May	6.52 m/s (14.6 mph)	6.09 m/s (13.6 mph)
June	5.60 m/s (12.5 mph)	5.07 m/s (11.3 mph)
July	5.99 m/s (13.4 mph)	5.40 m/s (12.1 mph)
August	6.20 m/s (13.9 mph)	5.06 m/s (11.3 mph)
September	6.86 m/s (15.3 mph)	6.07 m/s (13.6 mph)
October	7.37 m/s (16.5 mph)	6.96 m/s (15.6 mph)
November	7.27 m/s (16.3 mph)	7.14 m/s (16 mph)
December	8.29 m/s (18.5 mph)	8.33 m/s (18.6 mph)

(BNE 4, R. 33)

62. After the data had been gathered, GE used it to perform a Mechanical Loads Assessment that would suggest the proper model, dimensions, and locations for the proposed wind turbines on the Prospect property, taking into account not only wind speed but also wind shear (the difference in wind speed over a relatively short vertical distance), air density and turbulence intensity. BNE worked closely with GE during this assessment process, evaluating a range of options regarding project design. (BNE 2, R. 1; Tr. 4, pp. 118-121; Tr. 6, p. 193)

63. Rotor size must be assessed relative to turbulence intensity and wind shear, since a blade experiences different loads depending on wind conditions at the various points it sweeps through. Independent pitch motors adjust each blade's pitch and angle during operation. This adjustment compensates for wind turbulence to some extent, but not entirely. (BNE 1, Vol. 1, p. 10; Tr. 4, pp. 88-89)

64. Turbulence affects turbine placement. Placing turbines too close together could create an effect such that wind passing through the rotor of one turbine would cause increased turbulence at an adjacent turbine. The affected turbine could be damaged over time and/or would produce less electricity. (Tr. 6, p. 242)

65. The turbine cut-in wind speed is 7.8 mph (3.5 m/s). (BNE 2, R. 7; BNE 9h, Attachment 2, p. 2)

66. Based on measured wind data, the turbines are expected to operate approximately 7,787 hours over a one-year period, or 88.9 percent of the time. (BNE 2, R. 7)

67. The annual capacity factor of the proposed project is expected to be approximately 30 percent. The capacity factor is a measure of the project's efficiency. It refers to the amount of electricity generated in a year as a percent of electricity it would theoretically produce if it were to operate at its maximum output for 100 percent of the hours in the year. (BNE 1, Vol. 1, p. 12)

68. Based on measured wind data at the site, the proposed turbines are expected to run at full output for approximately 7.5 percent of the time during the year. (BNE 2, R. 8)

69. At its capacity factor of 30 percent, the proposed project would generate approximately 8,410 megawatt-hours (MWh) of Class I renewable energy annually. (BNE 1, Vol. 1, p. 11)

70. Wind is not constant; it tends to be calmer in the summer, especially during summer peak loads, and reaches higher speeds during winter peak loads. (BNE 4, R. 33; Tr. 6, p. 222)

Reliability

71. The proposed wind turbines are designed to have an availability of approximately 98 percent, including maintenance shut-down. (BNE 1, Vol. 1, p. 12)

72. Availability does not include shut-down for longer repair events, icing events, high wind events or other emergency conditions. (Tr. 4, pp. 82-84)

73. Maintenance is generally scheduled every six months and would require a turbine to be shut down for approximately one and a half days. Maintenance includes tightening bolts, changing filters, and topping off lubricants in the nacelle. (Tr. 4, pp. 83-84)

74. The proposed turbines could operate in a maximum extreme gust for a three-second period of approximately 125 miles per hour (mph) and for ten minutes at approximately 89.5 mph, in accordance with International Electrotechnical Commission standards. (BNE 1, Vol. 1, p. 13)

Public Health and Safety

Setbacks

75. Connecticut does not have state-issued setbacks for commercial wind turbines. Per the record in P 980, only four states do (Minnesota, Ohio, South Dakota, Wisconsin). Although many reports are prepared periodically on this subject, it appears no report is definitive, due to the number of jurisdictions involved, differences in defining the sizes of wind turbines to be regulated, differing approaches to regulation in general, and the rapidity of wind development in the U.S. (BNE 20, with attachment from OLR; SPC Administrative Notice 10)

76. Twelve states have established model siting ordinances or similar guidance concerning wind turbines at the state level, even despite having assigned regulatory control over such facilities to county or local jurisdictions (California, Delaware, Illinois, Maine, Massachusetts, Michigan, New Hampshire, New York, North Carolina, Oregon, Pennsylvania, and Wyoming). North Dakota and Vermont have also delegated control to lower jurisdictions. Vermont is currently debating whether to set state standards, while the record is ambiguous on the extent of North Dakota's state guidance. (BNE 20, with attachment from OLR; SPC Administrative Notice 10)

77. Setbacks mandated or advised by these 18 states are typically worded as a multiple of total turbine height, (tower plus blade length), with the multiple most commonly used varying from 1.1 to 1.5. A few variations are as follows: setbacks with a specified increase for residential zones; setbacks as multiples of rotor diameter; setbacks based on a multiple of rotor diameters in the direction of the prevailing wind. (BNE 20, with attachment from OLR; SPC Administrative Notice 10)

78. Setbacks tend to be measured to property lines, not residences, except in cases where the setbacks are based on noise. (BNE 20, with attachment from OLR; SPC Administrative Notice 10)

79. Where noise regulations in themselves are not accepted as protective, added setbacks for noise range widely: anywhere from 30 feet beyond the regulated extent to 0.5 mile or greater. (SPC Administrative Notice 10; SPC Administrative Notice 70, p. 9)

80. Exceptions to setbacks are typically allowed where adjoining property owners agree. (BNE 20, with attachment from OLR; SPC Administrative Notice 10)

Operational Safety

81. The proposed turbines can be controlled from: a) the nacelle, by use of an interface; b) the bottom of the tower, by use of a control box; and c) a remote location, by use of a Supervisory Control and Data Acquisition System with local lockout capacity. (BNE 1, Vol. 1, p. 10)

82. Emergency stop buttons would be located within the tower base and within the nacelle to stop the turbine in the event of an emergency. (BNE 1, Vol. 1, p. 10)

83. Each proposed turbine would have automatic and hand held fire extinguishers and automatic fire alarms. (BNE 6, R. 45)

Noise

84. Noise—unwanted sound—is conveyed from a source to the human ear as waves of air pressure. Sound pressures can be measured in terms of sound-level (loudness, volume), or in terms of frequency (pitch, tone). Sound-levels are expressed in decibels (dB). Frequencies are expressed in cycles-per-second, known as Herz (Hz). (BNE 1, Vol. 3, Tab N, pp. 2-3)

85. The decibel scale extends from zero dB (the threshold of hearing) to above 120 dB (painful). The scale is logarithmic, not linear. A 1 dB increase is not perceptible to the average person. Adding two equal sound levels creates a 3 dB increase in the overall sound level: that increase is at the threshold of perceptibility. A 10 dB increase is a tenfold increase in sound pressure but is only perceived as a doubling in loudness. [BNE 1, Vol. 3, Tab N, pp. 2-3]

86. In terms of frequencies, the ear can hear from about 20 Hz up to about 20,000 Hz, but it is most sensitive to sounds in the middle range (1,000 to 8,000 Hz). (SPC Administrative Notice 70, pp. 6-7)

87. Community noise is measured in ways that combine the scale of loudness (in dB) with the range of frequency response (in Hz) for the human ear. Noise measurement devices can present a simple graph of combined pressures and frequencies in one-third octave bands. However, they can also weight sound pressure changes in ways that more closely track human sensitivities. The most commonly-used weighting scheme is called the "A-weighted" scale (dBA): it emphasizes sound-levels at middle to high frequencies and de-emphasizes sound-levels at low frequencies. Another scheme (dBC) is equally sensitive to all frequencies above 32 Hz, with the result that, compared to dBA, it comes closer to representing perceived loudness in cases where low frequencies matter. (BNE 1, Tab N, pp. 2-3; SPC Administrative Notice 70, pp. 10-11; SPC Administrative Notice 27, p. 8; SPC Administrative Notice 28, p. 25; Tr. 6, pp. 152-53)

88. Noise from a wind turbine at 1,200 feet is dimensionally large: it is both enveloping, unlike noise from a point source, and continuous, unlike the sound of a car driving by. (Tr. 5, pp. 184-185, 193-196, 213-214)

89. Noise from multiple turbines is louder than noise from a single turbine. (SPC Administrative Notice 70, p. 14)

90. Wind turbines emit two main types of noise: noise from the mechanical equipment in the nacelle, such as the generator, gearbox, yaw motors, fans, transformer (mechanical noise); and noise from the rotor blades sweeping through the air (aerodynamic noise). (BNE 1, Vol. 3, Tab N, p. 9; SPC Administrative Notice 70, p. 11; Tr. 5, pp. 213-214)

91. Aerodynamic noise is generally characterized by rhythmic pulsations (modulations) that vary according to wind conditions and the rotor's positions in the air. For instance, a blade passing by the tower itself at the low point of its cycle can make a noise up to five dB louder than at the top of its cycle. Blades can also sound different as they encounter wind-shear. Finally, certain contours of the terrain cause turbulence, which in turn can cause variations in the aerodynamic noise produced by blades. (SPC Administrative Notice 70, pp. 12-14; SPC Administrative Notice 28, p. 6; Tr. 5, pp. 213-214)

92. Modulations of aerodynamic noise occur at low frequencies (20-300 Hz), sometimes occurring at frequencies even lower than 20 Hz, a frequency range called "infrasound", which is generally inaudible. (Tr. 5, pp. 175, 178; SPC Administrative Notice 70, p. 11; SPC Administrative Notice 28, p. 5)

93. Audible low-frequency noise (20-300 Hz) can cause sleep disturbance, headaches, ear pressure, skin sensations, and other similar symptoms in some people. Complaints of annoyance about noise appear to increase when outside noise levels exceed 35 dBA. (SPC Administrative Notice 1, p. 31; SPC Administrative Notice 70, pp. 15, 25)

94. Loud mechanical noise in the environment can disturb people's sleep. DEP has developed noise control regulations to limit community exposure. These regulations allow higher sound-levels during the daytime than at night. (Council Administrative Notice 42 [DEP Noise Regulations]; SPC 4b, R. 8-11)

95. DEP's noise regulations are expressed in terms of the "A-weighted" scale (dBA). (Council Administrative Notice 42 [DEP Noise Regulations])

96. To establish a baseline for existing conditions, BNE monitored noise at four locations up to 1,250 feet from the proposed turbines. Both daytime and nighttime sound levels were found to be consistent throughout the area. No location suggested a "High Background Noise Area", which would have increased the noise limits allowable for the proposed project. (BNE 1, Vol. 3, Tab N, pp. 8-9; BNE 11, p. 4)

97. In Connecticut, noise is controlled in terms of the sound-levels that may be emitted from a source property (Class A, B, or C) to an abutting property (Class A, B, or C). The class of any property is determined by its actual use. Class A is generally residential use. Class B is generally commercial use. Class C is generally industrial use. (Council Administrative Notice 42 [DEP Noise Regulations])

98. DEP noise criteria from an emitter to a receptor are as follows:

Emitter Class	Receptor Noise Zone			
	Class A (Daytime)*	Class A (Nighttime)**	Class B	Class C
Class A (Residential)	55	45	55	62
Class B (Commercial)	55	45	62	62
Class C (Industrial)	61	51	66	70

*(7:00 a.m. to 10:00 p.m.) ** (10:00 p.m. to 7:00 a.m.)
(Council Administrative Notice 42 [DEP Noise Regulations])

99. The abutting properties to the BNE project and their respective noise zone classifications based on actual land use areas follows:

Property Owner	Property Address	Zoning	Noise Zone Classification
CWC watershed land	-	Residential, RA-2	B
Kluge (communications)	15 Kluge Rd	Residential, RA-1	B
CL&P (communications)	(off Kluge Road)	Residential, RA-1	B
U.S. Cap Inc. (industrial)	214 New Haven Rd	Industrial	C
Demagistris (residential)	198 New Haven Rd.	Industrial	A
Visockis (residential)	190 New Haven Rd	Residential, RA-1	A
McCormack (residential)	184 New Haven Rd.	Residential, RA-1	A

(Council Administrative Notice 42 [DEP Noise Regulations]; BNE 2a, Fig 1; SPC Administrative Notice 54)

100. In determining compliance with DEP noise regulations, BNE categorized the wind turbine as a Class C emitter. (BNE 1, Vol. 3, Tab N; BNE 14, R. 39; Tr. 5, p. 119)

101. To predict the sound-level of the proposed turbines, BNE conducted noise modeling in accordance with the ISO-9613-2 standard, using sound levels provided by GE. (BNE 1, Vol. 3, Tab N; Tr. 6, pp. 143-144)

102. BNE's noise modeling indicates that the maximum noise emissions from the turbines would be 46 dBA at the nearest residences during both daytime and nighttime. (BNE 1, Vol. 3, Tab N, p. 10; BNE 11, p. 3)

103. The sound-level for the GE 1.6 MW wind turbine at 20.1 mph (9 m/s)—its maximum sound-level—is 106 dB. The octave bands show no discrete tones. (BNE 11, p. 1; SPC Administrative Notice, 28, p. 25; Tr. 5, pp. 52-53; Tr. 6, pp. 147-148, 228-229)

104. If the site property were considered a Class A use, then the Class A to Class A criteria would be applied (55 dBA during the daytime and 45 dBA during the nighttime). In this case, noise levels from the turbine would exceed the nighttime noise threshold by 1 dB. (Council Administrative Notice 42 [DEP Noise Regulations]; BNE 1, Vol. 3, Tab N, pp. 2, 6; (BNE 11, p. 3; SPC 4a, R. 16)

105. There are no DEP criteria regarding the time limit for the type of noise produced by an emitter. Turbine noise can occur repeatedly as long as its maximum level meets the noise level criteria. In the case of the BNE project, the turbines would emit their maximum noise level (46 dBA) for 7.5 percent of their operating time during a year. The remaining 92.5 percent of the time, they would emit less than 46 dBA. (BNE 2, R. 8; Tr. 6, pp. 226-228)

106. Connecticut noise regulations have also been established for certain special types of noise: impulsive noise, prominent discrete tones, infrasonic noise, and ultrasonic noise. Impulsive noise and ultrasonic noise are not a concern for wind turbines. (Council Administrative Notice 42 [CT DEP Noise Regulations]; SPC 4a, R. 13, 14; Tr. 6, pp. 228-229)

107. A prominent discrete tone, in general terms, is acoustic energy concentrated in a narrow frequency range. This type of noise shows up on the graph of one-third octave bands as a noticeable "spike." The graph of one-third octave bands for the GE 1.6 MW turbine does not display this feature. (Tr. 6, p. 230)

108. The turbines would not emit infrasonic noise exceeding the DEP allowance, which is 100 dBA. (Council Administrative Notice 42 [CT DEP Noise Regulations]; Tr. 6, p. 230)

Noise Mitigations

109. Post-construction noise monitoring can determine compliance with DEP criteria. In case of non-compliance and serve as the basis for developing any necessary mitigation measures. (BNE 24)

110. Sound can be attenuated by physical structures. For example, the walls of a residence and well-framed windows can reduce a sound-level of 45 dBA by 10 to 15 dB. However, low-frequency sound is more difficult to attenuate. (SPC Administrative Notice 1, p. 31; SPC Administrative Notice 28, p. 11; SPC Administrative Notice 70, p. 16)

111. Noise mitigation can be accomplished by adding insulation to walls, improving window treatments (drapes, etc.), or installing more efficient windows. These efforts would yield the greatest mitigation in bedrooms. (Tr. 5, p. 201)

112. Neither landscaping nor sound barriers are effective to screen noise the turbines, given the proposed turbine height. (Tr. 5, pp. 217-219)

Northern Turbine Relocation

113. The relocated turbine would be 97 feet farther from the nearest receptor. This increase would have a slightly beneficial effect on noise levels. (BNE 9h; BNE 14, R. 46; Tr. 6, p. 141)

Ice Throw/Drop

114. Ice can form on both the turbine towers and/or blades under appropriate weather conditions, which typically include temperatures in the range of 28° F to 36° F and a relative humidity greater than 97 percent. Glaze ice is of most concern with wind turbines, and can be formed through accumulations of freezing rain or drizzle. (BNE 14, R. 44; Tr. 2, pp. 65-66)

115. Ice can collect on both the rotating and non-rotating portions of the turbine, although ice formation on operating blades is more likely under appropriate weather conditions. Ice fragments can be thrown from the blade of an operating turbine or drop off a stationary turbine. (BNE 9h)

116. The risk level associated with ice throw and ice drop depends on the amount of icing assumed for the site. An estimate was made based on climate data obtained from the MET tower in Prospect during one winter season, consistent with information maintained by the U.S. Department of Commerce National Climatic Data Center. Based on the collected climate data, the estimated amount of icing at the site is 192 hours per season. The risk level associated with the ice throw and ice drop analysis depends on the amount of icing assumed for the site. An increase in the hours of icing would increase the risk of ice being thrown or dropped. (BNE 9h; BNE 14, R. 49; Tr. 2, p. 67; Tr. 4, pp. 207-208)

117. The worst-case distance for ice drop, (assuming a 100-meter rotor diameter rather than an 82.5 meter rotor diameter) for a 0.5 kg (1.1 pound) ice fragment is approximately 226 feet from the base of the turbine. The typical drop range (90 percent of occurrences) of 0.5 kg (1.1 pound) and 1 kg (2.2 pound) ice fragments from a 100-meter rotor diameter is 131 feet from the base of the turbine. (BNE 9h)

118. The probability of a 1 kg (2.2 pound) ice fragment striking a square meter section of the closest residence to the turbines (823 feet east of northern turbine) is once in every 82,639 years, assuming ice mitigation methods are not employed. The probability of a 1 kg (2.2 pound) ice fragment being thrown beyond 837 feet is nil. (BNE 14, R. 41)

119. GE has established recommended setback distances related to ice throws. The southern turbine would meet GE's recommended setback. The proposed northern turbine would not meet GE's recommended setback. (BNE 9h; BNE 14, R. 46; Tr. 6, pp. 40, 260-261)

Northern Turbine Relocation

120. The alternative northern turbine location would meet GE's recommended setback for ice throws. (BNE 9h; BNE 14, R. 46; Tr. 6, pp. 40, 260-261)

