STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition of BNE Energy Inc. for a Declaratory Ruling for the Location, Construction and Operation of a 4.8 MW Wind Renewable Generating Project on Winsted-Norfolk Road in Colebrook, Connecticut ("Wind Colebrook North")	**Petition No. 984**
	March 8, 2011

FAIRWINDCT, INC.'S SECOND SET OF INTERROGATORIES TO BNE ENERGY INC.

FairwindCT, Inc. ("FairwindCT") requests that the petitioner, BNE Energy Inc. ("BNE") respond to the following interrogatories:

1. Please provide copies of any documents related to your Scoping Meeting with CL&P.

2. Please provide copies of any documents related to your Application Request and Application Review with CL&P.

3. Has the Feasibility Study with CL&P been completed? If so, please provide a copy of that study. If not, when do you expect it to be completed?

4. Has the System Impact Study with CL&P been completed? If so, please provide a copy of that study. If not, when do you expect it to be completed?

5. Has the Transmission Study with CL&P been completed? If so, please provide a copy of that study. If not, when do you expect it to be completed?

6. Has the final report on bat acoustic studies been completed? If so, please provide a copy. If not, when do you expect it to be completed?

7. Please provide a shadow flicker analysis that analyzes the cumulative effects of both Wind Colebrook South and Wind Colebrook North on "receptors" in the surrounding area.

8. Please provide a noise evaluation that analyzes the cumulative effects of both Wind Colebrook South and Wind Colebrook North on noise levels in the surrounding area.

9. Do you plan to revise any of the site plans provided with your petition? If so, please provide a copy.

10. If you plan to revise site plans but have not yet completed those plans, please describe the anticipated revisions.

11. Have you offered to compensate any abutting property owners for the risk that your turbines may fall onto their property? If so, please provide the property owners' names and addresses and state when the offer was made.

12. In Exhibit B to your petition, dated September 30, 2010, your consultant VHB states that it "reviewed historic and cultural resources" and determined that no "historic resources listed or eligible for listing on the National Register of Historic Places, or Archeological Sensitive Areas [exist] at or within 1.5-mile of the proposed wind turbines." Please describe the "review" done by VHB that resulted in that erroneous conclusion.

13. Please provide AUTOCAD dwg files for all site plans included in the petition.

14. Please provide a list of all property lines, residences and related structures, roads, driveways, located within 984 feet of each proposed turbine location.

15. Please provide a list of all property lines and residences located within 0.5 mile of each proposed turbine location.

16. Please provide a list of all property lines and residences located within 1 mile of each proposed turbine location.

17. Please provide a list of all property lines and residences located within 1.25 miles of each proposed turbine location.

18. Please provide a list of all property lines and residences located within 1.5 miles of each proposed turbine location.

19. Please provide a copy of your agreement with David Battistoni and/or Rock Hall Associates, LLC.

20. Please provide a copy of the noise emission characteristics of the GE 1.6 MW turbines you reference in your responses to the Council's first set of interrogatories.

21. Please provide a copy of any other GE materials relevant to the proper siting of its 1.6 MW turbines, guidelines and policies, including but not limited to materials regarding ice and blade throw, fire safety, noise, wildlife impacts, fall zones and proper siting to avoid turbulence.

22. Please provide GPS coordinates of each noise monitoring location identified in your Noise Evaluation.

23. If your consultant monitored noise at any other location, please provide GPS coordinates of each additional location and provide the data collected.

24. As we heard on March 3, 2011 during the Evidentiary Hearing before the Connecticut Siting Council in Petition 980, GE may have performed more than one Mechanical Loads Assessment ("MLA") for siting the turbines in the petition. Please provide a copy of any MLA performed by GE with respect to this site.

25. Please provide the name(s) of GE personnel with whom you have been in contact in the course of preparing the instant petition, including, but not limited to, the author of any MLA prepared by GE.

