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 Flagg Hill Road in Colebrook, Connecticut ("Wind Colebrook South")s	**Petition No. 983**
	April 7, 2011

PETITIONER BNE ENERGY INC.'S INTERROGATORY RESPONSES TO FAIRWINDCT, INC.'S THIRD SET OF INTERROGATORIES

Petitioner BNE Energy Inc. ("BNE") submits the following responses to the Third Set of Interrogatories issued by FairwindCT, Inc. dated March 30, 2011:

Q1. Was only one Mechanical Loads Assessment conducted for this site? If not, please provide copies of all Mechanical Loads Assessments conducted for this site.

A1. See BNE response to Q23 of FairwindCT's second set of interrogatories dated March 15, 2011.

Q2. Please provide dimensions for the 1.6-82.5 turbine, including width of the turbine tower, height, width and depth of the nacelle, and the width of the blades at the widest point.

A2. The requested document is being filed separately pursuant to a motion for protective order and under seal.

Q3. Please provide dimensions for the 1.6-100 turbine, including width of the turbine tower, height, width and depth of the nacelle, and the width of the blades at the widest point.

A3. The requested document is being filed separately pursuant to a motion for protective order and under seal.

Q4. You indicate that Michael Klemens be conducting an on-site study for the smooth green snake in your response to Question 86 of FairwindCT's Second Set of Interrogatories, but Mr. Klemens' prefiled testimony makes no reference to the smooth green snake. Will Michael Klemens be conducting an on-site study for the smooth green snake?

A4. Mr. Klemens will assess habitat for the smooth green snake and determine any impacts and mitigation.

Q5. Please provide the approximate date on which the results of all of Michael Klemens' on-site studies will be reported in final form.

A5. Mr. Klemens expects to report on-site studies on or about April 21, 2011.

Q6. Please provide the approximate date on which the results of the "additional acoustic bat study" being conducted by Western EcoSystems Technology, Inc. ("WEST") will be reported in final form.

A6. Additional acoustic bat surveys are planned to be completed at Colebrook South between April 15 – October 31, 2011. In addition, BNE has committed to complete a two year post-construction bat fatality monitoring survey. The survey will be filed with the Siting Council and DEP upon completion, expected to be on or about December 15, 2011.

Q7. During this "additional acoustic bat study," will the Anabat detectors be placed on the met tower?

A7. No. Placement of an elevated detector would require lowering the meteorological ("Met") tower which could damage instrumentation and result in study delay. Also, a current conclusion reached by biologists working in the field of wind-energy/wildlife interactions is that bat activity indices derived from pre-construction acoustic studies show a rough correlation with post-construction fatality patterns (see final bat report and NWCC 2010). This conclusion is based on ground-based anabat sampling. In addition, while current information suggests that LF bats such as hoary bat may be detected at different rates at elevated vs. ground-based detectors, information collected at sites where both elevated and ground-based detectors are present have generally shown a greater overall activity rate at ground-based stations. Additionally, ground-based Anabat sampling has been a standard component of pre-construction acoustic bat monitoring at commercial wind energy sites for several years.

Q8. Please provide the approximate date on which the results of the "migratory bird study" being conducted by WEST will be reported in final form.

A8. Additional bird use surveys will be completed at Colebrook South during the spring and fall migration periods of 2011. These studies will provide data on bird species composition and levels of use during the migration seasons. In addition, BNE has committed to complete a two year post-construction fatality monitoring study. The studies will be filed with the Siting Council and DEP upon completion, expected to be on or about December 15, 2011.

Q9. In response to Question 46 in FairwindCT's First Set of Interrogatories, you referred to a 13.4-month period of wind data collection and did not provide the information by days, as requested. Please provide the <u>number of days</u> on which wind speeds were lower than 3.5 m/s for the period 1/1/09 through 12/31/09 and 1/1/10 through 12/31/10.

A9. BNE's wind data has been provided and is available for review at the Siting Council's offices subject to the protective order entered in this proceeding.

Q10. Please provide the number of hours on which wind speeds were lower than 3.5 m/s for the period 1/1/09 through 12/31/09 and 1/1/10 through 12/31/10.