Ice Throw and Ice Drop Mitigations

121. Ice formation can affect the aerodynamics of the turbine: accumulating ice slows the blades down. Sensors would detect lower power outputs when compared to wind speed and would cause the turbine to automatically shut down. The shut-down would protect the turbine from mechanical damage as well as act as a safety measure during icing events. (BNE 14, R. 47; Tr. 2, pp. 78-79)

122. Internal monitoring can also detect icing events through an increase in rotor vibration caused by blade ice formation. Again, an automatic shut-down would occur. (BNE 2, R. 9; BNE 14, R. 47)

123. The turbine would be monitored continuously by GE during operation. During known or predicted icing events, BNE would dispatch personnel to the site to monitor the turbines visually for icing. (BNE 2, R. 9; BNE 14, R. 47; Tr. 2, pp. 74-75)

124. Once the turbines are shut down, BNE would have personnel on-site to assess ice accumulation and operating conditions. (BNE 14, R. 47)

125. Restarting a turbine with ice on the blades is the most dangerous scenario for ice throws. To prevent this risk, BNE would have on-site personnel inspect the blades and ensure all ice has melted and fallen off them prior to re-start. (BNE 14, R. 47, R. 48; Tr. 2, pp. 69-71, 73; Tr. 6, pp. 267-268)

126. During severe icing events that are predicted sufficiently in advance, BNE would reduce the rotor speed or completely shut down the turbines to prevent ice throws. (BNE 14, R. 47)

127. GE offers an optional Winter Ice Operation mode that would allow the turbine to spin at slower speeds during icing events to keep the turbines operational while decreasing the risk of ice throws and ice drops. BNE is studying whether local weather conditions would warrant inclusion of this option. The mode can be added on after construction is completed. (BNE 2 R. 9; Tr. 2, pp. 86-89)

Shadow Flicker

128. "Shadow flicker" describes the alternating pattern of light and dark that happens when wind turbine blades sweep through the path of sunlight low in the sky. (BNE 2 a)

129. Under certain circumstances, shadow flicker can be cast through an unobstructed window of a home so that a room could experience repetitive changes in brightness. Shadow flicker can also occur outside, where the alternating shadows would appear on the ground. (BNE 2a)

130. The frequency of shadow flicker is determined by a rotor's speed and the number of blades on the rotor. The frequency is measured in Hertz (Hz), with 1 Hz being equivalent to one flicker per second. (BNE 2a)

131. The turbine would rotate at a speed of 9.75 to 16.18 revolutions per minute, which corresponds to 29.2 to 48.5 shadows per minute, or 0.49 to 0.81 Hz. (BNE 2a; Tr. 6, p. 268)

132. Shadow flicker from the turbines should not be of concern for those afflicted with photosensitive epilepsy because the proposed turbines would produce flicker below 1 Hz. The Epilepsy Foundation recommends concern at a level of 3 Hz and above. (BNE 2a; SPC Administrative Notice Item 1)

133. There are no Federal or State of Connecticut standards for exposure to shadow flicker. Some communities in various parts of the county have adopted standards that range from 10 hours per year to 30 hours per year at an occupied structure. (BEN 2a; SPC Administrative Notice Items 3, 5, 6)

134. In order to measure the likely occurrence of shadow flicker in areas surrounding the proposed turbines, a computer-generated probable case shadow flicker model was generated. The model accounts for vegetation and weather conditions not favorable for generating shadows, such as lack of sun or absence of wind. Additionally, the model assumes a conservative "greenhouse mode", which stipulates line-of-sight shadows falling on a residential dwelling from all sides. (This model is conservative in that the windows of many houses do not face the sun directly during all shadow flicker occurrences.) However, varying widths of the blade are not factored into the model. (Shadow flicker is more pronounced when the shadow is cast by the portion of a blade close to the hub than by the blade tip.) (BNE 2a; BNE 18c; Tr. 2, 90-93; Tr. 4, pp. 141-147; Tr. 6, pp. 118-120)

135. Even in heavily vegetated areas, it is possible shadow flicker could occur when leaves are off the trees, especially when shadows are cast through the thin tops of the tree canopy. (Tr. 4, pp. 156-158)

136. The probable case model was limited to a distance of approximately 1.25 miles from the turbines. Beyond this distance, shadow flicker would be negligible. (BNE 2a)

137. The probable case model, when applied to the original proposed turbine locations, indicates shadow flicker would occur generally east of the site, usually two hours before sunset during specific calendar periods. Shadow flicker would occur in a limited area west of the site for up to two hours after sunrise. (BNE 2a; BNE 5; Tr. 2, pp. 94-95; Tr. 4, pp. 168-169)

138. The probable case model indicates 74 residential dwellings would experience shadow flicker, ranging from three to 31 minutes per day during certain times of the year. Two residential dwellings would experience 32 to 34 hours of shadow flicker per year. Twelve residential dwellings would experience between 10 and 23 hours of shadow flicker per year. (BNE 5)

139. The probable case model also indicates that approximately five off-site properties would experience over 40 hours of exterior shadow flicker per year, and an additional six properties would experience 30 to 40 hours per year of exterior shadow flicker (not including the New Naugatuck Reservoir) (refer to Figure 7). (BNE 5; Tr. 6, pp. 268-270)

Northern Turbine Relocation

140. If the probable case model were applied to the site with the relocated northern turbine, 77 residential dwellings would experience shadow flicker ranging from two to 26 minutes per day during certain times of the year. Seventeen residential dwellings would experience 10 to 25 hours of shadow flicker per year. No residential dwelling would experience over 30 hours per year. Six parcels in the area would experience over 30 hours of exterior shadow flicker per year (not including the New Naugatuck Reservoir) (refer to Figure 8). (BNE 18c; Tr. 6, pp. 111-112)

Shadow Flicker Mitigations

141. Shadow flicker can be mitigated by installing window blinds or by strategic landscaping on the receptor property. In addition, turbines could be shut down at times when shadow flicker is most prevalent. (Tr. 2, pp. 96-99; Tr. 4, pp. 169-170; Tr. 6, pp. 124-125)

Environmental Impacts

Air and Water Quality Standards

142. The proposed project would comply with DEP air quality standards. The project would produce no air emissions during operation. (BNE 14, R. 36)

143. Water quality standards have been developed by the DEP to protect surface and groundwater resources in Connecticut. (Council Administrative Notice 40)

144. Surface water quality can be affected by construction and development activities through direct discharge or through run-off. (Council Administrative Notice 40)

145. The project would have no direct discharge into surface waters. Indirect discharges from the site would occur through run-off and stormwater discharge. Surface water quality would be maintained through the proper implementation of erosion and sedimentation controls both during construction and after construction. (BNE 14, R. 36)

146. Stormwater generated at the site would be controlled in accordance with the *2004 Connecticut Stormwater Quality Manual* and the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. BNE would design the project to conform to these guidelines. The submitted site plans relied on preliminary survey work that does not contain certain topographical features. If the project

were approved, BNE would complete all survey work and develop site plans for the D&M phase of the project consistent with the aforementioned manual/guidelines. (BNE 14, R. 36; Tr. 6 pp. 156-157,

147. Some of the preliminary construction erosion and sedimentation control features include silt fencing, drainage swales, sediment traps, check dams, pipe slope drains, runoff diversions, temporary seeding, and erosion control blankets. (BNE 22, Attachment 3, pp. 3.1-3.3)

148. Some of the post-construction erosion and sedimentation control features include riprap-lined swales, check dams, level spreaders, catch basins, and two bio-retention ponds. (BNE 22, Attachment 1)

149. Culverts would be installed beneath the access road to allow runoff to travel from one side to the other. The culverts would be at least two to three feet beneath the roadbed. (Tr. 6, pp. 171, 172)

150. In accordance with the 2004 Connecticut Stormwater Quality Manual, final design post-construction peak stormwater run-off levels would not exceed pre-construction levels. (BNE 22, R. 27, Tr. 6, pp. 162-163)

151. Once construction is completed, temporarily disturbed areas would be re-vegetated with a variety of native vegetation. To prevent phosphorus and nitrogen laden run-off into surface waters, re-vegetated areas would not be treated with fertilizers or pesticides. (BNE 14, R. 36)

152. A Spill Prevention Plan would be implemented during construction to respond to any accidental spills of hazardous, toxic or petroleum substances that could affect surface water or ground water resources. If a spill were to occur, BNE would notify the DEP and the CWC. (BNE 6, R. 19; BNE 14, R. 36, Attachment 2, p. 5-1)

153. BNE would give CWC at least 72 hours advance notice of any maintenance activity that would involve draining, transfer, or addition of lubricating, hydraulic or other oil having a volume of greater than five gallons; would allow CWC access to monitor all maintenance activities; would require on-site emergency spill control equipment during maintenance activities; and would immediately notify CWC and DEP in the event of a spill. (BNE 15, R. 6)

154. Groundwater in the site area is designated as GAAs, ground water that is a tributary to a public water supply reservoir. (Council Administrative Notice 40)

155. All the general features of BNE's site plans to protect water quality, and many of the particulars, have been discussed with the CWC, which was initially a party to this proceeding. Having been satisfied in its discussions with BNE, CWC withdrew as a party. (Record; BNE 9c; BNE 15, R. 1, R. 2; Tr. 6, pp. 140-141, 154-155, 158-161)

156. A former manufacturing facility abuts the site to the east at 214 New Haven Road, known as the U.S. Cap and Jacket (USCJ) property. The southern turbine is approximately 900 feet west of the USCJ property (refer to Figure 2). (BNE 18c, R. 2; BNE 1, Vol. 2, Tab F)

157. A groundwater plume containing industrial substances, notably perchloroethylene (PCE) and trichloroethylene (TCE), has been identified migrating off the USCJ property in a northeasterly direction, away from the turbine sites. (DEP comments of March 14, 2011; BNE 18c, R. 2, R. 3; BNE 21, R. 5; Tr. 5, pp. 34-35, 133)

158. BNE does not anticipate blasting of bedrock at the site. The layer of till over the bedrock at the site is estimated to be 15 to 60 feet deep. Excavation for the turbine foundation would be to an approximate depth of ten feet. (BNE 18c, R. 3; BNE 21; Tr. 4 pp. 108-114)

159. Installation of the turbine foundations would have no effect on overall groundwater flows at the site. (Tr. 5, pp. 192-193)

Wildlife

160. The BNE site property is generally located on the west side of a forested hill and includes the following habitat types: second growth hardwood forest, forested wetlands and hillside seeps, and a ten-acre hilltop meadow (refer to Figure 9). (BNE 1, Vol. 3, Tab I, p. 2)

161. The site does not have high wildlife value, due to a lack of diversity in nut and seed-bearing forest vegetation, and the abundance of Japanese barberry in the forest understory. Japanese barberry is an invasive species offering minimal food supply to native fauna. (BNE 1, Vol. 3, Tab I, p. 15)

162. Construction of the project would cause relocation of some wildlife to adjacent areas and cause some mortality of slower-moving species. Once construction is completed, some species sensitive to disturbance would return and some would occupy re-vegetated areas. Generally, long-term impacts to wildlife would be minimal. (BNE 1, Vol. 3, Tab I, pp. 15-16)

Amphibians and Reptiles

163. The site lacks the water features that attract many amphibian species. Common species that may occur at the site include American toad, redback salamander, wood frog, and spring peeper. (BNE 1, Vol. 3, Tab I, pp. 10-11, Tab M, p. 11)

164. Although a wood frog was identified on-site and is a vernal pool obligate species, no vernal pools are located on the site. Wood frogs could disperse over a range of 1,550 feet from a breeding pool. The wood frog identified most likely migrated onto the site from an off-site location. (BNE 8, R. 102)

165. Reptile species could include common snakes and the eastern box turtle, a state species of special concern. Although box turtles were not identified on site, and the site's ground elevation is not within the box turtles' favored habitat range, BNE would undertake protection measures to prevent impacts to this species, including work area isolation, contractor education and reporting to the DEP. (BNE 1, Tab I, pp. 10-12; BNE 24)

Mammals

166. Mammal species most likely to be found at the site include white-tailed deer, red fox, raccoon, opossum, skunk, woodchuck, coyote, rabbit, mink, fisher, and various rodents and bats. (BNE 1, Tab I, pp. 8-10, 13-14; BNE 9h)

167. A bat survey performed from June 25 to November 1, 2010 identified six species of bats utilizing the site. Three of these species, the eastern red bat, hoary bat, and silver-haired bat, are listed as state species of special concern. Although not recorded, the northern long-eared bat may occur at the site since it favors interior forest areas. Cave-roosting bats were not identified on the site. (BNE 9e, pp. 16, 20)

168. Tree-roosting bats would be attracted to the forest and forested wetland areas of the site. This type of habitat is common to the region. Tree-roosting bats in this area are solitary and do not aggregate in large numbers; however, the presence of forested wetlands and forest edge habitat on the site, and the proximity of the New Naugatuck Reservoir, are all favorable for supporting bat populations. (DEP comments of March 14, 2011; BNE 9e, p. 18; SPC 5d; R. 66, R. 67)
169. Most bat activity recorded at the site was in the meadow, most likely because that area offers more food for a majority of the identified bat species when compared to the forested areas. (BNE 9e, pp. 18-19)

170. Most recorded bat fatalities at wind turbine sites are of migratory tree-roosting species, generally during post-breeding and migratory periods. The most affected species (75% of reported fatalities) are the eastern red, hoary, and silver-haired bats. (BNE 9e, p. 21; Tr. 6, pp. 201-202)

171. The mortality of bats at the site is expected to be low to moderate but may be higher, especially for the hoary bat, due to possible undercounting attributed to limitations in the bat detection/identification methods of the study. Most bat fatalities would occur in August and September, usually during nights when wind speeds are low. (DEP comments of March 14, 2011; BNE 9e; SPC 5d, R. 61, R. 64; Tr. 6, pp. 202, 206)

172. The DEP recommends a post-construction bat monitoring study of at least two years to determine bat mortality. If such a study is not performed, DEP requests access to the property for research purposes. (DEP Comments of March 14, 2011)

173. BNE will perform additional bat monitoring for the period of May to November 2011 and would conduct a two-year post-construction bat monitoring study. (BNE 24)

174. Mitigation of bat mortality could be achieved by raising the turbine cut-in speed during migratory periods. An ultrasonic bat deterrent device is not yet commercially available but ongoing developmental testing indicates that the device could reduce bat fatalities could be reduced by 50 percent. (Tr. 6, pp. 208-211)

Birds

175. The site is utilized by various birds as nesting and foraging habitat. Forty-three bird species were identified on-site during a limited study on three separate days in early summer of 2010, all of which were regionally common species such as the eastern towhee and the American robin. Mature vegetation prevented positive identification of 58 of the 525 bird sightings. (DEP comments of March 14, 2011; BNE 1, Vol. 3, Tab M, pp. 6-12; BNE 8, R. 56; SPC 5a, R. 49, R. 50, R. 56, R. 57)

176. The study did not include the spring or fall migratory period for songbirds, raptors or waterfowl. Research has demonstrated that turbine fatalities of migrating raptors and waterfowl are not significant. Songbirds, most of which migrate at night, account for the majority of bird mortality at wind turbines. (BNE 1, Tab M; BNE 8, R. 53; SPC 5a, R. 54)

177. To address a concern that the initial study did not include migratory periods, BNE is performing a migratory bird study from March through April 2011. Data from this study would be submitted to the DEP upon completion. (BNE 24)

178. No state listed or federal listed species of concern were identified at the site during the bird survey. Several birds identified on-site are species of regional conservation concern, including the chestnut-

sided warbler, chimney swift, and eastern towhee. (DEP comments of March 14, 2011; BNE 1, Tab M, pp. 12-13; BNE 8, R. 59)

179. The most utilized area on the property for birds was the open meadow along the forest edge. Grasslands and early successional habitat are considered high-value habitats by the DEP and are management priorities in Connecticut and the northeast. (DEP comments of March 14, 2011; BNE 1, Tab M, pp. 12-13)

180. Development of the site could affect birds through loss of habitat or behavioral avoidance. Also, some grassland bird species could avoid the meadow area on the property due to construction activities, turbine noise and/or maintenance activities. Birds that rely on forest interior areas could be affected by forest clearing. (BNE 1, Tab M, p. 12; SPC 5a, p. 10)

181. A few studies have documented that some species of birds would avoid a turbine up to a distance of approximately 1,300 feet. Other studies have demonstrated that a wind turbine only displaces birds temporarily or does not significantly change their behavior once a turbine is in place. (BNE 1, Tab M, p. 12)

182. Bird strikes at turbines can occur for both resident and migrating species. Studies have demonstrated bird fatalities at a single turbine could occur at a rate of approximately 0 to 4 birds per year, mostly affecting migrating bird species. (SPC Administrative Notice 1, p. 40; BNE 1, Tab M, p. 12)

183. The project would not have a significant negative impact on birds of regional conservation concern. (DEP comments of March 14, 2011)

Visibility

184. The 132-foot blades of the turbine would extend to a blade-tip height of 463 feet above ground level. (BNE 1, pp. 7-8; BNE 22, Attachment 1, Sheet C 101)

185. The base of the turbine tower would be between 13.5 to 14.5 feet wide. (BNE 14 R. 62)

186. The proposed turbine hubs and associated 132-foot blades would be visible from 312 acres within a five-mile radius of each turbine. (BNE 14, R. 52)

187. Within one mile of the turbines, approximately 50 residential properties would have views of at least the hub and the blades above the trees. Some properties would be able to view a portion of the tower below the hub and all three blades (refer to Figures 10 - 14). Approximately 23 of these properties are within a half-mile of the turbines. (BNE 1, Tab J; BNE 9b)

188. The turbines would most likely have the greatest visual impact on the following properties: 187, 198, 210, 213, and 220 New Haven Road; 13, 15, and 17 Lee Road; and 2, 4, 6, and 8 George Street. (DEP comments of March 14, 2011; BNE 2a)

189. Of these residences, the most affected are 187 New Haven Road, 213 New Haven Road and 2 George Street, all of which would have unrestricted views of one or both turbines. (DEP comments of March 14, 2011)

190. The 100-meter hubs would be visible through vegetation during leaf-off conditions from approximately 1,164 acres within a five-mile radius of the site. Most seasonal visibility (84 percent) would occur within a one-mile radius of the site, mostly within residential areas to the east (refer to Figures 15-19). (BNE 9b)

191. Approximately 248 residential properties would have seasonal views of the 100-meter hubs within one mile of the site. Of these residences, 84 are within a half-mile to the east (northeast, east, southeast) of the turbines. (BNE 1, Vol. 3, Tab J)