26. Please identify the expected production time for turbines once a contract is signed.

27. Please provide a copy of any contract or agreement between you and GE that requires that you maintain the confidentiality of certain information produced or owned by GE that you have filed under seal in Petition 980. (In the alternative, provide the portion of any such contract or agreement containing those provisions.)

28. In Exhibit L to your petition, "Breeding Bird Surveys for the Colebrook Wind Resource Area Litchfield County, Connecticut," Western EcoSystems Technology, Inc. ("WEST") reports results of summer breeding bird surveys and incidental wildlife observations at the Colebrook Wind Resource Area ("CWRA") (the "Bird Survey"). In the Bird Survey, were the breeding bird survey points located in the vicinity of the proposed turbines in a manner that would adequately collect data to analyze breeding bird use within 500 meters in all directions of each proposed turbine location?

29. In the Bird Survey, how many survey points were located within 100m and 500m in all directions, of the southernmost turbine?

30. Why was breeding bird data collected at only 12 points?

31. Why were no bird surveys conducted from late May to mid June?

32. Why were no data collected on spring and fall migratory bird use?

33. Please describe the impact of the "unidentified passerine" observations on reported species richness and species diversity (Exhibit L).

34. Please provide the times, and field conditions (temperature, precipitation, visibility) for each of the 12 observation points each day that field data on bird use were collected.

35. What is the likelihood that all of the unidentified passerine observations in the Bird Survey were of a single species?

36. Which data points were situated to capture bird use in the open water/emergent wetland habitats?

37. Why were no nocturnal or callback surveys conducted for Northern Saw-whet Owl (*Aegolius acadicus*), Sharp-shinned Hawk (*Accipiter striatus*), Northern Goshawk (*Accipiter gentilis*) or American Bittern (*Botaurus lentiginosus*)?

38. The Bird Survey states that no state-listed species were observed during the survey. However, the Broad-winged Hawk (*Buteo platypterus*), a state-listed species of special concern was observed on the site according to Table 4. Please provide details on site use by this species as well as an analysis of the potential impacts the proposed wind development might have on Broad-winged Hawk.

39. It is stated in both the executive summary as well as the discussion section of the Bird Survey: "*The results of the surveys were characteristic of forested and open grassland areas of central Connecticut*". However, the subject site is not located in central Connecticut but rather the northwest highlands (a.k.a. Litchfield Highlands). Please provide a regionally-relevant assessment of the survey results.

40. Please quantify (in acres) and illustrate on an aerial photograph the direct forested habitat loss as well as the potential indirect habitat loss (through behavioral avoidance and habitat fragmentation) at each turbine location as discussed in the executive summary of the Bird Survey.

41. As stated in the executive summary of the Bird Survey, one of the principle objectives of the study was to: "*provide site-specific resource and use data that would be useful in evaluating potential impacts from the proposed wind energy facility*". What site specific bird data was collected at Colebrook North in order to achieve this study objective?

42. Which habitat type surveyed on the Colebrook South site was used to assess the potential bird use of the Mill Brook perennial stream system?

43. Given the contention that bird use of Colebrook North is substantially the same as Colebrook South, is there any reason not to assume that Broad-winged Hawk (*Buteo platypterus*), which was observed at Colebrook South, also inhabits the Colebrook North site?

44. Please provide the professional experience of Vanasse Hangen Brustlin, Inc. ("VHB") field personnel in conducting habitat assessments for forest-roosting bats.

45. Please state the number and species diversity of any snags identified by VHB personnel during the Vegetation Assessment.

46. Please describe the specific methodology employed by VHB to document "the occurrence of burrows, tree cavities, snags, and vernal pools" as stated in the Terrestrial Wildlife Habitat & Wetland Impact Analysis (Exhibit I, pg 4).

47. Why was the DEP's recommendation to have a herpetologist conduct an on-site survey for smooth green snake ignored (Exhibit I)?

48. Please provide the education and experience in conducting bat acoustic surveys and call analysis for all members of the WEST field team in Connecticut.