A10. BNE's wind data has been provided and is available for review at the Siting Council's offices subject to the protective order entered in this proceeding.

Q11. Have employees of Civil 1 or any other engineering firm worked on the site plans with Zapata? If so, please provide each engineer's name and employer.

A11. BNE objects to this interrogatory because the information sought is irrelevant to this proceeding. Subject to this objection and without waiving the same, Civil1 has worked closely with BNE and Zapata concerning the Colebrook South property and project.

Q12. Question 50 of FairwindCT's First Set of Interrogatories asked for a definition of "fall zone requirements." Your lengthy response to that interrogatory did not answer the question. Again, please define the phrase "fall zone requirements."

A12. BNE objects to this interrogatory because it has been asked and answered.

Q13. Please provide a list of all property lines, residences and related structures, roads, driveways, located within 898 feet of each proposed turbine location.

A13. BNE objects to this interrogatory because it has been asked and answered.

Q14. Question 26 of FairwindCT's Second Set of Interrogatories contained a typographical error. Please confirm that you have provided a copy of any contract or agreement that requires you to maintain confidentiality of certain information produced or owned by GE that you have filed under seal in Petition No. 983.

A14. BNE objects to this interrogatory because it has been asked and answered.

Q15. Does the confidentiality agreement between BNE and GE contain a provision excluding from protection information that has been put into the public domain through no fault of BNE?

A15. BNE objects to this interrogatory because it has been asked and answered. Specifically, BNE has filed its confidentiality agreement under seal and pursuant to the protective order in place in this proceeding. The terms of that agreement are available for parties and intervenors to review at the Siting Council's offices.

Q16. In response to Question 28 of FairwindCT's Second Set of Interrogatories, you stated that at the time the "breeding bird survey" began in 2010, the location of the southernmost turbine on the site "was not being considered by BNE." You make a similar

statement in response to Question 71 of FairwindCT's Second Set of Interrogatories. Please explain those statements and provide information on why and when the decision to add or change the turbine location was made.

A16. BNE objects to this interrogatory because the information sought is irrelevant to this proceeding. Subject to this objection and without waiving the same, see BNE response to Q20 of FairwindCT's first set of interrogatories dated March 15, 2011.

Q17. Who will conduct the post-construction bird and bat fatality monitoring you propose to do?

A17. BNE has not retained a consultant to perform the post-construction bird and bat fatality monitoring at this time.

Q18. Will the results of the post-construction bird and bat fatality monitoring you propose to do be made easily accessible to the general public and to local conservationists? Will the results be posted online?

A18. BNE objects to this interrogatory because the information sought is irrelevant to this proceeding. Subject to this objection and without waiving the same, BNE will file the post-construction bird and bat fatality monitoring reports with the Siting Council and DEP.

Q19. In response to Question 37 of FairwindCT's Second Set of Interrogatories, you stated "To our knowledge only three broadwinged hawks have been documented as fatalities at 76 operating wind facilities in the US (WEST unpublished data)." Please provide copies of that unpublished data. If you refuse to do so, please provide the names, locations, turbine type and size and time of year for the wind facilities at which those three broadwinged hawks died.

A19. BNE objects to this interrogatory because this information sought is irrelevant to this proceeding. BNE further objects to this interrogatory because the requested information is publicly available.

Q20. In response to Questions 53, 54 and 55 of FairwindCT's Second Set of Interrogatories, you objected on the basis that this project need not comply with the pre-construction monitoring guidelines in place in Pennsylvania, New York and New Jersey. Please confirm that you did not consult out-of-state pre-construction monitoring guidelines, despite the absence of such guidelines in Connecticut.

A20. BNE objects to this interrogatory because the question has been asked and answered. Specifically, BNE does not need to comply with guidelines from the states of Pennsylvania, New York or New Jersey since the Wind Colebrook South project is not located in any of those states.

Q21. Please confirm that the revised site plans, stormwater management plan and erosion and sediment control plan attached to Melvin Cline's prefiled testimony are the plans for which BNE is seeking the Council's approval.

A21. BNE objects to this interrogatory because it seeks a legal conclusion.