192. Seasonal visibility of the blades would vary, depending on the amount of existing vegetation in the view area. The blades would more likely be obscured by the thicker mass of the lower portions of trees rather than the top portions of the trees. Seasonal visibility is further complicated by the fact that the blades are sometimes moving and sometimes stationary: at times when they are moving, they can become visible even despite partial screening. Because of these complications, blade visibility was not included in the 1,164-acre seasonal visibility estimate. (Tr. 4, pp. 14-17)

192. The projected visibility of the turbines from residences within one-mile of the site is as follows:

Street	**Distance to Turbine (mi.)**	**#of properties with year-round views of hubs and 132- foot blades**	**# of properties with year-round views of part of blades (assuming 164-foot blades)***	**# of properties with seasonal views (not including blades)**
Amber Ct.	0.63	-	-	12
Barbara Ave.	0.75	6	3	8
Candee Rd.	0.50			12
Canfield Ct.	0.55	-	-	3
Coachlight Cir.	0.74	2	11	6
Cobblestone Ct	0.91	-	-	4
Cook Rd.	0.51	-	-	37
Deerfield Dr	0.74	-	3	23
Elaine Ct	0.60	1	1	11
Englewood Ave.	0.89	1	3	-
George St.	0.76	4	-	-
Fieldstone Dr.	0.22	-	-	3
Hemlock Rd.	0.51	4	4	7
Horizon View	0.98	-	-	2
Howard Ave.	0.84	1	3	3
Lee Rd.	0.32	10	4	6
Meadow Ln.	0.47	-	4	11
Putting Green Ln.	0.87	-	-	1
Radio Tower Rd	0.30	5	-	2
Robinmark Rd.	0.64	2	-	12
Route 69	0.20	5	8	8
Roy Mountain Rd.	0.85	-	-	7
Sill Ave.	0.79	-	-	7
Skyline Dr.	0.87	1	-	15
Stephen Ct.	0.61	-	1	6

Valley Ln.	0.69	5	6	-
Woodcrest Dr.	0.37	3	7	42

* There is no information in the record regarding visibility of portions of the 132-foot blades. Based on the shadow flicker results (which can predict some but not all visibility), at least another 67 residences would see portions of the 132-foot blades. (BNE 1, Vol. 3, Tab J; BNE 2, R. 18, BNE 5, R. 35; BNE 9b, R. 5; Tr. 2, pp. 90, 104-105)

193. Several blue-blazed hiking trails maintained by the Connecticut Forest and Parks Association occur within five-miles of the site, notably the Naugatuck Trail to the west along a prominent ridgeline in Naugatuck and Bethany, and the Quinnipiac Trail along a ridgeline east of the site. A majority of both turbines would be visible from the Beacon Cap overlook on the Naugatuck Trail, approximately 1.8 miles southwest of the site (refer to Figure 20). The turbines would also be visible from the Mount Sanford overlook on the Quinnipiac Trail, approximately 1.3 miles southeast of the site. (Council Administrative Notice Item 34 – Connecticut Forest and Park Association, Connecticut Walk Book West, 19th ed. 2006, p. 229; BNE 1, Vol. 3, Tab J; BNE 18c, R. 7; Tr. 4, pp. 23- 33)

194. There are no state designated scenic roads within five miles of the site. (Council Administrative Notice Item 35 – State of Connecticut Department of Transportation, Connecticut Official State Tourism Map (2007-2009); BNE 1, Vol. 3, Tab J)

195. The turbine hubs and the apex of the blades would be visible from a portion of the Prospect Green Historic District, approximately 1.5 miles north of the site. The district comprises a 130-acre area containing eight buildings along Center Street. (Council Administrative Notice 28 - National Park Service, U.S. Department of the Interior, *National Register of Historic Places* (July 2010); BNE 14, R. 52)

196. BNE contacted the State Historic Preservation Office (SHPO) in regard to the proposed project. The SHPO determined the proposal would have no effect on historical or cultural resources within 1.5 miles of the site. (BNE 1, Vol. 1, Tab B; BNE 9b, R. 10)

197. There is no information in the record regarding the visibility impact of the alternative northern turbine location. (Record)

198. BNE would establish a program to reimburse the property owners listed in Finding 188 for the reasonable cost of planting vegetative screening on these properties. (BNE 24)

Site Disturbance/Restoration

199. The original site plan, dated November 4, 2010, specified a 35-foot wide construction access road located in a 50-foot wide cleared area. The northern turbine would be located three feet from Wetland 3. Once the turbines were constructed, the access road would be re-built to a width of 20 feet. The plan specified that approximately 8.4-acres of land would be disturbed, including 5 acres of woodland and 0.6-acres of disturbance within 100 feet of Wetland 3. (BNE 1, Vol. 2, Tab F; Tr. 4, pp. 87-88, 115)

200. Disturbed areas would include space at each turbine location for a blade assembly and laydown area, turbine foundation area, a crane assembly area, a tower section laydown area, and a crane pad. A single soil stockpile area would be established within the meadow area. (BNE 1, Vol. 2, Tab F)

201. Blade laydown areas would require grading to accommodate the upslope blades. The downslope blade would hang off the existing slope. Clearing would be necessary to accommodate all of the blades. (BNE 1, Vol. 2, Tab. F; BNE 8, R. 81; BNE 22, Tab 1)

202. A revised plan, dated March 8, 2011, included an alternate location of the northern turbine. The new location would be 160 feet to the southwest of the original location. Clearing and construction would occur up the edge of Wetland 3. Other changes included the redesign of temporary erosion and sediment controls and permanent drainage features. These revisions increased the disturbed area to approximately 9.8-acres, the cleared area to approximately 5.75-acres, and the disturbance within 100 feet of wetlands to 1.1 acres. (BNE 18b, R. 12, Tab 1)

203. A third plan, dated March 28, 2011, was developed to accommodate concerns from CWC. This revision included the reduction of the construction access road from 35 feet wide to 20 feet wide, requiring BNE to use smaller turbine sections brought in by smaller trucks to the site. Another revision was the modification of drainage features and a re-orientation of the northern turbine construction area to increase the wetland buffer to 35 feet. This site plan specified a disturbed area of approximately 8.8-acres, including the clearing of 4.4-acres of woodland. Approximately 0.43 acres of disturbance would occur within 100 feet of wetland areas. (BNE 22, R. 26, Tab 1; BNE 25)

204. Additional engineering would be required to determine the amount of grading required on Kluge Road where Kluge Road transitions into the site access road. Grading may extend off-site onto the Kluge Road right-of-way. (BNE 8, R. 82; Tr. 6, pp. 172-173)

205. After construction, the site would be restored by re-contouring and planting a native herbaceous seed mixture to create upland meadow areas. Meadow areas would be maintained around the turbines whereas other meadow areas would be allowed to revert to woodland. (BNE 9f, R. 6; BNE 8, R. 79; BNE 25)

206. BNE would retain a third-party inspector to monitor the site for two growing seasons following construction. The inspector would monitor rates of re-growth, invasive species, and slope stabilization. BNE would perform any recommended remediation measures. (BNE 25)

207. Approximately 1.1 acres of the site would consist of permanently developed areas, including the access road, parking areas, turbines, storage building, and crane pads. (BNE 25)

208. The site would not be able to accommodate another wind turbine due to wind turbulence effects that could damage a turbine or cause it to produce less electricity. BNE would not restrict future use of the undeveloped portion of the parcel for another purpose. (Tr. 6, pp. 223-226, 241-242)

Wetlands

209. Four separate wetland areas were identified on the site (refer to Figure 9). All four are similar in their soil, hydrology, and vegetative characteristics. All four are forested wetlands that contain hillside seepage areas where seasonal high groundwater supports wetland vegetation. Intermittent watercourses are within most of the wetland areas. (BNE 1, Vol. 3, Tab I; BNE 9c, R. 4)

210. The southernmost wetland is identified as Wetland 1. It is the most productive of all of the on-site wetlands. (BNE 1, Vol. 2, Tab F.

211. All of the wetlands drain in a westerly direction towards the New Naugatuck Reservoir. (BNE 9c, R. 4)

212. No vernal pools were identified on the property. (BNE 9c, R. 5)

213. The nearest wetland to the southern turbine development area (turbine and associated blade laydown area) is Wetland 1, approximately 120 feet to the west. The northern turbine development area is three feet east of Wetland 3. No construction activities would occur within delineated wetland areas. (BNE 1, Vol. 2, Tab F)

Northern Turbine Relocation

214. BNE consulted with CWC regarding the site development plans to further protect the on-site wetlands from potential erosion and sedimentation. The plans were revised several times to address concerns, most of which regarded the protection of Wetland 3. The consultations resulted in relocating the north turbine to increase the Wetland 3 buffer from three to 35 feet. (BNE 9c, R. 7; BNE 15, R. 1, R. 2; BNE 22, Attachment 1; Tr. 6, pp. 140-141, 154-155, 158-161)

Mitigations

215. Disturbed soils adjacent to Wetland 3 would be stabilized using erosion control blankets on exposed areas and re-seeding with a wildlife/conservation seed mix. (BNE 9c, R. 7)

216. BNE would retain a third-party inspector to conduct inspections of the established erosion and sedimentation control measures. BNE would also allow CWC representatives to visit the site to inspect soil and erosion control measures. (BNE 14, R. 36; BNE 15, R. 5)

217. BNE has been advised by CWC that additional wetlands protections should be undertaken. One of these would be a conservation easement to a distance of 50 feet from the delineated edge of the two northernmost wetlands (Wetlands 2 and 4). The second would be an easement around Wetland 3, to a distance sufficient for BNE to perform necessary construction, operations and maintenance of the northern turbine. (BNE 26; Tr. 6, pp. 223-226)

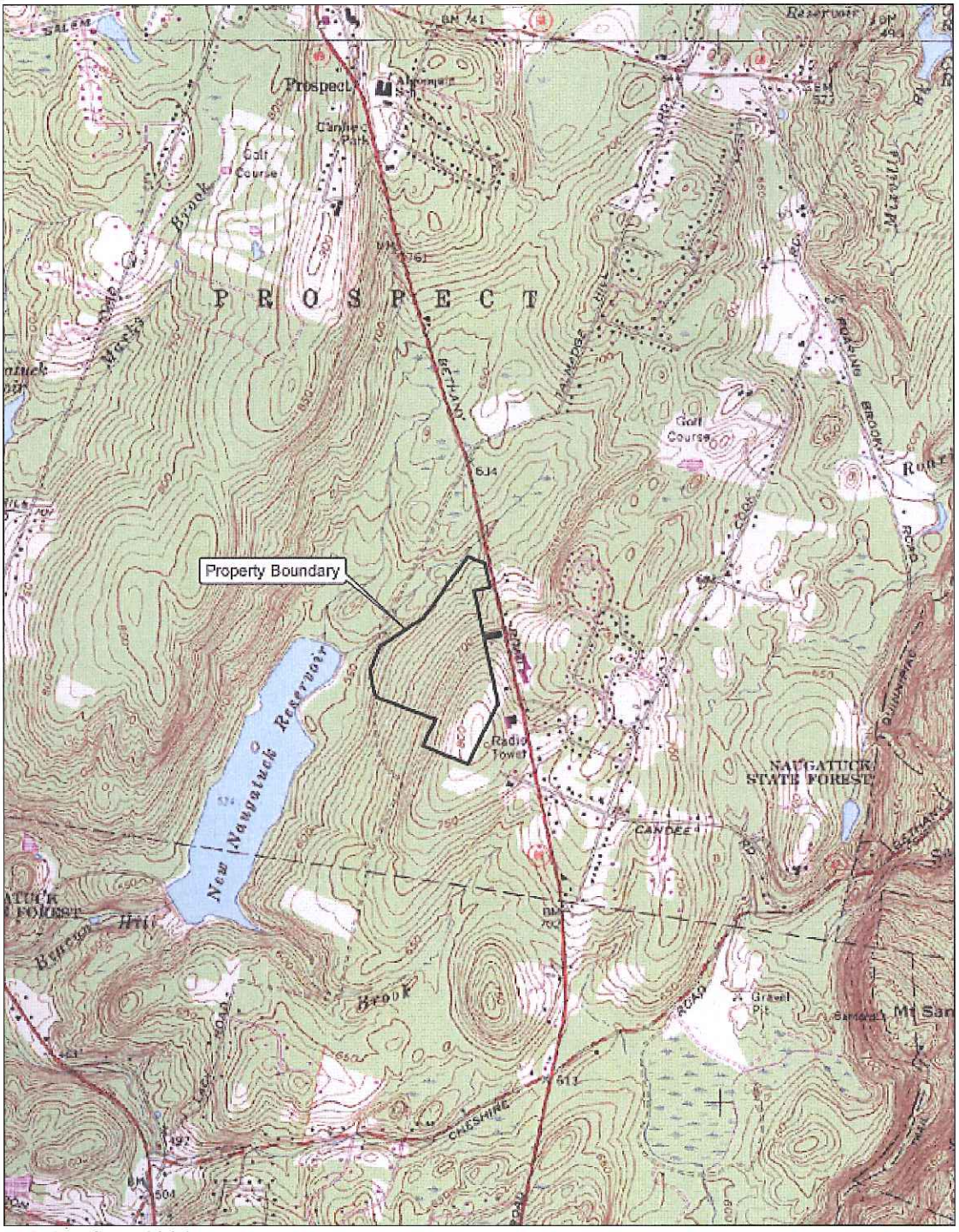


Figure 1: Site Location at 178 New Haven Road, Prospect, CT. (BNE 1, Vol. 3, Tab I)

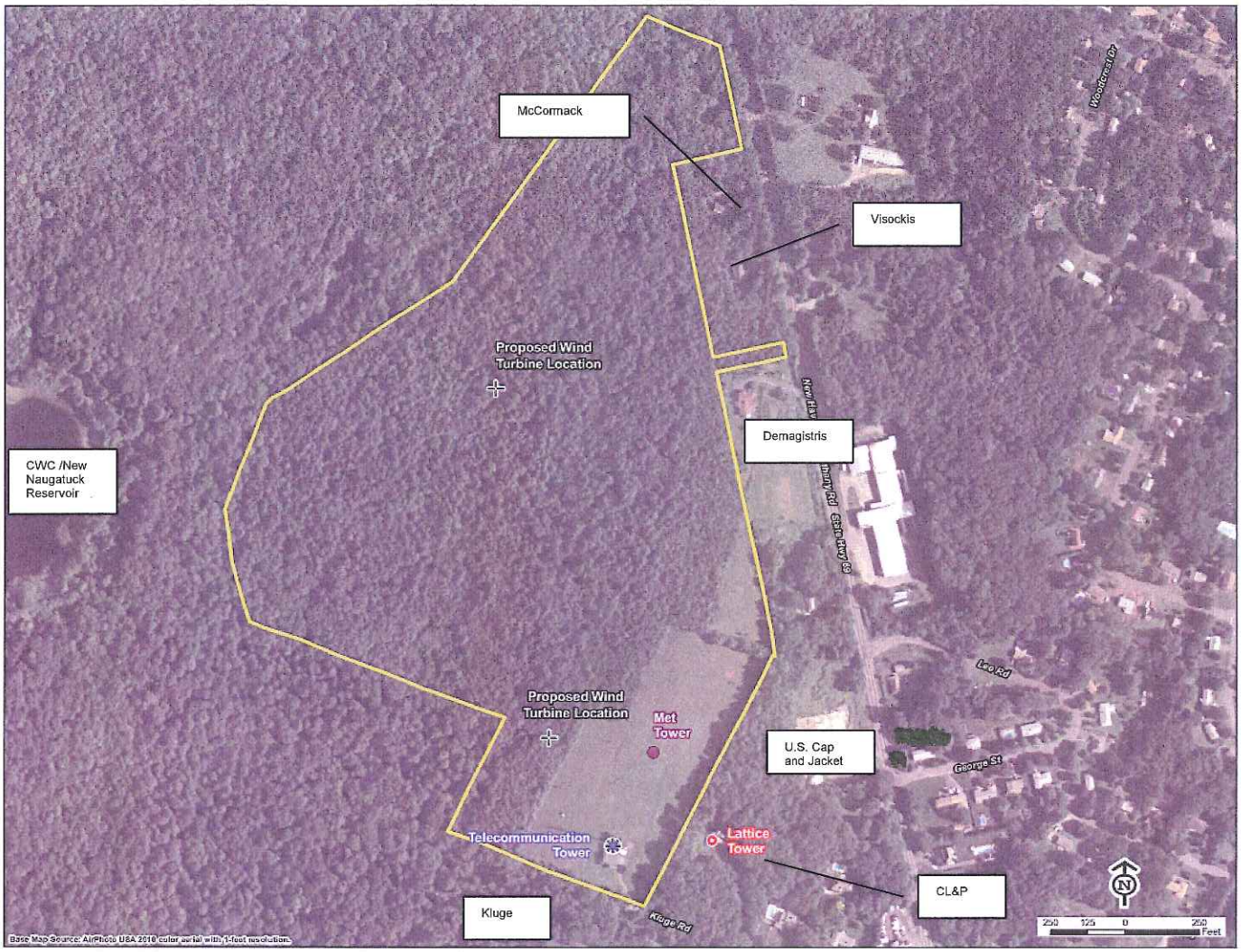


Figure 2: Existing property conditions and abutting properties. (BNE 1, Vol. 2, Tab F; BNE 18c)