49. Please explain the justification for excluding the possibility that eastern small-footed myotis could occupy the CWRA project site (Exhibit K).

50. Please explain how the 96.2% acoustic sampling rate was calculated (Exhibit K, pg. 7).

51. Please describe the specific calibration methods and sensitivity settings used by WEST on the CA1 and CA2 detector systems (Exhibit K).

52. Please describe the specific calibration methods used by WEST to determine the relative sensitivity of the CA1 and CA2 detector systems.

53. Please identify what calibration methods were used by WEST to confirm the proper functioning of the CA2 detector system at the beginning and end of the acoustic monitoring survey period.

54. Please compare the effective range limit of the bat detector system used by WEST in comparison to the nacelle height of the proposed wind turbines.

55. Please describe the temporal pattern of bat activity at the CA2 detector (independently of the CA1 detector).

56. Please identify how the CA1 and CA2 sampling sites were chosen.

57. Please identify the state or federal sampling guideline that was used to develop the sampling protocol at the CWRA project site (Exhibit K).

58. Does the acoustic sampling protocol used at the CWRA project site meet the temporal, spatial, or vertical sampling criteria identified by the Wind Siting Guidelines of the Pennsylvania Game Commission (Exhibit K)?

59. Does the acoustic sampling protocol used at the CWRA project site meet the temporal, spatial, or vertical sampling criteria identified by the pre-construction monitoring guidelines of the New York Department of Environmental Conservation (Exhibit K)?

60. Does the acoustic sampling protocol used at the CWRA project site meet the temporal, spatial, or vertical sampling criteria identified by the pre-construction monitoring guidelines for Tier 4 wind projects of the New Jersey Department of Environmental Protection (Exhibit K)?

61. Please explain why red bats were limited to the MF call group (30kHz - 40kHz) when WEST states in their report that "eastern red bats typically emit calls with minimum frequencies between 30 and 43 kHz (J. Szewczak, pers. comm.)" (Exhibit K, pg. 7).

62. In the Interim Report Discussion, WEST states that some of the HF call activity may have been due to little brown myotis, a species they categorize as an MF species. If both MF species are also HF species, what value is the MF call group?

63. Given that 3,004 calls were from the MF bat group, and given that only two species are in the MF bat group (little brown myotis and eastern red bat), and given that WEST only identified 5 calls from the eastern red bat, is it the opinion of WEST that 2,999 calls were from little brown myotis?

64. In the Discussion, WEST states that "the majority of MF activity during the study period was comprised of little brown bats" (Exhibit K, pg. 13). Please justify this statement.

65. Given that WEST's species-specific analysis only identified 0.1% of the MF bat calls and 0.2% of the LF bat calls, do you feel the conclusions made regarding eastern red bat and hoary bat activity at the CWRA project site are indicative of the overall activity of these species?

66. Was there a meteorological tower at the CWRA project site throughout the entire acoustic monitoring survey period? If yes, please explain why ground microphone systems were used to monitor bat activity when there was a meteorological tower on site that could have sampled within the rotor swept area.

67. Please explain how up to 95% of the bat activity is attributed to little brown myotis and big brown bats despite WEST's conclusion that "the CWRA is not in the vicinity of any known bat colonies" (Exhibit K, pg. 13).

68. Are upland sites with perennial streams and water habitat are critical roost habitat for bat species?

69. Are hydric habitats (including wetlands) a landscape-level feature that consistently associated with high levels of bat activity?

70. Are permanent water sources and wetland habitats used as foraging and/or roosting habitat by bats?

71. Please summarize the effort that was conducted to reach the conclusion that the "CWRA is not in the vicinity of any known bat colonies or features likely to attract large numbers of bats" (Exhibit K, pg. 13).

72. Please justify your conclusion that the CWRA is not in the vicinity of any features likely to attract large numbers of bats given the large beaver pond and multiple forested wetlands at the project site.