Q22. If you are still seeking approval for the site plans, stormwater management plan and erosion and sediment control plan included in Exhibits F, G and H to the petition, please respond to Questions 111-124, 136-132, 135, 140-142 of FairwindCT's Second Set of Interrogatories based on the site plans in Exhibit F.

A22. See objection to interrogatory Q21.

Q23. If you are no longer seeking approval for the site plans, stormwater management plan and erosion and sediment control plan included in Exhibits F, G and H, why have you not withdrawn those exhibits from your petition?

A23. See objection to interrogatory Q21.

Q24. In response to Question 13 of the Council's Pre-Hearing Interrogatories, Set One, you stated that "BNE is following GE's recommended setbacks for wind turbines adjacent to uninhabited land to ensure that the rotor blades are entirely on BNE property." Does GE have different recommended setbacks for wind turbines adjacent to uninhabited property than it does for inhabited property? If so, please explain how the recommendations differ and how GE defines "uninhabited" and "inhabited."

A24. BNE objects to this interrogatory because it seeks information that is confidential and proprietary. BNE notes that it has filed GE's setback guidelines with the Siting Council under seal and pursuant to the protective order in place in this proceeding.

Q25. Please provide GE's recommended setbacks for uninhabited land discussed in the preceding question and referenced in your response to the Council's interrogatories.

A25. See response to Q24.

Q26. Question 25 in the Council's Pre-Hearing Interrogatories, Set One, asked you the "approximate distance that parts of the blades could be thrown from a turbine" and asked you to provide calculations regarding that distance. You did not provide that information in your lengthy response. Please do so.

A26. BNE objects to this interrogatory because it has been asked and answered.

Q27. Does the "final" bat report attached to the prefiled testimony of David Tidhar replace the "interim" bat report attached to the petition as Exhibit L? If so, why have you not withdrawn Exhibit L from your petition?

A27. BNE objects to this interrogatory because it requests a legal conclusion.

Q28. In Question 5 of Mr. Tidhar's prefiled testimony, he refers to "bat fatality patterns" observed during post-construction monitoring projects "[a]t operating commercial wind-energy facilities located within the region within similar forest dominated landscapes (e.g., Noble Ellenberg NY, Noble Clinton NY, Maple Ridge NY, Lempster NH, Stetson Mountain ME and Mars Hill ME)." For each of those six listed facilities, please provide the type, height and number of the turbines located on the site and please provide the approximate dates of the post-construction monitoring studies referenced.

A28. BNE objects to this interrogatory because the information requested is publicly available.

Q29. Please provide the information regarding "the equipment used to transport the components to the erection location and their specific requirements for the road surface and the clearances required" and "the cranes used for the erection and installation process" reviewed by Melvin Cline and referenced in his prefiled testimony.

A29. GE will be responsible for the delivery of the turbine components to the Site. GE will likely transport the turbine components on a 6 and 9 axle Schnabel trailer with steerable dolly. Blade transportation can be provided by several different trailer styles, including the Trail King TK70EFX Blade hauler and Nooteboom 3- and 4- axle step deck. The trailers typically have steerable rear axles. The anticipated crane will be a Terex DEMAG CC2800-1NT narrow track crawler crane or similar. The crane components will be transported on tractor trailer trucks and assembled on site. Roads built to CT DOT standards should be adequate for transport of the turbine and crane components.

Q30. Please identify the "[c]onstruction companies with experience in the erection and installation of wind turbines" and "transportation engineering firms providing modeling assistance for blade transport vehicles" consulted by Mr. Cline or other BNE representatives, as referenced in Mr. Cline's prefiled testimony, and please provide copies of the information provided by those companies and firms.

A30. BNE has consulted with its anticipated construction company, the Delaney Group, regarding the cranes to be used. Delaney is a leading construction company that has completed construction services for clients on 19 wind construction projects, valued at more than $340 million, in the past two years. These projects support nearly 1,700 MW of power, over 1,000 foundations, and over 600 turbines installed in states including New York, Alaska, Wyoming, Kansas, Oklahoma, Washington, Texas, Idaho and Oregon. Land Design was also consulted to perform an AutoTurn analysis to provide typical vehicle turning movements.