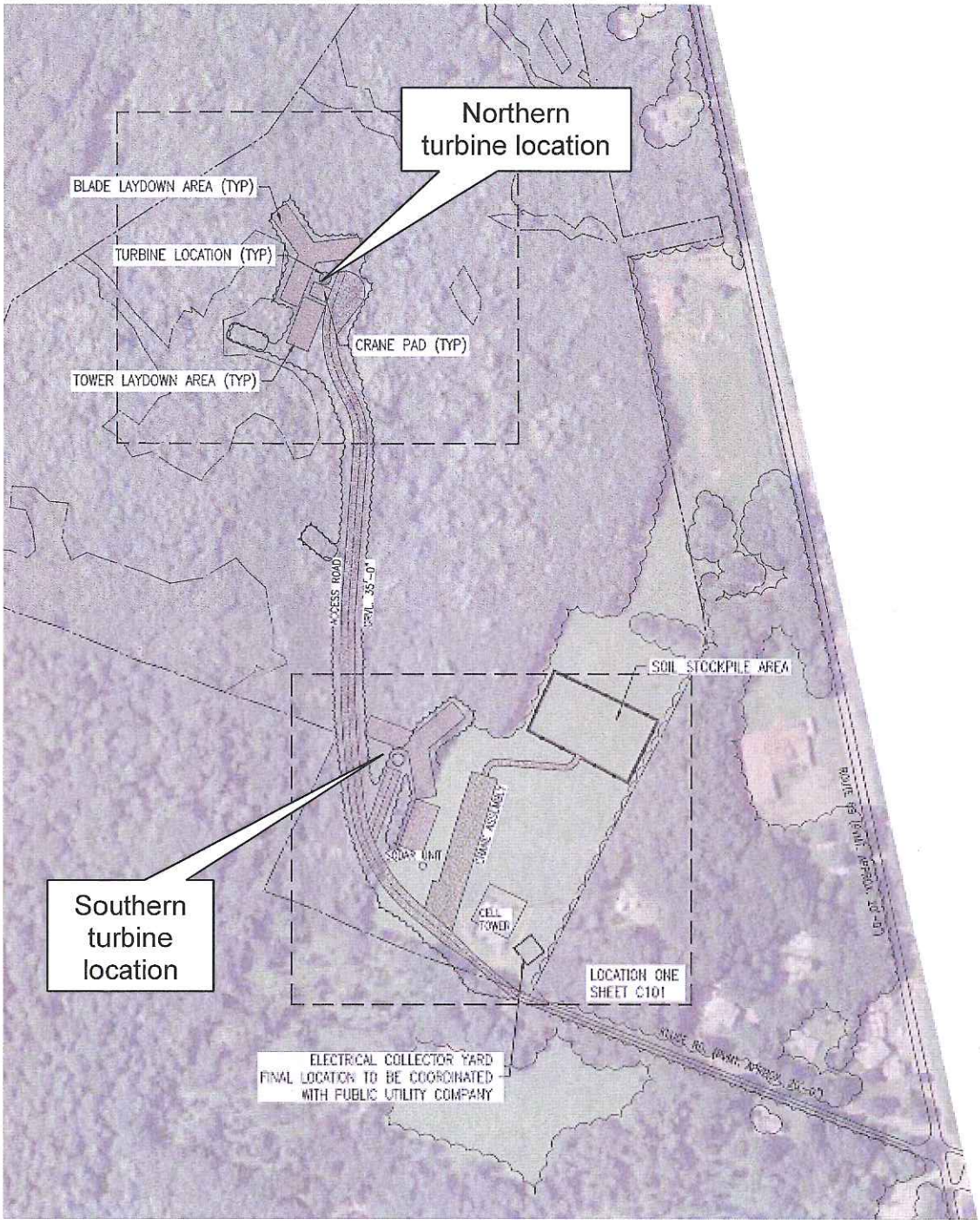


Figure 3: Preliminary site layout (with original location of northern turbine). (BNE 1, Vol. 2, Tab F)

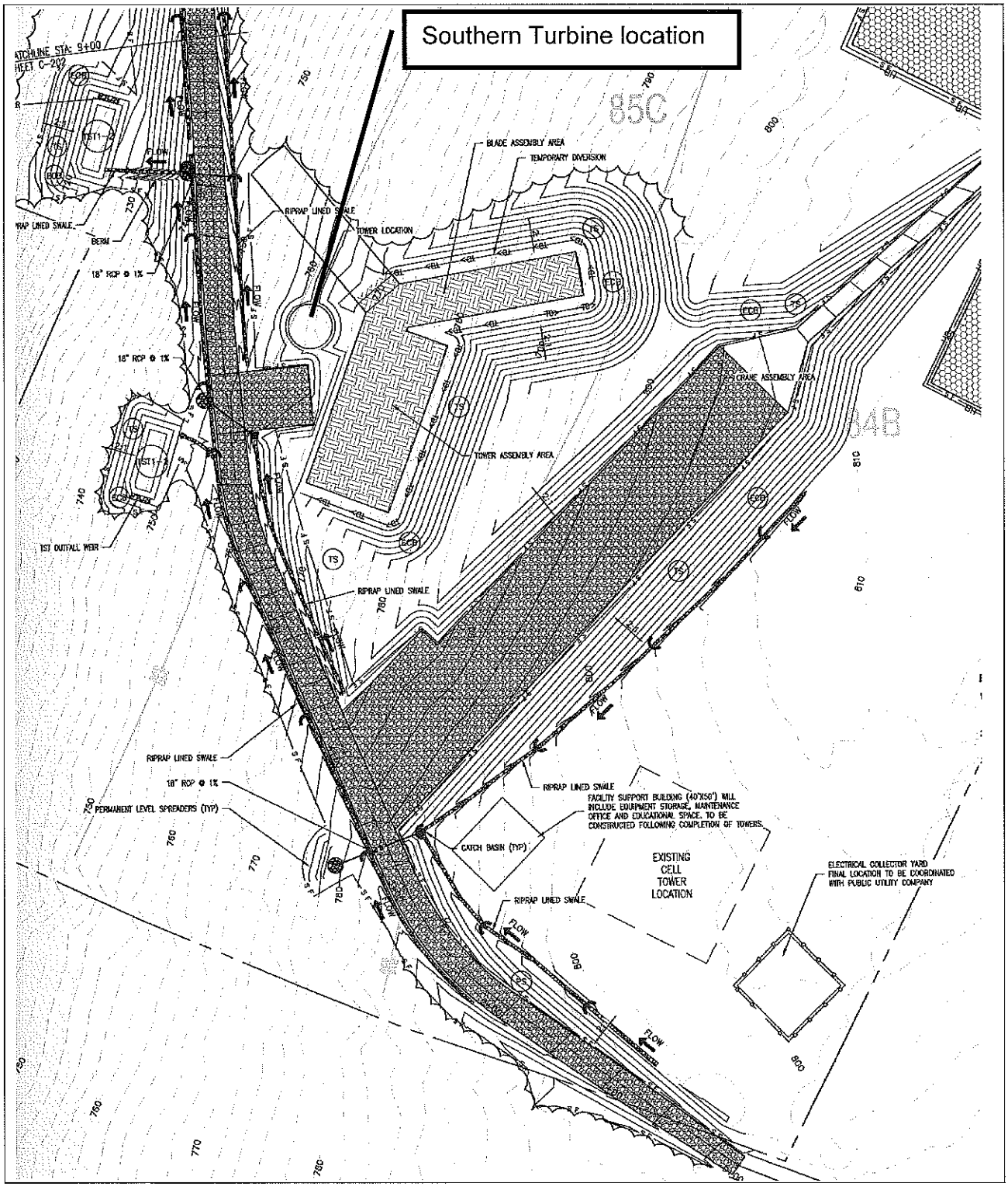


Figure 4: Preliminary site plan of southern turbine location with blade laydown area, crane pad, storage building location and electrical yard. (BNE 1, Vol. 2, Tab F)

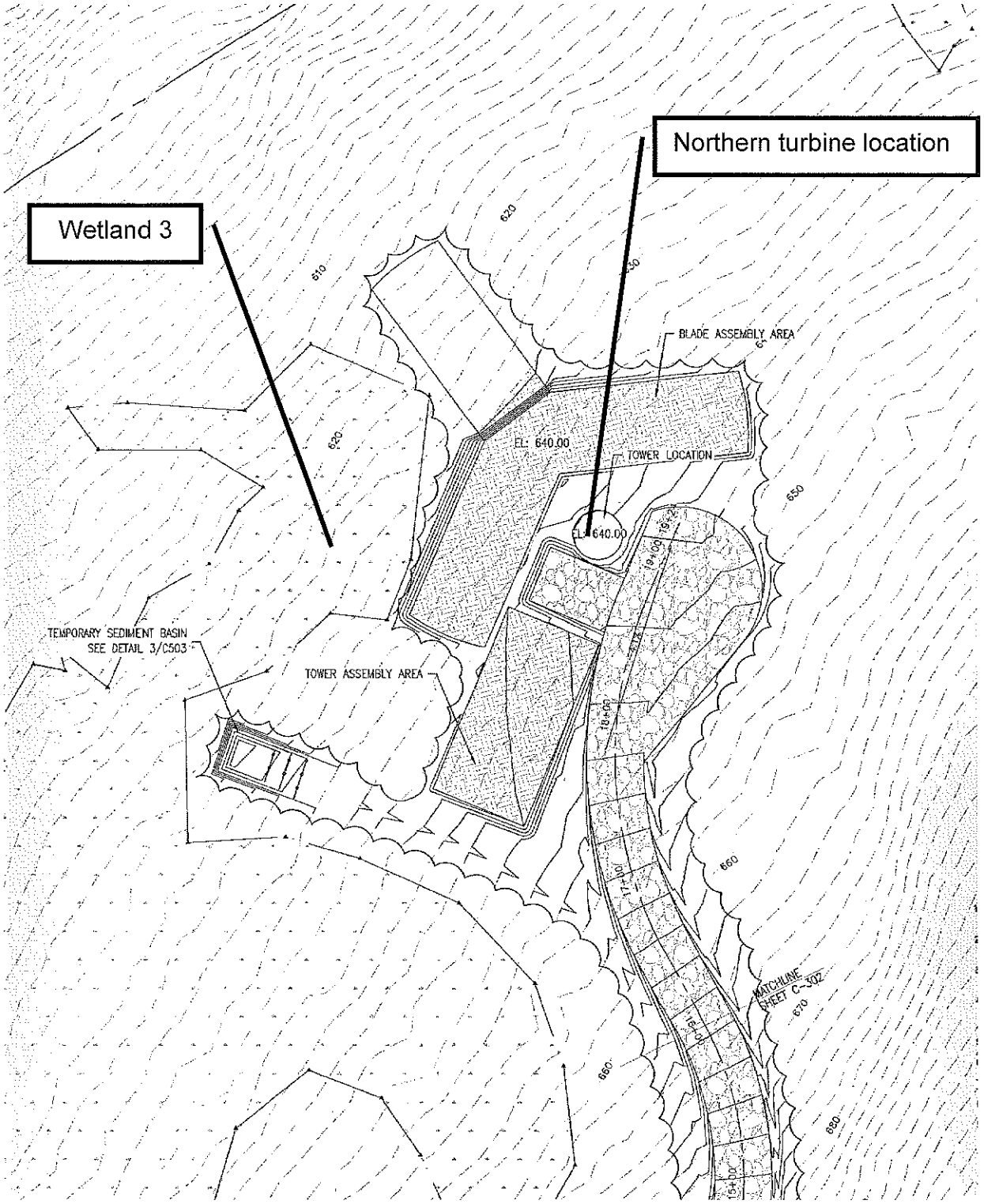


Figure 5: Preliminary site plan of northern turbine (in original location). (BNE 1, Vol. 2, Tab F)

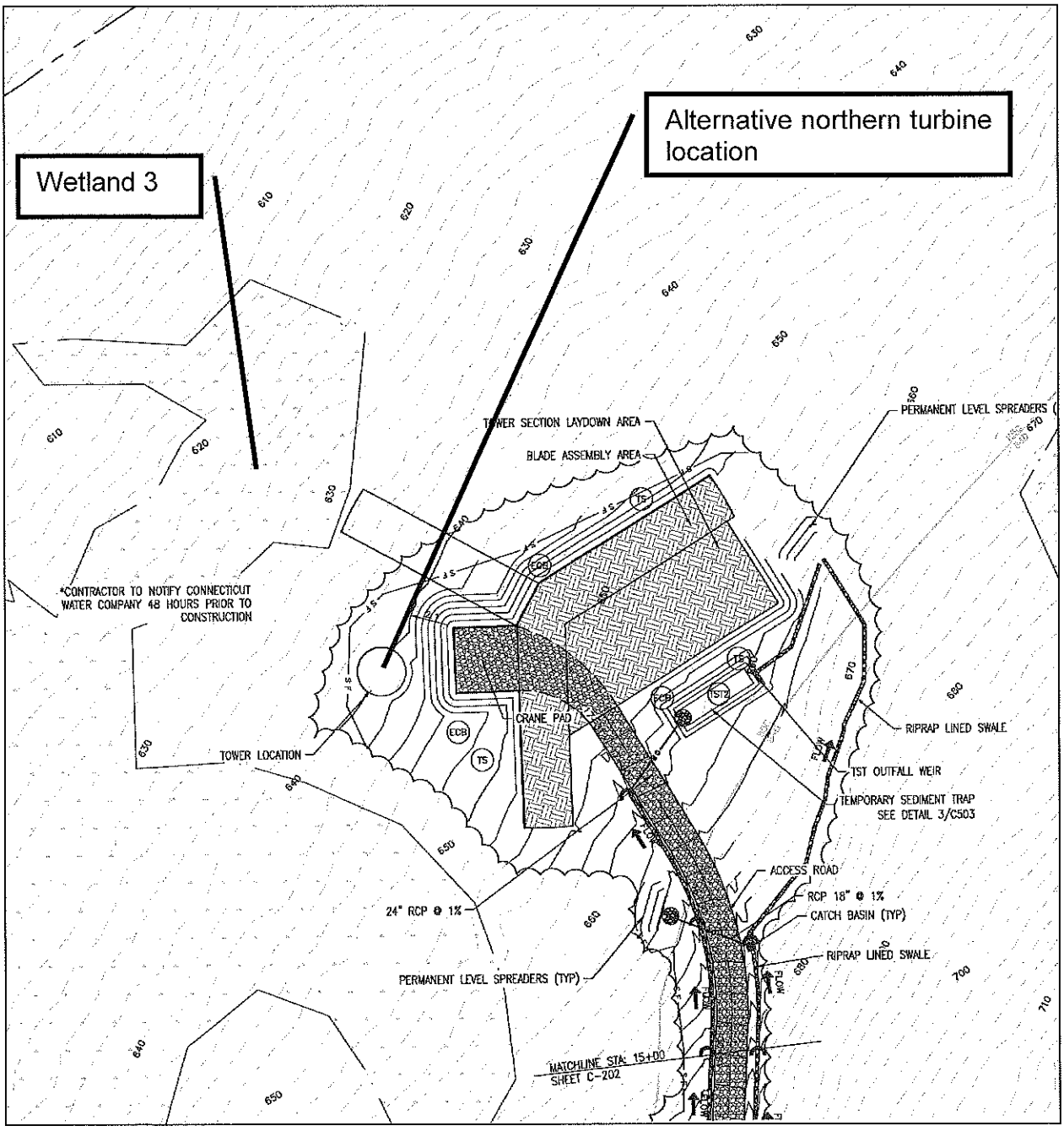


Figure 6: Alternative northern turbine location. (BNE 22, Attachment 1)

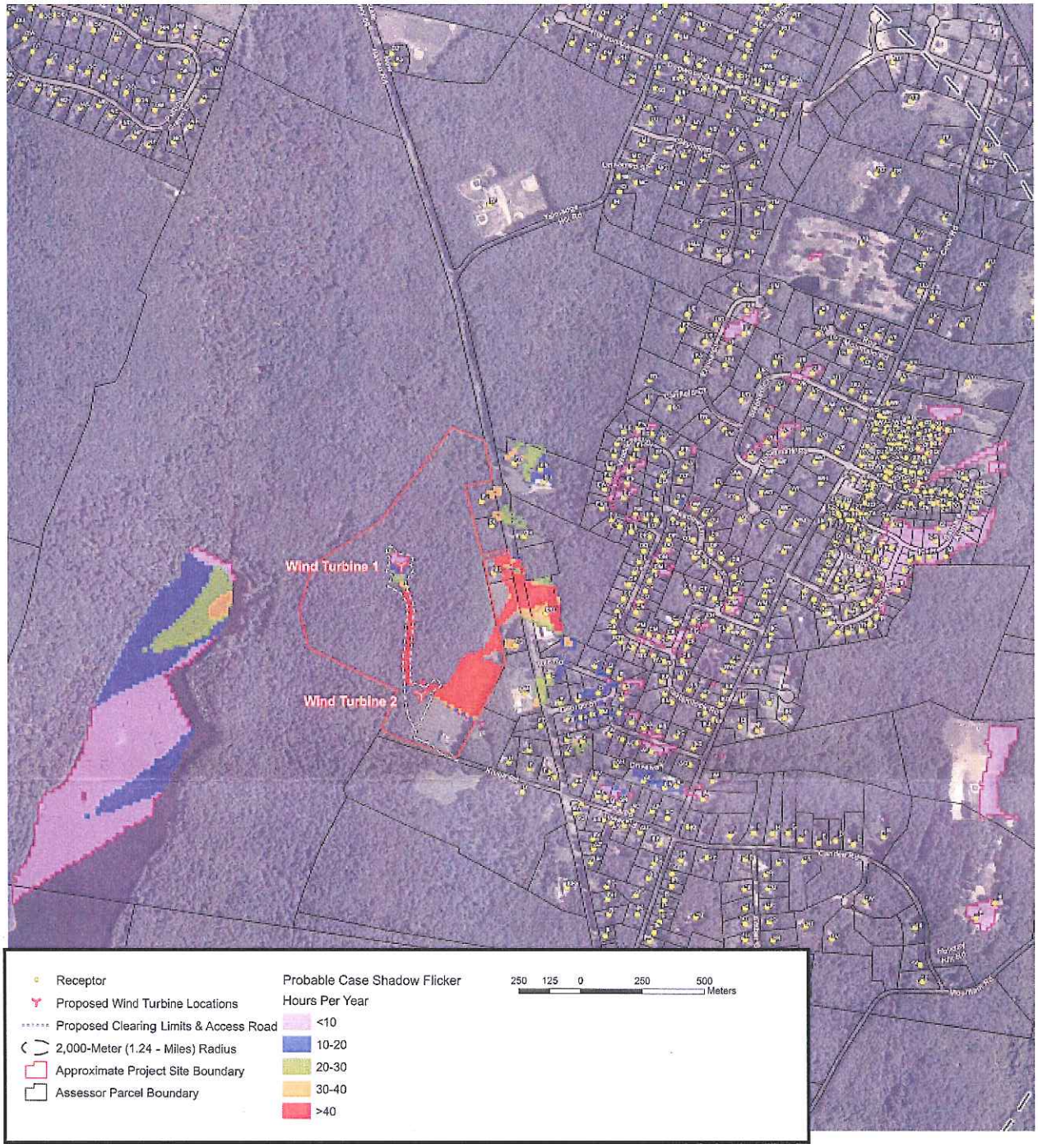


Figure 7: Shadow Flicker Probable Case Model using turbines in original locations with 82.5-meter rotor diameter - showing exterior shadow flicker. Please note, not all areas with <10 hours are shown. Turbine 1 is original northern location. Turbine 2 is southern location. (BNE 2a)