73. Given that the vast majority of bat mortality occurs during the fall migratory period, please explain how one can conclude the likely level of impact without providing data on the bat activity during the fall migratory period.

74. Given that the objective of the acoustic monitoring survey was to "characterize seasonal and spatial activity by bats within the CWRA during the maternity season", please justify why none of the six habitat types identified by VHB at the Colebrook North project site was surveyed for bat activity.

75. Given that the objective of the acoustic monitoring survey was to "characterize seasonal and spatial activity by bats within the CWRA during the maternity season", please explain why the survey missed over half of the maternity season.

76. Given the abundance of large diameter hardwood trees the Colebrook North project site, what effort was made to document tree-roosting bat activity in the secondary-growth northern hardwood forest habitat?

77. Given the high density of American beech snags at the Colebrook North secondary-growth northern hardwood forest habitat, what effort was made to document tree-roosting bat activity in the western portion of the Colebrook North project site?

78. Given the presence of perennial flowing water through the project site, what effort was made to document foraging bat activity along the wetland habitat in general and the Mill Brook specifically?

79. Given that the Colebrook North project site was unique in containing large diameter hardwood tree species and a perennial flowing water system, please justify why no bat activity monitoring was conducted at this project site.

80. What is the source of the site topography shown on the plans (Exhibit F)? What is the level of accuracy and precision?

81. What is the source of the wetland boundary locations shown on the plans (Exhibit F)? What is the level of accuracy and precision?

82. How were the wetland flags placed in the field by VHB located and transferred to the plans (Exhibit F). What is the level of accuracy?

83. Do all of the plans conform to A-2 and T-2 standards (Exhibit F)? If not, which ones do not?

84. How will the slash and stumps from clearing 11+ acres of trees be handled? Will stumps be buried on-site? If chipped, where is the stockpile area and how much volume will be generated?

85. Where is the dewatering wastewater treatment detail?

86. How much earthwork (total volume of cut and fill) is required to execute the plans?

87. Is the total earthwork balanced, or will there be a net import or export of earth materials?

88. How much specialized earth material (bank-run gravel, process gravel, rip-rap, etc.) will be required, in terms of yardage and truck trips?

89. What is the total volume of topsoil proposed to be stockpiled for use in site restoration? Where will it be stockpiled? Will any be exported from the site?

90. Why is no grading shown for the entire downslope blade at each assembly area?

91. Per Construction Schedule Note 10 on Sheet C-200 (Exhibit F) will any off-site grading be required? If so, have grading rights been obtained? If they are not available, how will this affect the plans?

92. Please explain the conflict between Construction Schedule Note 9 on Sheet C-200 (Exhibit F) and the grading shown for each of the tower and blade assembly areas, the temporary sediment trap and the road side slopes.

93. Where are the discharge points from the temporary diversions shown on Sheet C-201 (Exhibit F), what is the drainage area for each of the discharge points and what measures will be used for sediment control and stabilization at these outlets?

94. Please explain the discrepancy between the use of 1:1 slopes and the specified erosion control and stabilization measure of temporary seeding on Sheets C-201, C-202, and C-203 (Exhibit F)?

95. Please explain the discrepancy between the design of the silt fence north of the tower assembly area for Turbine 1 and the requirements of the CT Erosion and Sediment Control Manual

96. How large is the drainage area discharging to the unlabelled structure west of the road @ Station 1 + 00 on Sheet basin shown on Sheet C-202 (Exhibit F)? What is the slope of the berm for this basin? Where is the outlet structure or weir?

97. Please explain the discrepancy between the design of the silt fence throughout Sheet C-202 (Exhibit F) and the requirements of the CT Erosion and Sediment Control Manual.

98. What is the minimum separating distance between Wetland 2 and the proposed clearing limits?

99. Please explain how temporary seeding will be adequate to stabilize the slope just south of the property line on C-203 (Exhibit F).