Q31. What studies or assessments have been conducted by BNE regarding the capacity of the local town roads, including Flagg Hill Road, to bear the weight of the loads

associated with transporting and delivering the turbine components and all associated equipment, such as cranes?

A31. GE will be responsible for all transportation requirements for transporting the wind turbines and the Delaney Group will be responsible for all transportation requirements for transporting the supporting equipment such as cranes to the site.

Q32. Please provide computations showing the change in peak flows (rate, volume and velocity) from the culvert at STA 11 + 25 on the access drive, during the 2, 10, 25, 50 & 100 year storms.

A32. BNE objects to this interrogatory because the information sought is confidential work product.

Q33. Please provide computations showing the change in peak flows (rate, volume and velocity) at both sides of the access drive at Flagg Hill Road, during the 2, 10, 25, 50 & 100 year storms.

A33. BNE objects to this interrogatory because the information sought is confidential work product.

Q34. Please provide computations showing the change in peak flows (rate, volume and velocity) from the culvert at STA 21 + 50 on the access drive, during the 2, 10, 25, 50 & 100 year storms.

A34. BNE objects to this interrogatory because the information sought is confidential work product.

Q35. Please explain how the need for sanitary facilities and other utilities at the support building has been accommodated in the site plan.

A35. Site plans for the proposed support building have not been fully developed. Detailed site plans for the support building will be finalized and included in the anticipated development and management phase of this proceeding. This is typical procedure for any contested proceeding with the Council.

Q36. Please reconcile the discrepancy between the statements in the petition that the site will be returned to its pre-construction state and the permanent changes shown on the post-construction grading and restoration plans.

A36. The site will be returned to the pre-construction conditions to the maximum extent possible. Disturbed earth areas will be restored following construction with New England Conservation/Wildlife Mix, a native herbaceous seed mixture that will form a permanent, maintenance free cover of grasses, forbs, wildflowers and legumes. This seed mixture will provide erosion control and wildlife habitat value. Areas in proximity to the turbine bases will

be mowed to facilitate maintenance access. Remaining areas will not be maintained and allowed to revert to forest through the natural process of succession.

Q37. Where will the surplus of cut material be accommodated at the site?

A37. Refer to Sheet C-202 for the area designated as soil stockpile area. This area will accommodate the cut material during construction. The soil stockpile area is located to the northwest of Turbine Location Two.

Q38. How will the initial roadway cut at Flagg Hill Road be constructed? Where will equipment operate? How will the existing road be protected?

A38. The final design for the Flagg Hill Road connection will be completed during the development and management phase of the project after the final topographic survey and geotechnical investigations are completed. The transition will account for the required construction access as well as off-site drainage and erosion concerns. A rock construction entrance will be provided at the site entrance to minimize sediment tracking off-site per the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. Temporary road closures may be required to construct the initial portion of the access road. Temporary road closures will be coordinated with the Town of Colebrook to minimize traffic disruptions. The contractor will work closely with BNE, GE and the Town of Colebrook to minimize temporary disruptions and complete repairs to Flagg Hill Road that may be required during and after construction.

Q39. Please provide a reasonable estimate of the area around the proposed tower, laydown and assembly areas that must be cleared and/or graded to allow for the construction activities (Sheet C-500).

A39. As indicated on Sheet C-500, the total area to be cleared for the site is 14.30 acres.

Q40. Please indicate how the extent of the required construction and grading can be determined without a complete topographic survey and geotechnical analysis.

A40. The current design is based on LiDAR aerial photography, which is accurate to approximately one meter vertical and horizontal. LiDAR provides a reasonable approximation of topography features and contours. The current design is based upon sound engineering concepts and practices using this information. This is a standard practice for conceptual designs and is sufficient for engineering work at this stage of completion. Once BNE obtains a locational approval on the site, a final topographic survey will provide the level of detail required to complete the final construction design and the geotechnical data will provide soil characteristics and subsurface information that will be used to meet final design criteria. These items will then be incorporated into the construction drawings that will be submitted for approval with the Council during the anticipated development and management phase of this proceeding.