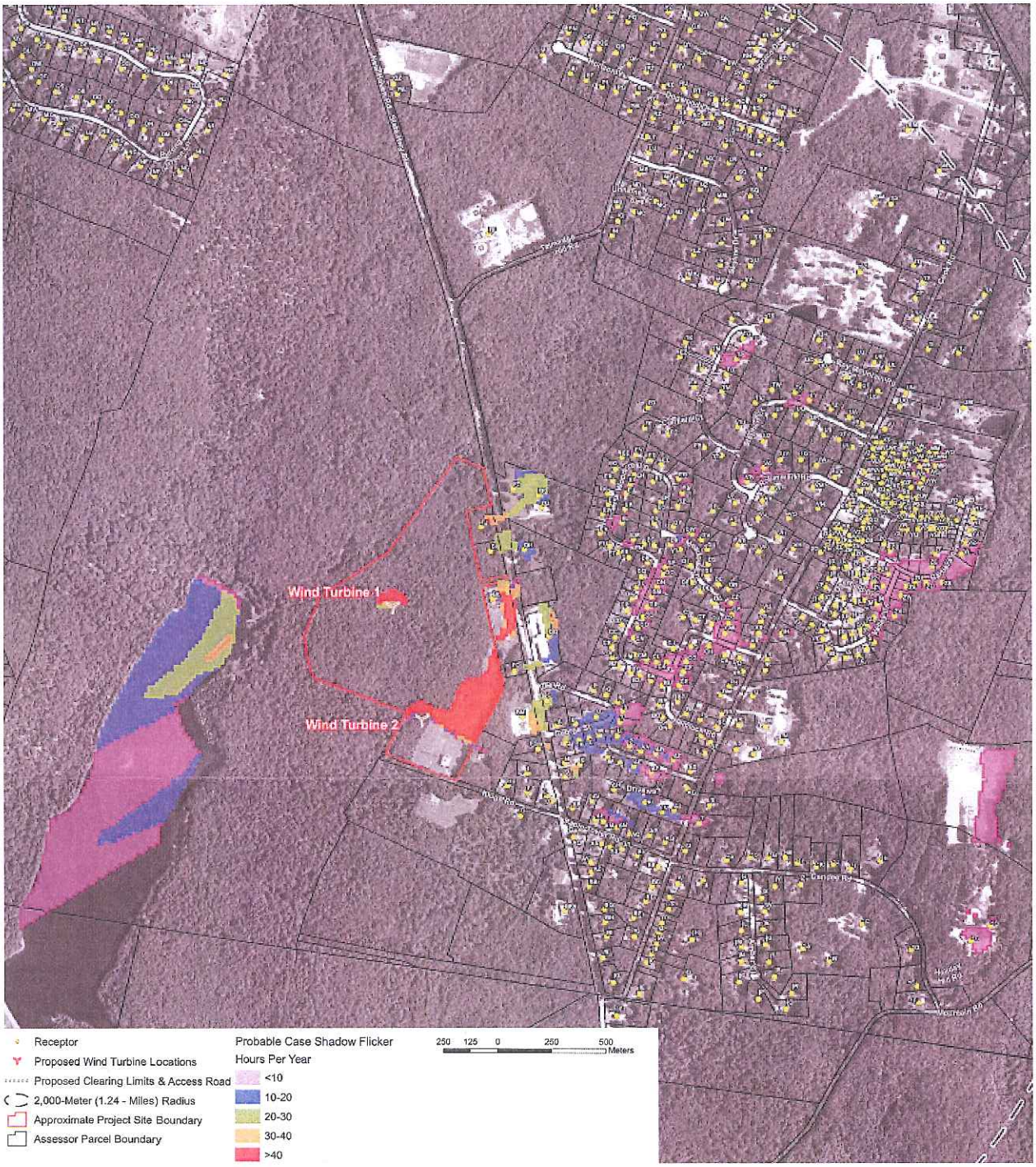


Figure 8: Shadow Flicker Probable Case Model using alternative northern turbine location with 82.5-meter rotor diameter - showing exterior shadow flicker. Please note, not all areas with <10 hours are shown. Turbine 1 is alternative northern location. Turbine 2 is southern location. (BNE 18c)

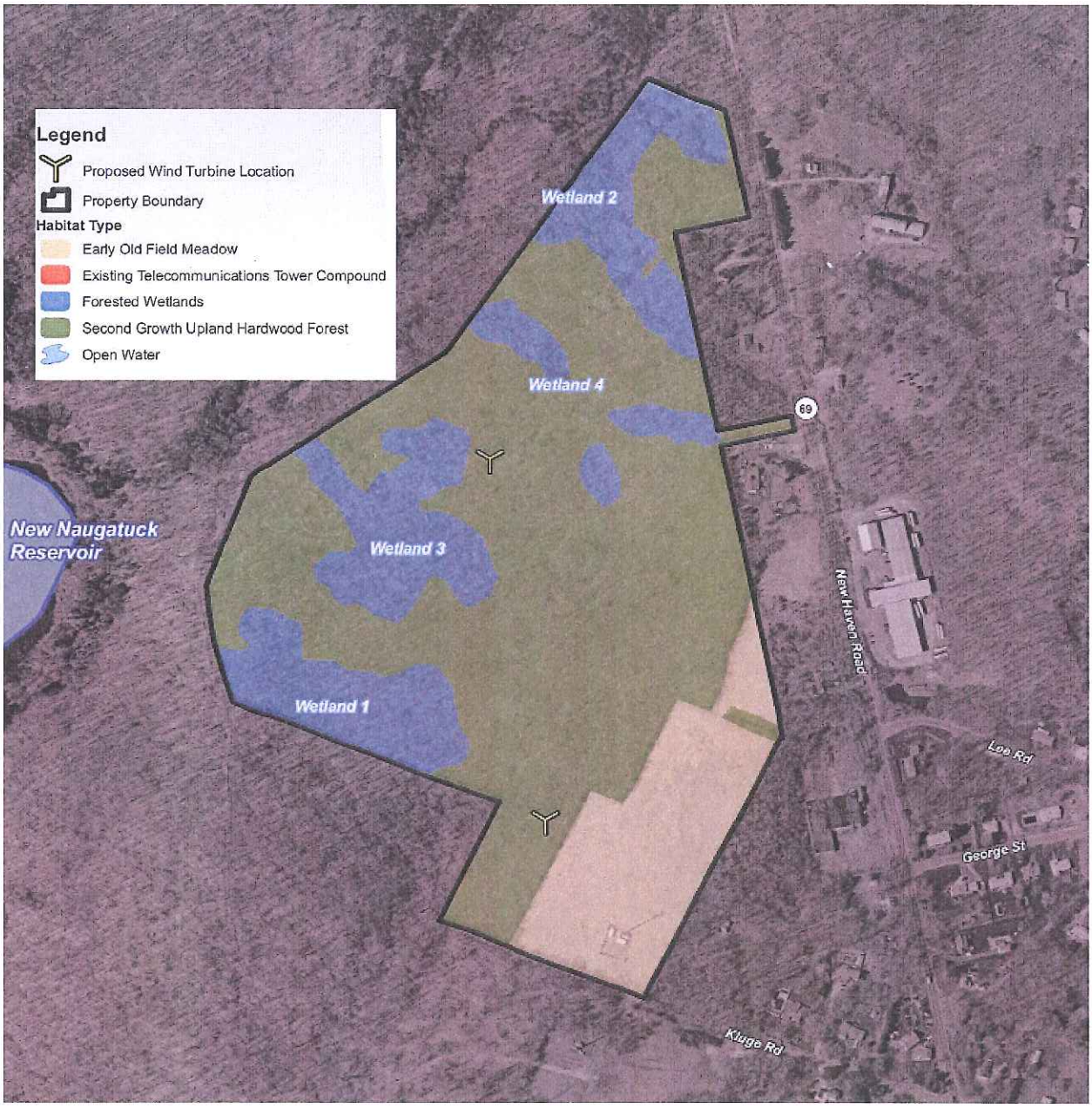
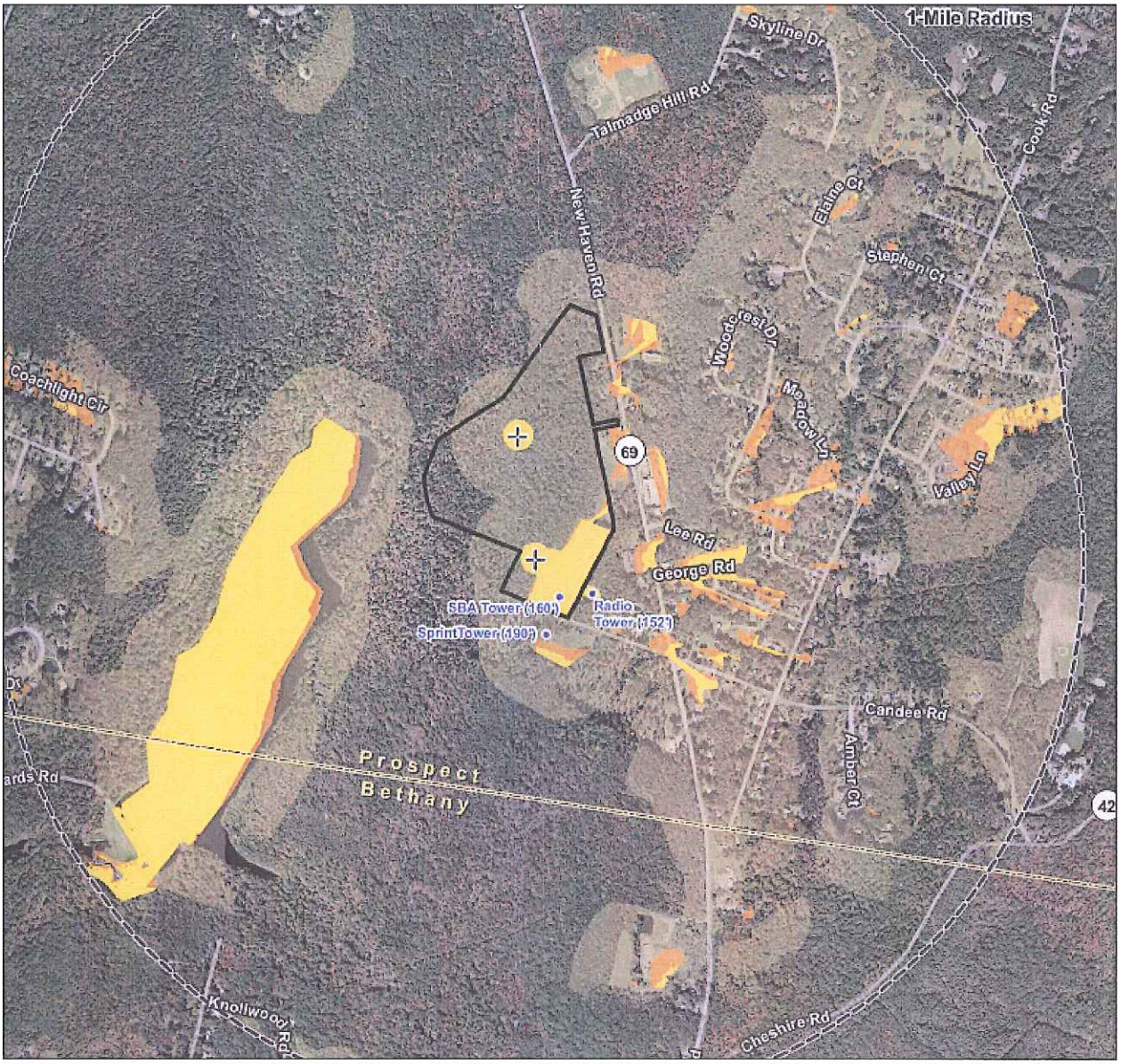


Figure 9: Habitat types on site property. (BNE 1, Vol. 3, Tab I)



Legend

- Proposed Wind Turbine Location
- Existing Tower
- 1-Mile Radius from Wind Turbines
- Approximate Site Property Boundary
- Wind Turbine 100 Meter Hub Height Year-Round Visibility (+/- 104 acres)
- Wind Turbine 150 Meter Hub and Blade Height Year-Round Visibility (+/-147 acres)
- Wind Turbine 100 Meter Hub Height Seasonal Visibility (+/- 978 acres)
- Town Boundary

Figure 10: Visibility of turbines using original locations from areas near turbines. Black dashed line represents one-mile radius around turbines. Please note, map under predicts visibility from Lee Road area. (BNE 1, Vol. 3, Tab J; BNE 14, R. 50)

LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
LEE ROAD ADJACENT TO #213 NEW HAVEN AVENUE (24mm focal length)	SOUTHWEST	0.25 MILE +/-	0.33 MILE +/-
		YEAR ROUND	YEAR ROUND (NOT VISIBLE IN PHOTO)

LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
LEE ROAD ADJACENT TO #213 NEW HAVEN AVENUE (24mm focal length)	NORTHWEST	0.25 MILE +/-	0.33 MILE +/-
		YEAR ROUND (NOT VISIBLE IN PHOTO)	YEAR ROUND

Figure 11& 12: Photosimulations of turbines from Lee Road (1 is southern turbine, 2 is original northern turbine) (50 m blades). Both turbines would be visible from this location. (BNE 14, R. 50)

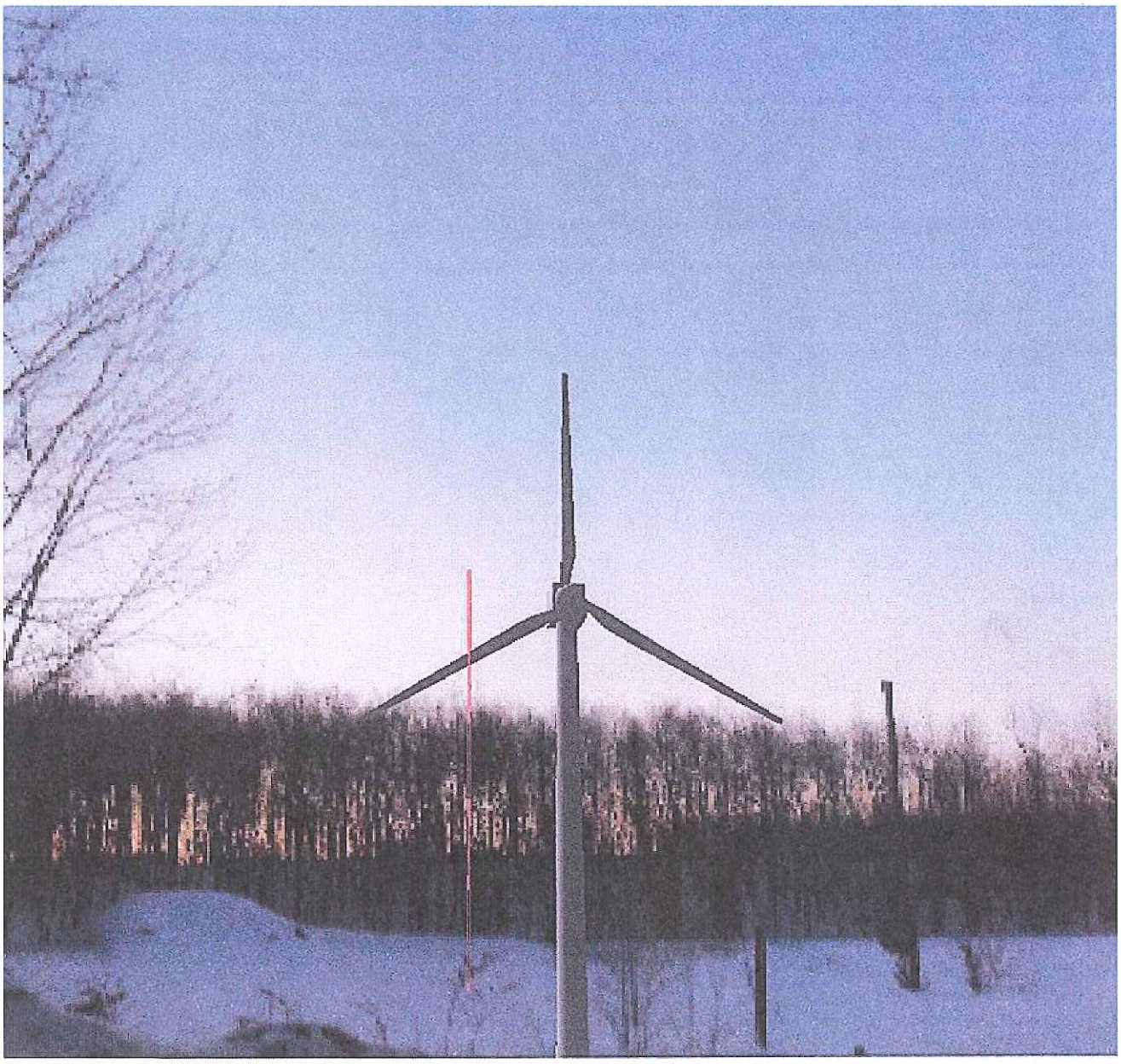
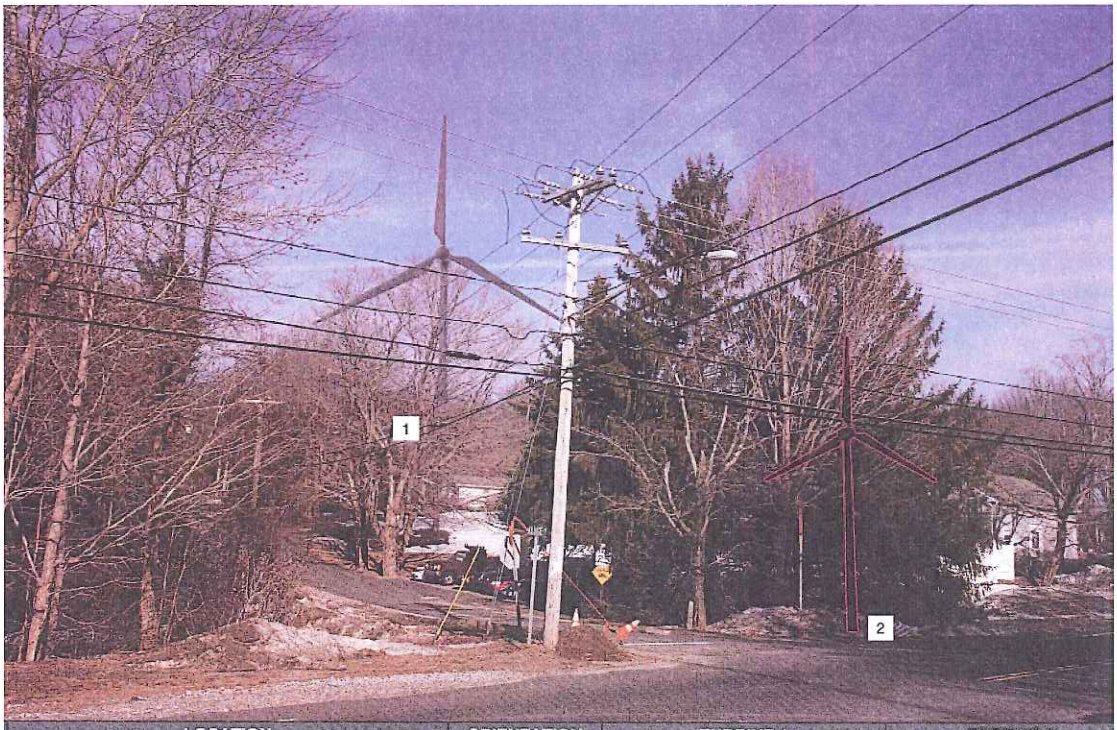