100. Please explain the discrepancy between the design of the silt fence throughout Sheet C-203 (Exhibit F) and the requirements of the CT Erosion and Sediment Control Manual.

101. How will run-on from upslope areas, groundwater seepage and slumping be controlled on the cut slopes above the blade laydown area on Sheet C-203 (Exhibit F)? If it is to be intercepted and diverted, where are those facilities on the plan, where will the discharge points be, what is the total area that drains to each of the discharge points, how will they be stabilized, what erosion control measures will be required, and how will the grading accommodate these features?

102. What drainage measures are currently present on the south side of Rock Hall Road?

103. Where will the drainage ditch on the north side of the access road on Sheet C-204 (Exhibit F) between Sta. 2 + 75 and 0 + 00 discharge? Is there a drainage system in this area to accommodate the flow? Has its capacity been analyzed? If so, what are the results? If not, how can BNE assert that its proposal will have no adverse impacts?

104. Where will the drainage ditch on the south side of the access road on Sheet C-204 between Sta. 1 + 50 and 0 + 00 discharge? Has its capacity been analyzed? If so, what are the results? If not, how can BNE assert that its proposal will have no adverse impacts?

105. How large is the drainage area that discharges to the proposed culverts at the wetland crossing shown on C-204 (Exhibit F)? What are the 50 year return frequency peak flows to these culverts?

106. Please explain the discrepancy between the design of the silt fence throughout Sheet C-204 (Exhibit F) and the requirements of the CT Erosion and Sediment Control Manual.

107. How much earthwork is required to execute the grading plans shown on Sheets C-201-204 (Exhibit F)? If the earthwork is not balanced, will there be a net cut or fill and how much material will be imported or exported from the site? Where are the soil stockpile areas?

108. How will the discharge from the temporary diversion ditch be conveyed down the slope @ Station 1+ 75 of the access road, to the roadside ditch?

109. Why doesn't the erosion control barrier downslope of the access road Station 1+00 and 5+00 conform to the requirements of the Erosion Control Manual?

110. Why doesn't the stabilization of the slopes for the Tower assembly area on Sheet C-201 (Exhibit F) conform to the requirements of the Erosion Control Manual.

111. Why is no grading shown for western leg of the blade assembly area on Sheet C-201 (Exhibit F)? Why doesn't this grading conform to the requirement that the blade assembly area be graded flat to within 6" shown on the plans?

112. Will a support building be provided at this site? If so, please provide site plans (including grading, erosion control, access, utilities, sanitary facilities) for the support building. How much site disturbance be required to make this facility operational? Was this included in the area of disturbance calculations? If so, please provide a plan and calculations demonstrating this.

113. If no support building will be provided at this site, how will sanitary facilities and utilities be provided for maintenance work?

114. How will the downslope end of the blade be supported in the assembly of the blade for Turbine 1? What operations and equipment are required to assemble the blade? Why is the apparent operational space around each of the vanes of the blade the same?

115. Given the 16' grade differential shown on Sheet C-302 (Exhibit F), how will the southern blade tip be supported during assembly of the blade for Turbine 2?

116. Given the 24' grade differential shown on Sheet C-303 (Exhibit F), how will the southwestern blade tip be supported during assembly of the blade for Turbine 3?

117. Why aren't the culverts at the wetland crossing shown on the road plan and profile Sheet C-304 (Exhibit F) as is standard practice?

118. Given the very steep grade of the access road to Turbines 2 and 3 (12.26% for over 200') please provide supporting calculations to demonstrate that the roadside ditches are stable.

119. Why are no sediment control measures shown at the discharge points from the roadside ditches to the wetlands at the crossing?

120. How will the permanent roadside ditch on the north side of the access road west of the wetland crossing be stabilized? Why are no erosion control or water quality measures provided?

121. Why is the permanent access road widest at the wetland crossing (Exhibit F, Sheet C-311)?

122. Please explain the conflict between the Petition, which states that the site will be restored to its pre-construction condition (forested), and the restoration plan (Exhibit F, Sheet 312) which shows only 3 trees and 30 shrubs to restore a disturbed area of approximately 10 acres?