Q41. Where and how will the permanent bio-retention pond outlets be located? What is the approximate linear distance on the existing slopes until sheet flow becomes shallow concentrated flow? What will the velocities be at the outlets?

A41. The bioretention ponds, including their corresponding outlet,s will be installed in accordance with the 2004 Stormwater Quality Manual. As indicated in the Stormwater Management Plan, Section 2.3.6 and Appendix K, the post-construction peak runoff rate does not exceed the pre-construction peak runoff rate as required by the 2004 Stormwater Quality Manual. Additional calculations will be provided when soil characteristics and groundwater levels are determined from geotechnical investigations. As indicated on Sheet C-503, the final grading details (to include the pond outlets) will be provided in the anticipated development and management phase of the project.

Q42. What is the width of the right of way that must be cleared and maintained to install the overhead electric lines from Flagg Hill Road to the collector yard? Please confirm that this was not accounted for in the disturbed area calculations.

A42. BNE has not yet finalized its interconnection agreement with Connecticut Light and Power. BNE does not expect there to be any overhead electric lines on the site to the point of interconnection on CL&P's distribution system.

Q43. What is the size of the drainage area west of the proposed wetland crossing? How do you know that the proposed French Mattress can pass storm flows from that drainage area without adversely affecting the hydro-period of the upgradient wetland?

A43. The proposed wetland crossing has been positioned at the narrowest and highest point in the wetland to minimize disturbance to the wetlands. The proposed location was purposely selected because it is located at the wetland drainage divide. The French Mattress has been proposed to minimize disturbance to the wetlands and to facilitate natural groundwater movement through the crossing location. It will not affect the upgradient or downgradient wetland hydrology. The French Mattress utilizes a porous road subbase, which eliminates the need for culverts which have the potential to impound water and concentrate flows.

Q44. Where are the weirs/outlet structures and energy dissipaters for the proposed sediment traps and bio-retention basins? What velocities will be experienced on the access road surface and in the roadside ditches? Is this calculated velocity based on any assumptions? If so, please state what those assumptions are and provide documentation that those assumptions are reasonably conservative. Are they stable under these conditions?

A44. The final design of the bioretention ponds and temporary sediment traps, including their corresponding outlets will be designed in accordance with the 2002 Connecticut Guideline for Soil Erosion and Sediment Control and the 2004 Water Quality Manual. As indicated in the Stormwater Management Plan, Section 2.3.6 and Appendix K, the post-

construction peak runoff rate does not exceed the pre-construction peak runoff rate as required. Additional calculations will be provided during the anticipated development and maintenance phase of the project and after geotechnical information is available. We anticipate the outlets to include level spreaders and/or rip rap aprons to dissipate the flow from the basins. As indicated on Sheet C-503, the final grading details (to include the pond outlets) will be provided in the anticipated development and management phase of the project and after topographic survey and geotechnical information is available.

Q45. Which plan sheets show the grading, outlet controls and energy dissipation devices for the permanent stormwater basins?

A45. The dimensions for the proposed bioretention ponds are provided on Sheet C-503, the typical bioretention pond detail is provided on Sheet C-502, and the plan sheets show the locations of the bioretention ponds. Please refer to the Stormwater Management Plan, Appendix K for details on the bioretention pond outfall controls. As stated above, the final details for the bioretention ponds will be provided in the anticipated development and management phase of the project and after topographic survey and geotechnical information is available.

Q46. What does the unlabelled, rectangular outline is shown on the plans upslope of the access road, Station 2 + 00, depict?

A46. This is an existing building which is to remain as indicated on Sheet C-314.

Q47. What criteria and design storm were used to design the permanent diversions shown on the plans? Please direct us to the calculations that demonstrate that the diversions meet the requirements of the 2002 Connecticut Guidelines for Erosion and Sediment Control.

A47. The proposed permanent diversions were designed in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, Chapter 5, Section 7. The calculations are included in the Erosion and Sediment Control Plan, Appendix C. The design was based on a 10-year frequency, 24-hour duration storm.