Figure 13: Photosimulation of southern turbine from Route 69 near George Road, 0.31 miles west of southern turbine. Red line is MET tower. (BNE 18c, R. 5; SPC 4s; SPC late file of April 1, 2011)

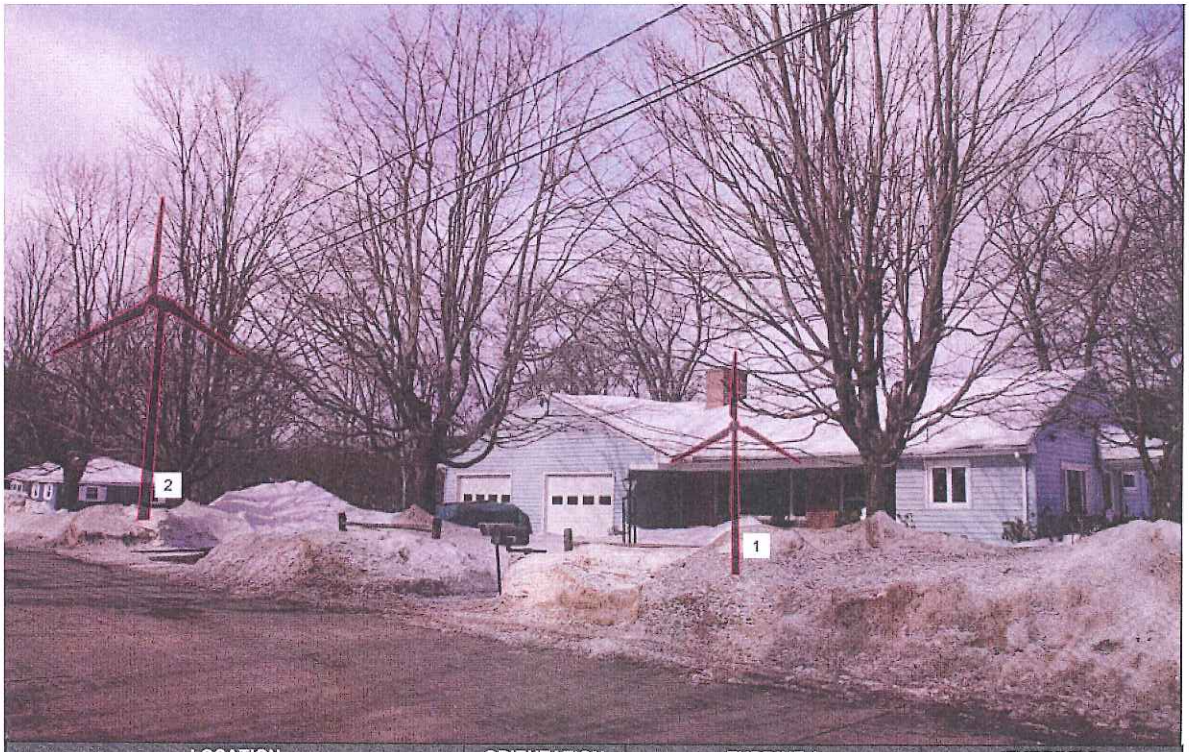


LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
RADIO TOWER ROAD AT NEW HAVEN AVENUE (24mm focal length)	NORTHWEST	0.31 MILE +/-	0.50 MILE +/-
		YEAR ROUND	NOT VISIBLE

Figure 14: Photosimulation of southern turbine from Radio Tower Radio / Route 69 intersection (50 m blades). (BNE 14, R. 50)

LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
ADJACENT TO #27 FIELDSTONE (35mm focal length)	SOUTHEAST	0.80 MILE +/-	0.75 MILE +/-
		SEASONAL	SEASONAL

Figure 15: Projected seasonal visibility from Fieldstone Drive (1 is southern turbine, 2 is northern turbine) (50 m blades). Turbines are superimposed on photos. (BNE 14, R. 50)



LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
GEORGE STREET AT LEE ROAD (18mm focal length)	NORTHWEST	0.43 MILE +/- SEASONAL	0.33 MILE +/- SEASONAL

LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
ADJACENT TO #15 LEE ROAD (24mm focal length)	NORTHWEST	0.43 MILE +/- SEASONAL	0.34 MILE +/- SEASONAL

Figure 16 &17: Projected seasonal visibility from Lee Road area (2 is southern turbine, 1 is northern turbine). (BNE 2b)

LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
ADJACENT TO #45 BARBARA AVENUE (24mm focal length)	SOUTHWEST	0.89 MILE +/-	0.89 MILE +/-
		NOT VISIBLE	YEAR ROUND

Figure 18: Projected seasonal and year-round visibility from Barbara Ave. (2 is southern turbine, 1 is northern turbine) (BNE 2c)

LOCATION	ORIENTATION	TURBINE 1	TURBINE 2
ADJACENT TO #47 WOODCREST DRIVE (24mm focal length)	SOUTHWEST	0.48 MILE +/-	0.41 MILE +/-
		SEASONAL	NOT VISIBLE

Figure 19: Projected seasonal visibility from Woodcrest Dr. (1 is southern turbine, 2 is northern turbine) (50 m blades). Turbines are superimposed on photo. (BNE 14, R. 50)

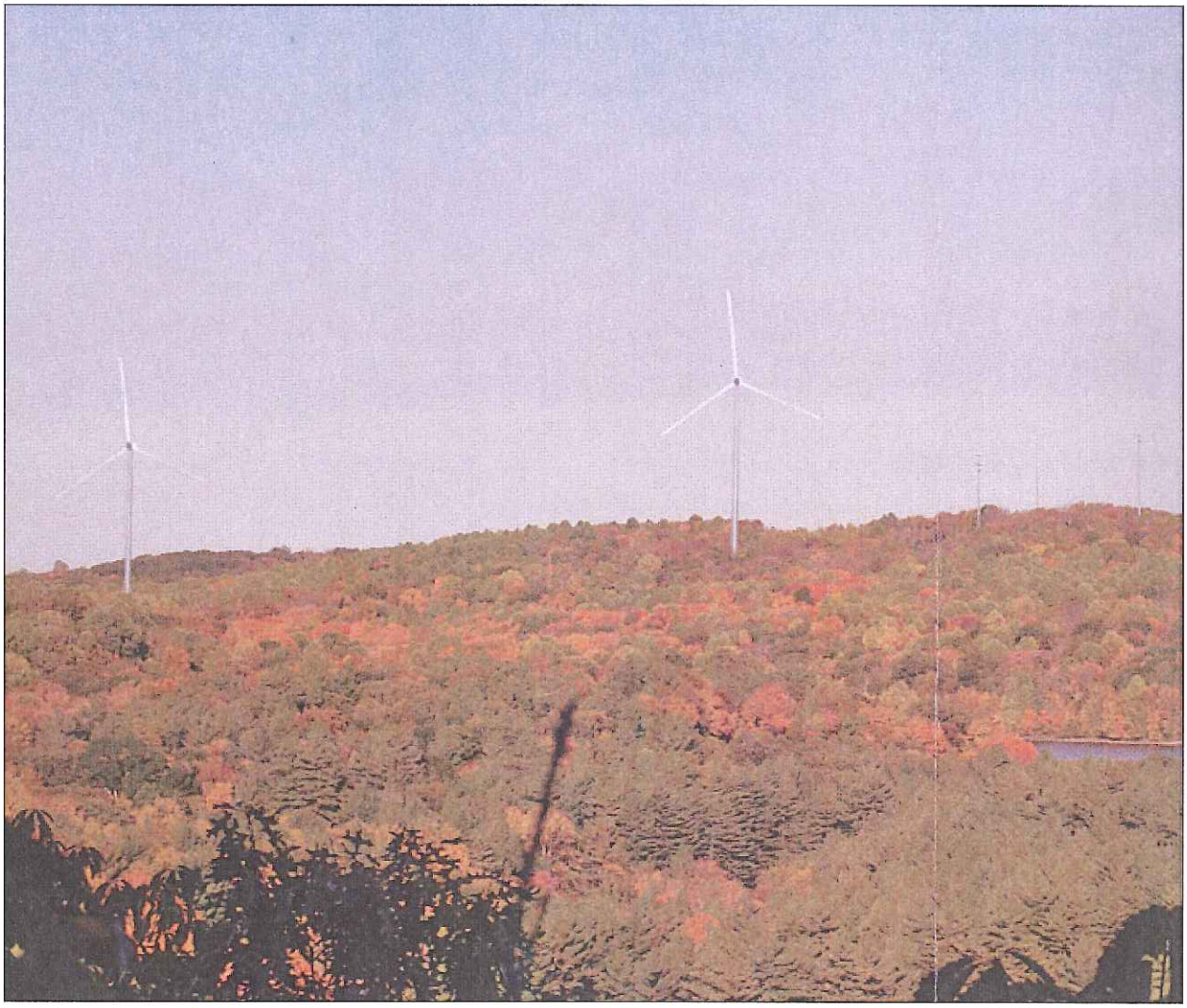


Figure 20: Photosimulation of both turbines from Beacon Cap Overlook on Naugatuck hiking trail, approximately 1.8 miles to southwest. (50 m blades) (BNE 1, Vol. 2, Tab J)

PETITION NO. 980 - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut.	}	Connecticut Siting Council May 12, 2011

Opinion

On November 17, 2010, BNE Energy, Inc (BNE) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of a 3.2 megawatt Wind Renewable Generating facility located at 178 New Haven Road, Prospect, Connecticut. Pursuant to CGS §16-50k(a), the project is eligible to be approved by a declaratory ruling as a grid-side distributed resource facility under 65 megawatts that is in compliance with air and water quality standards of the Connecticut Department of Environmental Protection (DEP).

Pursuant to CGS § 16a-35k, the State of Connecticut set forth an energy policy to diversify the fuel mix and to develop and utilize renewable energy resources, such as solar and wind energy, to the maximum extent possible. To accomplish this goal, the State has implemented renewable portfolio standards that required 20 percent of electric generation within the state be produced from Class I renewable energy sources, including wind, by 2020.

The proposed site is located on a 67.5-acre parcel at 178 New Haven Road in Prospect, approximately 280 feet west of Route 69 and immediately north of Kluge Road. The property encompasses the top and northwest slope of a steep hillside, part of a ridgeline running northwest-southeast. Downslope to the west, the land is forested and undeveloped. A large tract of protected watershed land owned by the Connecticut Water Company surrounds the New Naugatuck Reservoir in the valley. To the east of proposed site, land is zoned for one and two-acre residential development, with scattered commercial and industrial locations, and land-use consists predominantly of settled residential neighborhoods. Here, approximately 650 buildings, mostly homes, are within 1.25 miles of the site, 129 residential parcels are within a half-mile, and 52 are within 2000 feet.

The proposed site consists of 57 acres of woodland and has a 10-acre meadow at its crest, where the property rises to a maximum height of approximately 810 feet above mean sea level (amsl). A 160-foot telecommunications tower owned by SBA Inc. is located in the meadow's southeast corner. At the center stands a 197-foot meteorological tower (Met tower), erected by BNE in 2008 to provide wind speeds and other related weather data. Two other towers, a 150-foot microwave tower owned by CL&P and a 190-foot telecommunications tower owned by Sprint, are located on adjacent parcels to the south and southeast.

BNE proposes to construct two General Electric (GE) 1.6 megawatt wind turbines at the site. Each turbine would include a 328-foot (100 meter) tower with a nacelle at the top of the turbine tower. The nacelle contains the generator, other operational equipment, and the hub. Three 132-foot blades connect to the hub, having a nominal rotor diameter of 270 feet (82.5 meters). The total height of the turbine, measured as the height of the tower (hub height) plus the length of a blade at its apex, is 463 feet above ground level (agl).

BNE proposes to site its two wind turbines in the wooded area below the meadow. Four forested wetland areas lie along this slope, in places where seasonal high groundwater seeps out to feed small intermittent watercourses and support wetland vegetation. Both turbines would be positioned to avoid disturbing the wetlands as much as possible. The southern turbine would be located at a ground elevation of 762 feet amsl. Two locations for the northern turbine were proposed—one put forward in the application, the other developed as an alternative during the proceeding. Either one would be at 640 feet amsl.

The site would be accessed by a new, 20-foot wide road extending from the end of Kluge Road onto the site, continuing in a north-south direction to reach the two turbines. Other project facilities proposed are an electrical collector yard containing electrical interconnection equipment, to be built near the existing telecommunications tower on the property; and a 40-foot by 50-foot maintenance/storage building to be built near the southern turbine.

Based on the wind data and turbine model selected, the two turbines are estimated to produce 8,410 megawatt hours of electricity per year. The project is expected to have an annual capacity factor of 30 percent. The electricity from the project would be a Class I renewable resource, consistent with the State's policy of developing and utilizing renewable energy resources to the maximum extent possible, as set forth in CGS §16a-35k.

The Council is charged with implementing State policies. Noting that wind-powered renewable projects are before us for the first time, the Council would like to preface its opinion with two statements. First, while renewable energy sources are seemingly cost free, they are not available anywhere and everywhere. Sites for conventional power plants are limited only by convenient access to a roadway, river, or pipeline, none of which are particularly difficult to find in Connecticut, but the number of sites for renewable energy facilities is severely constrained by topography and weather. Second, renewable energy projects take up more space than conventional power plants—and in different dimensions. As we attempt to harvest power more directly from Nature, we find ourselves having to fit our designs for generating facilities more closely with Nature's large scale.

The Council has evaluated the project proposed by BNE in terms of its effects on the natural environment, public health and safety, and scenic, recreational, and cultural values related to quality of life. We begin with findings regarding the natural environment.

The project would not produce any air emissions or greenhouse gases and would comply with DEP air quality standards. The argument that obtaining power from wind, or any other intermittent energy source, necessarily causes more air pollution than it replaces is not convincing. In any case, it is not germane to the Council's decision.

The project would not have an adverse impact on water quality. It would be designed to meet DEP water quality standards, in conformance with the 2004 Connecticut Stormwater Quality Manual and the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

Immediately abutting the proposed site to the east is an industrially-zoned parcel that was formerly occupied by a factory known as U.S. Cap and Jacket (USCJ). A plume of contaminated groundwater was previously identified extending from the USCJ site towards the northeast, away from the BNE site. There is no evidence in the record that contaminated groundwater is moving west, onto the BNE site. Although concerns have been raised that blasting for wind-turbine foundations might fracture bedrock, creating migratory pathways and altering groundwater flow, the proposed foundations would be dug into a layer of glacial till, not deep enough to require blasting.

Town approval would be obtained for a well and septic system that would service the storage/maintenance building. Neither would require blasting. The Council finds the project would have no effect on groundwater flows on the site property.

Development of the site would result in the temporary disturbance of eight to nine acres of land, depending on the final layout. Disturbed areas would include space for construction of the proposed turbines, a blade assembly and laydown area, a temporary stockpile area, a crane assembly area, a tower section laydown area, and a crane pad. More precise figures on the amount of disturbance to accommodate construction and associated temporary and permanent drainage features would be specified during final site design.

The turbines and associated construction areas were situated to avoid filling any on-site wetlands. The construction area of the northern turbine was originally adjacent to a wetland area. BNE consulted with the Connecticut Water Company (CWC), and subsequently developed an alternative location for the northern turbine; BNE also redesigned associated construction areas. The new alternative increased the wetland buffer area from 3 to 35 feet, satisfying the CWC. Further protections were discussed, most notably BNE's offer to establish a permanent 50-foot buffer zone around certain wetlands on the site.

Post-construction, most of the site would be restored to a natural condition. Approximately 7.7 acres would be re-contoured, followed by planting of a native herbaceous seed mixture to create upland meadow areas. Meadows around the turbines would be maintained, whereas other meadow areas would be allowed to revert to woodland. Approximately 1.1 acres of the site would consist of permanent developed areas, including the access road, parking areas, turbines, storage building, and crane pads. In the Council's opinion, the restored condition would represent less impervious surface on the site than a likely allowable subdivision, which could include up to 47 homes.

Operation of the turbines would not adversely affect populations of birds, as estimated fatalities are zero to four bird-strikes per year per turbine, which is well below the average number of birds killed yearly by cars or collisions with buildings. Three types of bats listed as State special concern species apparently occur on the property. Bat mortality was presented as low to moderate, but no numeric estimates were provided: thus, DEP has requested post-construction carcass monitoring and possible mitigations if mortality is found to be high. Another State special concern species, the eastern box turtle, may also occur at the site, making it necessary for construction workers to be trained in methods of protecting this species. Site development would not be expected to have any adverse impact on fish or amphibians. Although the Council acknowledges that the record does not contain thorough information on birds and bats, it finds effects on wildlife would be minimal, given the project's size.

Concerning the project's effects on public health and safety and on scenic, recreational and cultural amenities, the Council puts considerable weight on impacts to the project's closest neighbors. Connecticut is a small, densely-populated state—the fourth most densely-populated in the country. Although Prospect residents often describe their town as rural, its population of 608 people per square mile actually puts it closer to the average for Connecticut as a whole (738 people per square mile), which is generally characterized as suburban. As has been described at the beginning of this Opinion, the fit between the turbines and its neighbors is very tight.

The Council has considered the following matters regarding public health and safety: ice throw/drop, shadow flicker and noise.

The risk of ice drop and ice throw from the turbines was analyzed carefully, and the Council believes it is not a concern beyond the site. Ice drop happens right around the turbine itself, well within the property boundaries. As for ice throw, the likelihood of ice being thrown beyond the site boundaries is extremely remote. Additionally, switching the northern turbine to the alternative site would increase the turbine's distance from the nearest residential building, thus meeting GE's recommended ice-throw setbacks. Finally, ice throw beyond site boundaries could be avoided altogether by automatic or manual shut-down to the turbines during icing conditions, and by special attention to blade de-icing by personnel who would come on-site for the re-start.