123. What will be the impact on forest-interior birds and other disturbance sensitive species of this permanent conversion of forest to meadow?

124. Where will the temporary stream crossing/temporary bridge crossing detail shown on sheet C-503 (Exhibit F) be used?

125. Where is the centerline of the two intermittent watercourses at the proposed wetland crossing detailed on Sheet C-503 (Exhibit F)?

126. Please explain the internal discrepancies in the Wetland Crossing detail on Sheet C-503 (Exhibit F) with respect to the culvert type, size and length and provide a revised detail that is consistent.

127. Why was no construction sequence provided for the Wetland Crossing, particularly with respect to accommodating the existing flow during construction, dewatering, and sediment control to protect the downstream watercourse and aquatic resources?

128. Where will the wetland crossing detail referenced on C-503 (Exhibit F) and shown as Detail 2 on Sheet C-504 (Exhibit F) be used?

129. Why doesn't the temporary sediment basin conform to the requirements of the Erosion Control Manual with respect to height, width and slope of the containment berm? Where is outlet weir? How will the flow be conveyed to a stable outlet?

130. Please provide a plan and profile detail and construction sequence for the underground electric trenching required?

131. How will the side slopes and bottom of the temporary roadside ditches be stabilized? What runoff velocities will occur for the 10 yr through 100 year storms and how will the ditch bottom and sides be stabilized? Please provide calculations showing that the ditches will be stable and have adequate capacity to pass the design storm.

132. Why are there no erosion control or water quality measures at the outlets from the temporary roadside ditches to the watercourse at the wetland crossing?

133. How will the flow from the ditch shown on the south side of the permanent access road on Sheet C-310 (Exhibit F) be stabilized downslope of the end of the gravel section at approx. elevation 1318?

134. Why are no measures shown to stabilize the ditch shown on the north side of the permanent access road on Sheet C-310 (Exhibit F) be stabilized?

135. What measures are included in the design to control seepage and stabilize cut slopes in areas with a hardpan, or where seasonal high groundwater is likely to be encountered?

136. What is the drainage area upslope of the low point on the crane assembly access road to Turbine 1. How will runoff be controlled at this point during construction and how will sediment be removed from the runoff?

137. Why is there a discrepancy between the Erosion Control narrative and the plans with respect to stabilization of slopes steeper than 2:1?

138. How will the success of the proposed restoration and enhancement areas be monitored and what plans are in effect to address any remedial measures that may be required.

139. Please provide calculations demonstrating the adequacy of the proposed temporary sediment basins.

140. Can you direct us to the detail for sediment control for dewatering wastewaters?

141. Can you direct us to the calculations for sizing what appears to be a sediment basin west of Turbine 2 (Exhibit F)?

142. What financial assurances will be put in place to ensure that the proper erosion controls are installed and maintained, and that the site is restored as shown? If you propose bonding or other surety, what is the amount you propose?

143. Do you have a permit under the Inland Wetlands and Watercourse Act CGS §§22a-36 to 22a-45(a) for Wind Colebrook North?

144. If the answer to the previous question is: no, do you intend to apply for one? If not, why not? If so from which authority?

145. If you intend to apply, when do you intend to do so?

146. If you have already received and Inland Wetlands and Watercourse Permit, please attach a copy of the permit.

By: _____
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CERTIFICATION

I hereby certify that a copy of the foregoing document was sent by U.S. mail to the following service list on the 8th day of March, 2011:

Carrie L. Larson
Paul Corey
Thomas D. McKeon
David M. Cusick
Richard T. Roznoy
David R. Lawrence and Jeannie Lemelin
Mary and Jeff Stauffer
Walter Zima

and a copy was sent via email to:

John R. Morissette
Christopher R. Bernard
Joaquina Borges King

_____
Denise L. Myron