Q48. Given the steeply sloping nature of the site and the lack of a topographic survey and geo-technical data, which BNE's engineers say prevents them from designing the bio-retention ponds, crane road, access road and wetland crossing, what assurances can BNE provide to the Council that the proposed wind development can be accommodated on the site? What contingency plans are in place in the event that they cannot be accommodated on the site with a plan that meets good engineering practice and all of the applicable DEP and CT standards?

A48. BNE objects to this interrogatory because it misstates information contained in the record and contains erroneous conclusory statements. Specifically, BNE has not stated that the bioretention ponds, roads and wetlands crossings cannot be designed. To the contrary, BNE

has stated that these items are not fully designed and cannot be fully designed until the anticipated development and management phase of this proceeding, which would include the submission and approval of completed construction drawings, geotechnical evaluation and the like. The Lidar topo provides good accuracy for this stage of the design. Final topographic information will be field verified to provide a very high level of precision and the final design will be a refinement of the designs which are already shown. It is our professional opinion that all of the requirements can be met on the site. The differences in the existing conceptual drawings and final construction drawings submitted for development and management plan approval will be minor.

Q49. Why do the roadside ditch check dams still fail to meet the design criteria of the 2002 Connecticut Guidelines for Erosion and Sediment Control?

A49. BNE objects to this interrogatory because it seeks a legal conclusion. Subject to this objection and without waiving the same, BNE responds as follows: According to the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, the proposed rip rap lined permanent diversions (swales) do not require rock check dams. Rock check dams have been provided as an additional energy dissipation and sediment removal feature.

Q50. Do the drainage computations account for reduced infiltration capacity of the crane road and access road due to compaction by heavy vehicle traffic?

A50. Yes. The stormwater model has accounted for the proposed gravel crane and access roads with a curve number of 85. Gravel roads by design must be compacted to provide a structurally sound travel surface, which will reduce the infiltration capacity.

Q51. Please provide a calculation to verify the 2.7% increase in impervious area.

A51. The table below is an extension of the Basin Characteristics table located in the Stormwater Management Plan, Appendix K. It conservatively assumes the pre-construction property does not contain any impervious area.

Basin ID	Total Size (AC)	% Impervious (Post)	Weighted % Impervious
Basin 1	1.18	14.43	0.21
Basin 2	1.67	36.36	0.76
Basin 2A	4.98	0.00	0.00
Basin 2B	3.62	0.00	0.00
Basin 2C	3.49	17.25	0.75
Basin 3	1.87	0.00	0.00
Basin 3A	13.30	0.00	0.00
Basin 3B	2.47	0.00	0.00
Basin 4	1.41	21.12	0.37
Basin 4A	10.45	0.00	0.00

Basin 5	1.66	18.31	0.38
Basin 6	2.06	8.08	0.21
Basin 6A	5.90	0.00	0.00
Remainder of Property	25.95	0.00	0.00
		Impervious Percentage	**2.69**

Q52. If the runoff co-efficient only increases from 55 to 56 after construction, why are peak runoff attenuation practices (13 permanent basins) required?

A52. The stormwater model uses a conservative time of concentration of six (6) minutes for all disturbed basins. The impervious area has increased and the ground cover changed resulting in an increased runoff rate. The bioretention ponds are required at various locations around the site due to the site's topography. The bioretention ponds are used for stormwater treatment and peak runoff attenuation in accordance with the 2004 Connecticut Stormwater Quality Manual.

Q53. Please explain how 36' of water will be accommodated in Basins 1-6 as per the Filter Bed Sizing table in Appendix D.

A53. Thirty-six (36) feet of water will not be accommodated in the bioretention ponds. The designed filter bed surface area for the bioretention ponds exceeds the required surface area. The Filter Bed Sizing table in Appendix D of the Stormwater Management Plan mistakenly indicates that the average height of water above the filter bed during the water quality design storm is thirty-six (36) feet. This should have been thirty-six (36) inches of water. The following table shows the correct filter bed surface areas based upon the average height of thirty-six (36) inches of water.