Shadow flicker is another impact of the proposed wind project that has been measured to a high degree of predictability. It would affect properties generally east of the site, usually two hours before sunset during specific calendar periods. The probable case study model, based on the original turbine configuration, indicates about one-tenth of the homes (+/- 70) would experience some shadow flicker; only two would experience it for periods regarded as highly annoying (+/- 30 hours per year). If the northern alternative turbine configuration were used, about the same number of homes would experience some shadow flicker, but none for highly annoying periods of time. As to the effects of shadow flicker outdoors, in people's yards, the northern alternative configuration would eliminate half of the highly annoying shadow-flicker periods. Finally, shadow flicker can be mitigated in various ways, such as the installation of window blinds or landscaping. The Council views shadow flicker as a potential annoyance rather than a health threat.

Noise is a serious public-health concern, such that virtually all states have regulations limiting noise. The noise from wind turbines, in particular, has distinctive features. For instance, it has a large component of low-frequency sound. In addition, while certain elements of turbine noise are distinctly enveloping, or continuous, others can vary unpredictably, depending on wind speed, direction, and turbulence. Given these features, individuals have widely different sensitivities to turbine noise. The Council is satisfied overall, that noise emitted by the project would meet Connecticut DEP allowable limits at the nearest residential receptors, and that the DEP regulations are protective of the public health. Nonetheless, the Council acknowledges that some health professionals are challenging the adequacy of state regulations either to measure or minimize the health impacts of wind-turbine noise. Furthermore, if mitigation were to become necessary, it would be difficult and costly. Finally, the Council is particularly cautious about the noise impacts of this proposed project on account of densely-populated neighborhoods close to the proposed turbines.

Overall, on issues of public health and safety, the Council's opinion is that the potential impacts are manageable, in that varying types and approaches to mitigation could be undertaken.

Concerning values related to quality of life, the Council finds the visibility of the proposed turbines to be a problem. In this case, viewers would have a ready reference point: there are three telecommunications towers near the turbines, the tallest of which is 190 feet; however, the overall mass and height of the turbines would appear much greater. The diameter of the turbine tower is 13.5 to 14.5 feet, compared with the typical diameter of a cell-tower monopole of 4 to 5 feet and the turbine's hub height would be about 70 percent higher than the comparable telecommunications tower located on the property.

BNE chose locations for the proposed turbines west of the hill and downslope partly in order to mitigate views from the east; however, this plan does not provide substantial mitigation. Visibility modeling indicates that both of the proposed turbines would be visible year-round from 50 residences within one mile, while approximately 248 residential properties within a mile would have seasonal views of one or both, a number the Council finds excessive. The turbines' blades, which would extend 132 feet above hub-height at their apex, and whose rotation would catch a viewer's eye, could only lend impact to the turbines' visibility.

Residential subdivisions approximately 0.8 miles west of the site, on the far side of the reservoir, would be somewhat buffered by distance and vegetative screening. To the east, the Council finds there is not enough of a vegetative or land buffer between the proposed site and adjacent residential areas to sufficiently screen year-round and seasonal views of the turbines. Although BNE agreed to install vegetative plantings along the property line and at select properties in the area, the Council finds vegetative screening would not be effective in mitigating visual impact.

Given the mass of the turbine towers, the height of the turbine hubs, the height and rotation of the blades and the lack of an effective means of visual mitigation, the Council finds a substantial adverse visual impact sufficient to deny the proposed project.

Based on the record in this proceeding we find that the effects associated with the construction, operation, and maintenance of this electric generating facility at the proposed site, including effects on the natural environment; public health and safety; scenic, historic, and recreational values are in conflict with the policies of the State concerning such effects, and are sufficient reason to deny this petition.

PETITION NO. 980 - BNE Energy, Inc. petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, operation and maintenance of a 3.2 MW Wind Renewable Generating facility located at 178 New Haven Road, Prospect, Connecticut.	}	Connecticut
	}	Siting
	}	Council
		May 12, 2011

Decision and Order

Based on the record in this proceeding, we find that the substantial adverse visual effects associated with the construction, maintenance, and operation of the proposed 3.2 megawatt Wind Renewable Generating facility at the proposed site, are in conflict with the policies of the State concerning such effects; and therefore are sufficient reason to deny the proposed facility.

We hereby direct that a copy of the Findings of Fact, Opinion, Decision and Order, and Conclusions of Law be served on each person listed below, and notice of the decision be published in the *Waterbury Republican American*.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors in this proceeding are:

Petitioner	**Representative**
BNE Energy, Inc	Lee D. Hoffman, Esq. Bonnie L. Heiple, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 Paul Corey, Chairman BNE Energy Inc. Town Center, Suite 200 29 South Main Street West Hartford, CT 06107
Party	**Representative**
Town of Prospect	Robert J. Chatfield Mayor Prospect Town Office Building 36 Center Street Prospect, CT 06712-1699

Party
Save Propsect Corp.

Representative
Jeffrey J. Tinley, Esq.
Anthony J. Interlandi, Esq.
Tinley, Nastri, Renehan & Dost, LLP
60 North Main Street
Waterbury, CT 06702

Party
FairwindCT, Inc

Representative
Nicholas J. Harding
Emily A. Gianquinto
Reid and Riege, P.C.
One Financial Plaza, 21st Floor

Intervenor
Eric Bibler
31 Old Hyde Road
Weston, CT 06883

Party
John and Cheryl Lamontagne
Thomas and Eileen Satkunas

Representative
Thomas J. Donohue, Jr., Esq.
Killian & Donohue, LLC
363 Main Street
Hartford, CT 06106

Party
The Connecticut Light and Power Company

Representative
John R. Morissette
Manager – Transmission Siting and Permitting

Christopher R. Bernard
Manager, Regulatory Policy (Transmission)

Joaquina Borges King
Senior Counsel
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270

CERTIFICATION

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **PETITION NO. 980** - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut, and voted to deny this petition as follows:

Council Members	Vote Cast
Robert Stein, Chairman	No
Colin C. Tait, Vice Chairman	Recused
Commissioner Kevin M. DelGobbo Designee: Kenneth Braffman	No
Acting Commissioner Dan Esty Designee: Brian Golembiewski	Yes
Philip T. Ashton	Yes
Daniel P. Lynch, Jr.	Yes
James J. Murphy, Jr.	Yes
Dr. Barbara Currier Bell	Yes
Edward S. Wilensky	Yes

Dated at New Britain, Connecticut, May 12, 2011.

PETITION NO. 980 - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut.	}	Connecticut
	}	Siting
	}	Council
		May 12, 2011

Conclusions of Law

A. The proposed wind renewable generating project was properly filed as a petition for a declaratory ruling.

BNE Energy, Inc. (BNE) filed a petition for a declaratory ruling with the Connecticut Siting Council (Council) on November 17, 2010 that no Certificate of Environmental Compatibility and Public Need (CECPN) is required for the construction, maintenance and operation of a 3.2 megawatt (MW) wind renewable generating facility located at 178 New Haven Road, Prospect, Connecticut (Petition). The proposed grid-side distributed resource project has a capacity of not more than 65 MW and utilizes wind renewable energy sources. Therefore, BNE's proposed project was properly filed as a petition for a declaratory ruling under Conn. Gen .Stat. §16-50k (a).

Pursuant to Public Act 05-1, An Act Concerning Energy Independence (codified at Conn. Gen. Stat. §16-50(k), "[T]he Council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling... (B)... 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." The legislative purpose of P.A. 05-1 was to incent distributed resource projects and reduce peak electric demand, which is consistent with the energy policy of the state under Conn. Gen. Stat. §16a-35k to diversify the state's energy supply mix and to develop and utilize renewable energy sources, such as solar and wind energy, to the maximum practicable extent.[1] The Act established a rebuttable presumption that there is a public benefit for a grid-side distributed resource project with a capacity of 65 MW or less.[2] Under the Public Utility Environmental Standards Act (PUESA), which governs the Council's jurisdiction, a public benefit exists if a proposed electric generating facility is necessary for the reliability of the electric supply of the state or for the development of a competitive market for electricity.[3]

The Council's standard of review under the PUESA for a petition for a declaratory ruling is to make a determination that the proposed facility will have no substantial adverse environmental effect and therefore, would not require a CECPN.[4] Under Conn. Gen. Stat. §16-50p, the statutory criteria for a determination of substantial adverse environmental effect is: "The nature of the probable environmental impact of the facility alone and cumulatively with other existing facilities, including a specification of every significant adverse effect, including, but not limited to, electromagnetic fields..., conflicts with the policies of the state concerning, the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forests and parks, air and water purity and fish, aquaculture and

---

[1] 2005 Conn. Acts 1 (Spec. Sess.); Conn. Gen. Stat. §16a-35k (2011).
[2] *Id.*
[3] Conn. Gen. Stat. §16-50p(c) (2011) (establishing a public benefit standard for an electric generating facility as opposed to a public need standard for other facilities under Conn. Gen. Stat. §16-50p(a)(3)(A)); *See also Citizens for Defense of Oxford v. Connecticut Siting Council,* 2000 Conn. Super. LEXIS 2994 (Conn. Super. 2000).
[4] Conn. Gen. Stat. §4-176 (2011); Conn. Gen. Stat. §16-50k (2011); R.C.S.A. §16-50j-38.

wildlife."[5] The Council is required to state why the adverse environmental effects or conflicts with state policies are or are not sufficient reason to deny the project.[6] In 2007, the Council approved a 37.5 MW wood biomass generating facility in Plainfield under Conn. Gen. Stat. §16-50(k) (a) and in accordance with the statutory criteria for a determination of substantial adverse environmental effect under Conn. Gen. Stat. §16-50p.[7]

Pursuant to the provisions of the Uniform Administrative Procedure Act (UAPA), within 60 days of receipt of BNE's petition and based on the nature and scope of the proposed project, the Council decided to hold a public hearing on the matter.[8] BNE provided the Council with information required for an application for a CECPN under the Council's Application Guide for a Renewable Energy Facility.[9] The Council held two public hearings in the Town of Prospect on February 23, 2011 and February 24, 2011 at which members of the public attended and spoke both for and against the project.[10] Evidentiary hearings were continued on March 3, 2011, March 15, 2011 and March 31, 2011.[11] Eight parties and intervenors participated in the hearing process.[12] Based on the record developed in the proceeding, the Council found that the project would be consistent with the state's Class I Renewable Portfolio Standard and the state's energy policy, however, the council also found that the effects associated with the construction, operation and maintenance of the wind renewable electric generating facility at the proposed site, including effects on the natural environment; public health and safety; scenic, historic and recreational values, particularly with respect to visibility, were in conflict with the policies of the state concerning such effects and were sufficient reason to deny the petition.

B. The PUESA does not require public disclosure of proprietary information.

BNE filed a Motion for Protective Order consistent with Council Procedures for the Filing of Proprietary Information in this matter on February 16, 2011 seeking permission to file certain confidential and proprietary business information of BNE and GE under seal. Conn. Gen. Stat. §16-50o requires submission into the record "the terms of any agreement… entered into by the applicant and… any third

---

[5] Conn. Gen. Stat. §16-50p(a)(3)(B) (2011).
[6] Conn. Gen. Stat. §16-50p(a)(3)(C) (2011).
[7] Connecticut Siting Council, Petition 784, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&Q=320968&PM=1 (last visited May 4, 2011) (The Council held a public hearing on the petition for the convenience of the public and to develop a full record for its decision. The Council requested that the petitioner publish notice of the petition and provide notice to abutting landowners. Members of the public attended the hearing and spoke both for and against the project. Based on the record developed in the proceeding, the Council found that the project would provide 15% of the state's Class I Renewable Portfolio Standard, the facility would benefit the state by removing a renewable resource from the waste stream, prolonging the life of regional landfills and generating energy that may displace older, non-efficient generation without detriment to the local environment or surrounding community and that the effects associated with the construction, operation and maintenance of the facility at the proposed site, including effects on the natural environment; public health and safety; scenic, historic and recreational values were not in conflict with the policies of the state concerning such effects and were not sufficient reason to deny the petition. The Council approved the facility with conditions including a Development and Management Plan, an independent environmental consultant and a post-construction noise survey at the property boundaries and nearest residential receptors).
[8] Conn. Gen. Stat. §4-176(e) (2011); Connecticut Siting Council, Meeting Minutes, January 6, 2011.
[9] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011) (the petitioner was not required to follow the Application Guide in filing a petition for a declaratory ruling).
[10] Public Hearing Notice of the Connecticut Siting Council, January 24, 2011, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[11] Connecticut Siting Council, Petition 980, Findings of Fact ¶10, May 12, 2011, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[12] *Id.* at ¶7.

party, in connection with the construction or operation of [a] facility," but does "not require the public disclosure of proprietary information or trade secrets."[13] BNE sought to protect information and data regarding wind resources, wind speeds, wind generation and related proprietary information and sought to protect GE information and formulas relating to setback recommendations, mechanical loads assessments and related proprietary information. GE did not request party or intervenor status in the proceeding.

"Proprietary information" is defined in Black's Law Dictionary as "information in which the owner has a protectable interest."[14] The Department of Public Utility Control defines "proprietary information" as information that may be exempt from public disclosure pursuant to Conn. Gen. Stat. §1-210(b).[15] The Connecticut Freedom of Information Act (FOIA) defines "trade secret" as:

> "...information, including formulas, patterns, compilations, programs, devices, methods, techniques, processes, drawings, cost data, customer lists, film or television scripts or detailed production budgets that (i) derive independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means, by, other persons who can obtain economic value from their disclosure or use, and (ii) are the subject of efforts that are reasonable under the circumstances to maintain secrecy...".[16]

The Connecticut Supreme Court defined "trade secret" as consisting of any "... compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it."[17] The Court set out several factors to be considered in determining whether given information qualifies as a trade secret, which are: 1) the extent to which the information is known outside of the business; 2) the extent to which it is known by others involved in the business; 3) the extent of measures taken to guard the secrecy of the information; 4) the value of the information to the business and competitors; 5) the amount of effort expended in developing the information; and 6) the ease or difficulty with which the information could be properly acquired or duplicated by others."[18]

Applying the criteria to this petition, it is found that: 1) the petitioner and GE view the information as confidential and proprietary; 2) persons in the business with knowledge of the information are GE, the turbine manufacturer, Paul Corey, president of BNE, Carrie Larson, attorney for BNE and members of BNE's witness panel; 3) BNE and GE entered into a confidentiality agreement relating to the information and GE clearly indicates the information is proprietary and not to be disclosed on each page of the documents; 4) the wind data and formulas used in the assessments have independent economic value that, if generally known, would be a disadvantage to GE and the petitioner, and would be an advantage to market competitors and future wind project proponents; 5) GE and BNE expended effort and incurred costs in development of the information; and 6) the wind data and formulas used in the assessments could not be properly acquired or duplicated by others.

---

[13] Conn. Gen. Stat. §16-50o (2011).
[14] BLACK'S LAW DICTIONARY 1235 (7th ed. 1999).
[15] State of Connecticut, Department of Public Utility Control, Basic Procedures for Filing Proprietary Information Under Protective Order, *available at* http://www.ct.gov/dpuc/cwp/view.asp?a=3364&q=405172 (last visited May 4, 2011).
[16] Conn. Gen. Stat. §1-210(b)(5)(A) (2011).
[17] *Dept. of Public Utilities of the City of Norwich v. Freedom of Information Commission,* 55 Conn. App. 527, 530 (Conn. App. 1999), citing *Town & Country House & Homes Service, Inc. v. Evans*, 150 Conn. 314, 318-19 (1963).
[18] *Id.*

In objections to BNE's Motion for Protective Order, other participants in the proceeding informed the Council that the GE setback recommendation documents are posted on the New York Public Service Commission website.[19] While posted on that website, the GE documents are clearly marked on each page: "Confidential and Proprietary – Do not copy without consent." There is no copy of a consent form from GE posted on that website, nor has a consent form from GE been submitted into the record for this petition. However, parties and intervenors in this proceeding, including, but not limited to expert witnesses, were afforded the opportunity to review the materials submitted under the protective order upon signing a Non-Disclosure Agreement.[20]

In a recent decision, the Connecticut Supreme Court held that the review of documents "is guided by the principle that the party claiming an exemption from the disclosure requirements of the [Freedom of Information Act] bears the burden of establishing the applicability of the exemption."[21] The Court also stated that "whether a document expressly is marked "confidential" is not dispositive, but is merely one factor a court may consider in determining confidentiality. Certainly, however, the fact that a document is marked "confidential" creates a presumption of confidentiality. To the extent that the presumption may be rebutted, it is not dispositive. It is difficult to imagine a document that could be more clear on its face regarding whether and for what reason it is intended to be confidential."[22] The GE and BNE documents sought to be protected in this petition are clearly marked "confidential and proprietary – do not copy without consent." On that basis and absent a requirement under the PUESA to disclose proprietary information, the Council granted BNE's Motion for Protective Order on February 24, 2011 and reaffirmed that decision on March 31, 2011.[23]

C. The Council did not engage in ex parte communications with Epsilon Associates, Inc.

Anticipating receipt of applications and petitions for renewable energy facilities, in October 2010, the Council employed Epsilon Associates, Inc. (Epsilon) for a two year contract as a consultant to study and measure the consequences of proposed renewable energy facilities on the public health, safety and environment. Under the contract, it states: "...2. Contractor will review and provide opinion, interrogatory suggestions, comments and recommendations on various renewable energy projects *on an as needed basis*; 3. Contractor will author proceeding documentation, including but not limited to, requested reports, comments, interrogatories, proposed conditions and pre-filed testimony; 4. Contractor will be available to attend, cross-examine, and testify at public hearings as an expert witness, *as necessary*..."[24] Under Conn. Gen. Stat. §16-50n(e), "the Council may employ one or more independent consultants to study and measure the consequences of the proposed facility on the environment. ... any study and any report issued as a result thereof shall be part of the record in the proceeding."

The Council did not request Epsilon to issue any study or report that would have been required to be made part of the record in this proceeding under Conn. Gen. Stat. §16-50n(e). According to the Supreme Court, administrative agencies "are entitled to technical and professional assistance in matters

---

[19] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[20] *Id.*
[21] *Lash v. Freedom of Information Commission et al.,* 300 Conn. 45 (2011), citing *New Haven v. Freedom of Information Commission,* 205 Conn. 767 (1988).
[22] *Id.*
[23] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[24] Personal Service Agreement between Epsilon Associates, Inc. and the Connecticut Siting Council, dated October 1, 2010 (emphasis added).

which are beyond their expertise and that such assistance may be rendered in executive session."[25] However, the use of such assistance "cannot be extended to the receipt, ex parte, of information *supplied by a party to the controversy* without affording his opposition an opportunity to know of the information and to offer evidence in explanation or rebuttal."[26] Epsilon was not a party to this proceeding. Pursuant to the contract, Epsilon was employed by the Council to provide technical and professional assistance in the review of proposed renewable energy facilities, including, but not limited to, this petition.