Basin ID	Af, Filter Bed Surface Area (sf)
Basin 1	5
Basin 2	8
Basin 2C	16
Basin 3	8
Basin 4	7
Basin 5	8
Basin 6	9

Q54. How much sand and special soil mixes will be required to construct the peak attenuation basins and water quality treatment basins? Has this volume of material been included in the calculations of the truck traffic required to complete construction?

A54. The sand and special soil mixes required to construct the peak attenuation basins and water quality treatment basins have not yet been calculated. These calculations will be

completed upon completion of the geotechnical report. This volume of material was not included in the truck traffic.

Q55. Please explain the note "excludes segregated runoff" in the water quality volume tables in Appendix D of the revised Stormwater Management Plan attached to Melvin Cline's prefiled testimony.

A55. The stormwater model, drainage basins, and swales have been designed to by-pass or segregate runoff from undisturbed areas upstream of the construction activities. The runoff from the undisturbed areas does not require treatment in the bioretention ponds or to be directed to the temporary sediment traps.

Q56. The sizing calculations for the temporary sediment traps appear to be based on several assumptions. Please provide documentation as to the validity of the assumed design parameters.

A56. BNE objects to this interrogatory because the information sought is confidential work product. Subject to this objection and without waiving the same, BNE responds as follows: the sizing of the temporary sediment traps is based upon the criteria set forth in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. Design calculations are provided in Appendix C of the Erosion and Sediment Control Plan. References to temporary sediment traps design criteria from the Guidelines are provided on the right side of the calculation pages.

Q57. The design calculations for the permanent diversions appear to be based on several assumptions. Please provide documentation as to the validity of the assumed design parameters.

A57. BNE objects to this interrogatory because the information sought is confidential work product.

Q58. Did Jeff Gruver personally conduct any component of the bat acoustic setup or call analysis at the Colebrook Wind Resource Area ("CWRA")?

A58. Yes.

Q59. Under the Tier 3 Section of the United States Fish and Wildlife draft wind turbine guidelines, *Bat Survey Methods* (pg 37) it states under Acoustic Monitoring that "[t]he Committee recommends placing acoustic detectors on existing met towers... Acoustic detectors should be placed at high positions (as high as practicable, based on tower height) on each met tower included in the sample to record bat activity at or near the rotor swept zone, the area of presumed greatest risk for bats." Do the WEST biologists confirm the accuracy of this quote and agree with this statement?

A59. BNE objects to this interrogatory because the information sought is irrelevant. Specifically, the United States Fish and Wildlife draft wind turbine regulations are already part of the record in this proceeding.

Q60. Under Tier 3 Section of the United States Fish and Wildlife draft wind turbine guidelines, *Bat Survey Methods* (pg 37) it states under Acoustic Monitoring that "[d]evelopers should evaluate whether it would be cost effective to install detectors when met towers are first established on a site. Doing so might reduce the cost of installation later and might alleviate time delays to conduct such studies." Do the WEST biologists confirm the accuracy of this quote and agree with this statement?

A60. BNE objects to this interrogatory because the information sought is irrelevant. Specifically, the United States Fish and Wildlife draft wind turbine regulations are already part of the record in this proceeding.

Q61. Under Tier 3 Section of the United States Fish and Wildlife draft wind turbine guidelines, *Bat Survey Methods* (pg 37) it states under Acoustic Monitoring that "the Committee recommends that additional sampling stations be established at low positions (~1.5 - 2 meters) at a sample of existing met towers and one or more mobile units (i.e., units that are moved to different locations throughout the study period) to increase coverage of the proposed project area." Do the WEST biologists confirm the accuracy of this quote and agree with this statement?

A61. BNE objects to this interrogatory because the information sought is irrelevant. Specifically, the United States Fish and Wildlife draft wind turbine regulations are already part of the record in this proceeding.

Q62. Do the United States Fish and Wildlife draft wind turbine guidelines suggest anywhere that low position ("ground") monitoring should be used instead of met tower monitoring? If so, please identify that language.

A62. BNE objects to this interrogatory because the information sought is irrelevant. Specifically, the United States Fish and Wildlife draft wind turbine regulations are already part of the record in this proceeding.

Q63. Do the United States Fish and Wildlife draft wind turbine guidelines suggest anywhere that low position ("ground") monitoring using non-mobile sampling stations is effective or recommended? If so, please identify that language.

A63. BNE objects to this interrogatory because the information sought is irrelevant. Specifically, the United States Fish and Wildlife draft wind turbine regulations are already part of the record in this proceeding.

Q64. Mr. Tidhar states in his pre-filed testimony that the monitoring protocol conducted at Colebrook South was "in accordance with the United States Fish and

Wildlife draft wind turbine guidelines, tiers one through three recommended assessments." Please identify specific language in the USFWS Guidelines that supports this statement as it relates to WEST's decision to use non-mobile low position ("ground") monitoring.

A64. BNE objects to this interrogatory because the information sought is irrelevant. Specifically, the United States Fish and Wildlife draft wind turbine regulations are already part of the record in this proceeding.

Q65. In response to Question 43 of FairwindCT's Second Set of Interrogatories, you stated that Jeff Gruver, who led West's acoustic bat analysis, has completed at least 100 acoustic bat analyses for proposed and existing wind facilities. Of those 100 projects, how many included Anabat monitoring conducted on a met tower? Of those projects that included Anabat monitoring conducted on a met tower, how many resulted in damage to the meteorological equipment?

A65. The number of acoustic bat studies Mr. Gruver has been involved in for WEST is estimated at greater than one hundred. The study designs have been mixed – some studies have included both elevated and ground-based detectors, others have included ground-based units only and others have included elevated units only. When the project owner is concerned about damage to Met towers, anabats have not been elevated, thereby avoiding damage to the Met tower by avoiding the installation to begin with.

Q66. The figure used by WEST to identify the acoustic sampling points (Tidhar Pre-Filed Testimony, Exhibit 2, Figure 2) is of a scale and resolution that prevents useful identification of the sampling sites. Using the site map produced by VHB (Petition, Exhibit I, Figure 2), please identify the locations of CA1 and CS1 and state the distance between these two sampling points.

A66. Location information is provided in the body and appendix A of the final bat report. The distance between the detectors is approximately 400-m. (~1,200 ft).

Q67. In response to Question 51 of FairwindCT's Second Set of Interrogatories, BNE states that the SM2Bat unit was placed at the edge of the beaver pond because "[o]pen water is considered a feature attractive to bats for foraging, and placement of the SM2Bat unit at this location increased potential for recording bat species that may occur in the Project area." Given this statement, why did WEST claim in its interim report (Petition, Exhibit L) that the "CWRA is not in the vicinity of any known bat colonies <u>or features likely to attract large numbers of bats</u>" (emphasis added)?

A67. The characterization used referred to major hibernacula, over-wintering habitat, or caves which could support large numbers of bats in a small spatial area. The statement did not imply that no bat habitat was present at the site. The site is situated in a landscape which contains features such as beaver ponds and woody wetlands, however, the area surrounding the

site also contains such features. Therefore, the site does not contain unique bat habitats relative to the surrounding landscape.

Q68. In response to Question 52 of FairwindCT's Second Set of Interrogatories, BNE lists the Cape Vincent Wind Project in New York as a site that used a similar acoustic monitoring protocol during the pre-construction site assessment. Please provide details of the sampling protocol at that site, including the timing of the survey, the sampling height of acoustic monitors, and the total sampling effort (in detector-nights).

A68. BNE objects to this interrogatory because the information is publicly available.

Q69. Given that BNE claims that the data analysis approach used at the CWRA is similar to other monitoring projects conducted at wind development sites, please provide a citation for any acoustic monitoring project in the eastern United States that was not conducted by WEST and that uses the MF acoustic group.

A69. BNE objects to this interrogatory because the information requested is irrelevant to this proceeding. BNE further objects because this question has been asked and answered.

Q70. Please provide the complete citation for "Brooks (2011)" referenced in response to Question 60 of FairwindCT's Second Set of Interrogatories.

A70. BNE objects to this interrogatory because this question has been asked and answered.

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Certification

This is to certify that a copy of the foregoing has been mailed this date to all parties and intervenors of record.

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