Also, the Council did not request Epsilon to be available to attend, cross examine or testify at the public hearings as an expert witness. The Council requested Epsilon to review and provide opinion on the petition and to provide the Council with recommended interrogatories. The portions of the interrogatories authored by Epsilon were ultimately issued to the petitioner and copies of the interrogatories were provided to all parties and intervenors in the proceeding. Furthermore, pursuant to a FOIA request dated April 12, 2011 from Attorney Nicholas Harding representing FairwindCT, Inc. (Fairwind), a party in this proceeding, the Council publicly disclosed all of its communications with Epsilon. Therefore, the Council did not engage in ex parte communications with Epsilon.

D. The Council has a statutory duty to consult with and seek comments from other state agencies.

Under Conn. Gen. Stat. §16-50j, "prior to commencing any hearing… the Council shall consult with and solicit written comments from the Department of Environmental Protection… All such comments shall be made part of the record… Said departments and the Council shall not enter any contract or agreement with any party to the proceedings or hearings…that requires said departments or Council to withhold or retract comments, refrain from participating in or withdraw from said proceedings or hearings." On January 21, 2011, the Council solicited agency comments on this petition.[27] The DEP submitted comments on March 14, 2011.[28] Fairwind issued a subpoena to the author of the DEP comments, Frederick Riese, on March 25, 2011 compelling him to appear to testify on March 31, 2011.[29] On March 29, 2011, the DEP requested a ruling from the Council that Mr. Riese not be compelled to appear and indicated that the submission of comments does not elevate DEP's status to that of a party or intervenor and does not constitute pre-filed testimony.[30] The Council did not require Mr. Riese to appear. During the hearing on March 31, 2011, Save Prospect Corp. (SPC), a party in this proceeding, filed a motion to strike the DEP comments from the record, which was denied by the Council.[31]

According to the state Appellate Court, the Council "has a statutory duty to seek input from and the expertise of other state agencies and the legislature clearly contemplated the involvement of other state agencies to supply information to the Council in order to render its decision… The Council [acts] properly by taking into account the [DEP] standard setting function in determining the degree of [environmental impact]. It is clearly within the statutory authority of the Council to grant [a petition for a declaratory ruling] subject to specific conditions, including subsequent compliance with DEP standards and regulations. The PUESA provides the Council with numerous means of acquiring information in addition to that which must be submitted by the [petitioner]."[32] Mr. Riese was not a witness for the

---

[25] *Pizzola v. Planning and Zoning Commission of the Town of Plainville*, 167 Conn. 202, 208 (1974).
[26] *Id.* (emphasis added).
[27] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[28] *Id.*
[29] *Id.*
[30] *Id.*
[31] *Id.*
[32] *Town of Preston v. Connecticut Siting Council,* 20 Conn. App. 474 (Conn. App. 1990); *City of Torrington v. Connecticut Siting Council,* 1991 Conn. Super. LEXIS 2084 (Conn. Super. 1991).

Council or any party or intervenor in this proceeding. His comments were filed pursuant to a request from the Council that is statutorily required when the Council commences a public hearing. Those comments were not submitted as pre-filed testimony for the DEP; the DEP has appointed a designee who is a voting member of the Council. Mr. Riese's comments were submitted into the record pursuant to the requirements under Conn. Gen. Stat. §16-50j, which imposes upon the Council a statutory duty to consult with and seek comments from other state agencies.

E. The hearing procedure was consistent with due process requirements.

On February 23, 2011 and March 28, 2011, Fairwind filed objections to the Council's notice of the hearing procedure and hearing program.[33] The objections related to the change in the order of cross examination of BNE, the inability of participants to cross examine Epsilon and Mr. Riese, the inability to file additional pre-filed testimony and the time limits and specific topics for cross examination.[34] On February 22, 2011, the Council issued a memorandum addressing how the evidentiary hearings in this matter would proceed.[35] The Council indicated that cross examination of BNE would be limited to topics relevant to the final decision to be rendered by the Council under Conn. Gen. Stat. §16-50p: public health and safety, environmental impacts and facility operation. Furthermore, the Council indicated that time for cross examination on the relevant topics would be limited pursuant to R.C.S.A. §16-50j-30, which states, "to avoid unnecessary cumulative evidence, the Council may limit the number of witnesses or the time for testimony upon a particular issue in the course of any hearing."[36]According to the state Supreme Court, "it is well established that unless administrative regulations are shown to be inconsistent with the authorizing statute, they have the force and effect of a statute."[37] Additionally, "it is well settled that parties to... quasi-judicial proceedings are not entitled to pre-trial discovery as a matter of constitutional right. Pre-trial discovery may be expressly authorized by statute, but, absent an express provision the extent to which a party to an administrative proceeding is entitled to discovery is determined by the rules of the particular agency."[38]

The Connecticut Supreme Court held that limitation of cross examination of witnesses does not violate due process and the Court has held repeatedly that the "procedures required by the UAPA exceed the minimal procedural safeguards mandated by the due process clause."[39] Furthermore, the Court stated that while the UAPA "provides that in contested cases a party may conduct cross examinations required for a full and true disclosure of the facts; it also provides that the agency shall, as a matter of policy, provide for the exclusion of irrelevant, immaterial or unduly repetitious evidence."[40] It is therefore well established that cross examination is subject to reasonable limitation. The test of cross examination is "whether there has been an opportunity for full and complete cross examination rather than the use made of that opportunity."[41] It is also well established that "due process requires not only that there be due notice of the hearing, but that at the hearing 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."[42] The Council endeavored to provide notice to parties and intervenors of the

---

[33] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[34] *Id.*
[35] *Id.*
[36] *Id.*
[37] *Webster Bank v. Oakley et al,* 265 Conn. 539 (2003).
[38] *Pet v. Department of Health Services, et al,* 228 Conn. 651 (1994).
[39] *Id.*
[40] *Id.*
[41] *Id.*
[42] *Connecticut Fund for the Environment v. Stamford,* 192 Conn. 247 (1984); *Palmisano v. Conservation Commission,* 27 Conn. App. 543 (Conn. App. 1992).

statutory time constraints for a decision on the petition, the time limits for cross examination and the topics relevant to the final decision to be rendered by the Council under Conn. Gen. Stat. §16-50p in the Council memorandum of February 22, 2011.

On March 7, 2011, the Council issued a memorandum addressing how the evidentiary hearing on March 15, 2011 would proceed.[43] The Council indicated that the hearing would commence with cross examination of parties and intervenors by the Council, petitioner and other parties and intervenors to accommodate travel plans for out of state witnesses.[44] Those accommodations were made for the travel plans of *Fairwind's* out of state witnesses. Fairwind had no objection to the hearing procedure at that time. On March 17, 2011, the Council issued a memorandum addressing how the continued evidentiary hearing on March 31, 2011 would proceed.[45] The Council indicated that the hearing would commence with cross examination of the petitioner by the Town of Prospect and continue with the cross examination of the remaining parties and intervenors by the Council, petitioner and other parties and intervenors.[46] According to the state Supreme Court, "constitutional principles permit an administrative agency to organize its hearing schedule so as to balance its interest in reasonable, orderly and nonrepetitive proceedings against the risk of erroneous deprivation of a private interest."[47] The rearrangement of the order of cross examination on the hearing program did not deprive Fairwind of a private interest; it provided Fairwind with an opportunity to make out of state travel arrangements for its witnesses.

Finally, with regard to Fairwind's objection to the hearing procedure on the basis of an inability to file additional pre-filed testimony, the Council allowed the submission of additional pre-filed testimony without the opportunity for cross examination beyond the established deadline of March 8, 2011 for all proceeding participants.[48] This included, but was not limited to, supplemental pre-filed testimony of Fairwind witness, William Carboni and supplemental pre-filed testimony of SPC witness, Andrey Kamenskiy.[49] According to the state Supreme Court, "it is not unconstitutional for the Council, in good faith to balance its statutory time constraints against a [party's] desire for more time to present their objections to [a] proposal."[50] In that case and in this matter, the Council accepted submissions from parties after the public hearings had ended providing additional opportunities for parties to voice their concerns. Therefore, the hearing procedure was consistent with due process requirements.

F. The resignation of Council Chairman Daniel F. Caruso during the pendency of this proceeding did not warrant a "mistrial."

On March 22, 2011, Attorney Jeffrey Tinley (Tinley), representing SPC, submitted a letter to the Council describing a conversation that had taken place between he and former Council Chairman Caruso (Caruso) in the chambers of Judge Caruso's probate court on March 18, 2011.[51] Tinley accused Caruso of engaging in ex parte communications in violation of Conn. Gen. Stat. §4-181. Upon receipt of the Tinley letter, Caruso resigned as Council Chairman on March 24, 2011. During the evidentiary hearing held on March 31, 2011, the Council considered a Motion for Mistrial or in the Alternative for Continuance,

---

[43] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[44] *Id.*
[45] *Id.*
[46] *Id.*
[47] *Concerned Citizens of Sterling v. Connecticut Siting Council,* 215 Conn. 474 (1990).
[48] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[49] *Id.*
[50] *Concerned Citizens of Sterling v. Connecticut Siting Council,* 215 Conn. 474 (1990).
[51] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).

Reconsideration and to Alter Schedule dated March 29, 2011 filed by Fairwind in response to the alleged ex parte communication.

In its motion, Fairwind cited to a state Supreme Court case in which the superior court judge assigned to a judicial civil trial matter engaged in ex parte communications.[52] A public hearing on a petition for a declaratory ruling filed under the UAPA and the PUESA is not a trial; it is an administrative proceeding. Furthermore, Council decisions are rendered by nine voting members rather than one judge. During the public hearing held on March 31, 2011, the Council denied Fairwind's motion for mistrial, motion for continuance and motion to alter the schedule and granted the motion for reconsideration.[53] As a result, the Council reaffirmed all of the 24 previous rulings in this proceeding.[54] Therefore, the resignation of Caruso as Council Chairman and the reaffirmation of the 24 rulings during Caruso's chairmanship cured any alleged predisposition upon which to judge the merits of this petition by Caruso and the other eight Council members.

G. Chairman Stein met the requirements to participate in the deliberations and vote on this petition.

Robert Stein was named as Acting Chairman of the Council on March 24, 2011. He presided over the evidentiary hearing held in this petition on March 31, 2011. At a public meeting of the Council held on April 18, 2011, Chairman Stein stated for the record that he read the transcripts, visited the site and reviewed the record in this proceeding and therefore, fully intended to participate in the deliberations and the final decision on this petition.[55] On March 21, 2011, the Council issued a memorandum indicating Chairman Stein had met the requirements under the UAPA to make an informed decision on the matter and that any party or intervenor who had objections should notify the Council in writing no later than May 2, 2011.[56] On April 29, 2011, the Council received an objection from Fairwind to the participation of Chairman Stein in the deliberations and vote on this petition pending receipt of information with respect to the nature and scope of Chairman Stein's site visit, as well as presenting an interpretation of the Council memorandum to indicate that Chairman Stein had already decided to vote in favor of the petition.

It is well settled that members of an administrative agency need not be present at public hearings in order to participate in decisions if the member acquaints themselves sufficiently with the issues raised and the evidence and arguments presented at public hearings in order to exercise an informed judgment.[57] Chairman Stein announced during a public meeting of the Council that he had read all of the transcripts, reviewed the entire record and conducted a site visit. He met the requirement of sufficient acquaintance with the issues raised and the evidence and arguments presented at the public hearings in this matter to exercise an informed judgment.

Fairwind's objection sought information from the Council with respect to the nature and scope of Chairman Stein's site visit. Site visits are not required by the UAPA or the PUESA. The purpose of a site visit is to acquaint members with the property at issue; the purpose of a hearing is to afford the parties the

---

[52] *See Abington Ltd. Partnership v. Heublein,* 246 Conn. 815 (1998).
[53] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[54] *Id.*
[55] Connecticut Siting Council, Meeting Minutes, April 18, 2011.
[56] Connecticut Siting Council, Petition 980, *available at* http://www.ct.gov/csc/cwp/view.asp?a=2397&q=468692 (last visited May 4, 2011).
[57] *New Haven v. Public Utilities Commission,* 165 Conn. 687 (1974); *Dana-Robin Corp. v. Common Council of the City of Danbury,* 166 Conn. 207 (1974); *Loh v. Planning and Zoning Commission of the Town of Fairfield,* 161 Conn. 32 (1971).

opportunity to present and to rebut evidence.[58] Site visits are neither a hearing nor an integral part of the hearing process.[59] Courts recognize that site visits, although not required by statute, may be necessary for evaluation of property and that site visits are an appropriate investigative tool.[60] Chairman Stein publicly disclosed that he had read the transcripts, reviewed the entire record and conducted a site visit. Therefore, Chairman Stein met the requirements of the UAPA and the Supreme Court to exercise an informed judgment on this petition.

[58] *Manor Development Corp. v. Conservation Commission,* 180 Conn. 692 (1980); *Grimes v. Conservation Commission of the Town of Litchfield,* 49 Conn. App. 95 (Conn. App. 1998);
[59] *Grimes v. Conservation Commission,* 243 Conn. 266, 277-9 (1997).
[60] *Id.*

PETITION NO. 980 - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut.	}	Connecticut Siting Council May 16, 2011

Dissent on Conclusions of Law § B
Kenneth L. Braffman
Designee of the Department of Public Utility Control

This dissent is limited to two rulings of the Siting Council in this proceeding: 1) the February 24, 2011, Ruling granting the February 16, 2011, Motion for a Protective Order (Motion) filed by BNE and, 2) the March 31, 2011, Ruling reaffirming that decision in response to a Motion to Reconsider filed by FairwindCT on March 28, 2011. The subject of the Motions and Rulings are the ice throw setback considerations relating to GE's turbine for which BNE sought approval. Section B of the Draft Conclusions of Law (Draft) is entitled "The PUESA does not require public disclosure of proprietary information." This is a correct statement; however, in my opinion, the Council's ruling on the information and application of the law to this information is incorrect.

I dissent with the Council's rulings on this matter because the information as to GE's setback requirements is already publicly available and therefore is not exempt from public disclosure. How is it possible for data or information to be exempt from public disclosure as a trade secret if it is already public? The Council's decision to protect something it knows to be publicly available for the reasons discussed in its Draft is wrong and injurious to the concept of transparency in government. To qualify as a trade secret defined by Connecticut law in Conn. Gen. Stat. § 1-210(b), the information must pass a two-prong test: 1) the information must derive an independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from their disclosure or use, and, 2) the information must be the subject of efforts that are reasonable under the circumstances to maintain secrecy.

The affidavit in support of non-disclosure of the GE setback boundaries is woefully lacking in information as to how that information has an economic value.[1] The Council never tested the assertions regarding the information as to either intrinsic economic value or as to being secret.[2]

On March 28, 2011, FairwindCT, Inc filed a Motion for Reconsideration of the Council's Ruling (Reconsideration Motion). The Reconsideration Motion cited to a website of the New York State Public Service Commission for the fact that the information is in the public domain and entitled to be disclosed on the public record herein. The Reconsideration Motion also included an affidavit from an attorney stating that the information on the public website is in fact the exact same information that the Council

---

[1] For instance, the danger and distance of ice-throw risk from the turbine blades does not facially appear to be the type of information from which an economic value can be derived; GE's engineering process that goes into making turbine blades that have particular attributes certainly would be. Further, in my opinion, there is an overwhelming public interest that this information be publicly disclosed in any event.

[2] Conn. Gen. Stat. §1-210(b) states that the trade secret information sought to be protected must be the " . . .subject of efforts that are reasonable under the circumstances to *maintain* secrecy . . ." . (emphasis added)

withheld from public disclosure. Important to the discussion here is that the information on the public website nevertheless is stamped "Privileged and Confidential".

Notwithstanding this affidavit, the Council voted to reaffirm its Ruling. In so doing, it relied on the case of Lash v. Freedom of Information, et al., 300 Conn. 45 (2011), mainly for the proposition that a document that is marked "confidential" creates a presumption of confidentiality.[3] While the Lash case does indeed stand for the proposition that the Draft recites, it is not a ruling or holding that can be applied to this case. Presumptions are merely legal inferences, to be used only until other facts are known. Indeed, a presumption of fact is *not* evidence; it is a legal device that operates only in the *absence* of evidence. Once evidence of a fact that rebuts the presumption is introduced, the presumption is entirely dissipated. BLACK'S LAW DICTONARY 1186 (6th ed. 1993). The Council's ruling herein is wrong in that it put greater weight on a presumption rather than a fact. It allowed the presumption of secrecy to trump the known fact of public availability.

For the above reasons, I dissent from the Council's rulings with regard to the public disclosure of GE's setback requirements for the wind turbines proposed to be sited herein.

[3] Ironically, the Court's ruling was only with regard to whether the Freedom of Information Commission (FOI) abused its discretion is assessing a civil penalty against a public official – not as to whether the records should be protected. The Court had, in a previous case, affirmed the final FOI decision ordering disclosure of the requested records. See Director, Dept. of Information technology v. FOI, 274 Conn. 179, 181-83, 874 A.2d 785 (2005).

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

May 16, 2011

TO: Classified/Legal Supervisor
980110223
Waterbury Republican American
389 Meadow Street, P.O. Box 2090
Waterbury, CT 06722

FROM: Lisa A. Fontaine, Fiscal Administrative Officer

RE: **PETITION NO. 980** - BNE Energy, Inc. petition for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut.

Please publish the attached notice as soon as possible, but not on Saturday, Sunday, or a holiday.

Please send an affidavit of publication and invoice to my attention.

Thank you.

LAF

CSC
CONNECTICUT SITING COUNCIL

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

NOTICE

Pursuant to General Statutes § 4-176(h) and 4-180(c) the Connecticut Siting Council (Council) announces that, on May 12, 2011, the Council issued Findings of Fact, an Opinion, Decision and Order, and Conclusions of Law, denying a petition from BNE Energy, Inc. for a declaratory ruling 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 located at 178 New Haven Road, Prospect, Connecticut. This petition record is available for public inspection in the Council's office, Ten Franklin Square, New Britain, Connecticut.