



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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VIA ELECTRONIC MAIL

January 24, 2020

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

RE: **PETITION NO. 983** - BNE Energy, Inc. Declaratory Ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of a 4.8 MW Wind Renewable Generating facility located on Flagg Hill Road, Colebrook, Connecticut.
Development and Management Plan Modification.

Dear Attorney Hoffman:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than February 14, 2020. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 15 copies to this office, as well as a copy via electronic mail. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. Fewer copies of bulk material may be provided as appropriate.

Please be advised that the original and 15 copies are required to be submitted to the Council's office on or before the February 14, 2020 deadline.

Any request for an extension of time to submit responses to interrogatories shall be submitted to the Council in writing pursuant to §16-50j-22a of the Regulations of Connecticut State Agencies.

Sincerely,

Melanie A. Bachman
Executive Director

MB/MP/laf

Petition No. 983
BNE Energy, Inc. – Wind Colebrook South
Development & Management Plan Modification
Interrogatories
January 24, 2020

Notice

1. Please submit an abutters map.
2. Has BNE Energy, Inc. (BNE) provided notice to the owners of parcels located south, east and west of the 53 Flagg Hill Road, Colebrook parcel regarding the proposed Development and Management Plan (D&M Plan) Modification for the third turbine (T3)?
3. Referencing Tab B, please submit the missing exhibits attached to the Option Agreement for 53 Flagg Hill Road.

Site Development

4. Was T3 selected through a RFP process? If so, please explain.
5. According to the July 17, 2018 request for extension of time for construction and the August 16, 2018 explanation for the request for extension of time for construction, BNE indicated that it entered into a power purchase agreement (PPA) for T3 with Eversource and the UI on June 20, 2017.
 - a) Does the PPA have provisions for the sale of the electricity and the renewable energy certificates generated from T3?
 - b) What percentages of electricity are to be sold to Eversource and UI?
 - c) For what megawatt output?
 - d) Is there a cap on the megawatt output of T3 per the PPA?
6. What is the length of the PPA? Are there provisions for any extension of time in the PPA? Is there an option to renew?
7. If the PPA expires and is not renewed and T3 has not reached the end of its lifespan, will BNE decommission T3 or seek other revenue mechanisms for the power produced by T3?
8. What other wind turbine models does GE or Enercon have available that are suitable for the site and compatible with the PPA?
9. Please submit the technical documentation and setback considerations (equivalent to the GE documentation behind Tab F of the D&M Plan Modification) for the Enercon 4.2.
10. What is the projected operational life of T3?
11. Provide the longitude and latitude coordinates of the center of the T3 tower.

12. Page 4 of the D&M Plan Modification indicates that the nearest residence is 1,027 feet away from T3 and the second nearest residence is 1,600 feet away from T3. Provide the addresses of both residences. Please also provide the distances from the center of the T3 tower to the residences and to the associated residential property lines.
13. Page 1 of the D&M Plan Modification states, "BNE also has an option to purchase approximately 9.95 acres located at 45 Flagg Hill Road..." Drawing C001 also depicts the 9.95 additional acres directly to the south of the original site property. Referencing Tab C of the D&M Plan Modification, Purchase Option Agreement for 45 Flagg Hill Road, Colebrook, it states that the property from Optionor consists of approximately 9.27 acres of land. Exhibit B to the Purchase Option Agreement – Map of Property also depicts 9.27 acres based on the "Property Line in Purchase Option." Please reconcile the 9.95 acres with the 9.27 acres.

Energy Output

14. Have electrical loss assumptions been factored in to the 4.2 MW output of T3? Please explain.
15. What is the T3 output (MW AC) at the point of interconnection?
16. What is the projected annual capacity factor (expressed as a percentage) and projected annual megawatt-hours (MWh) for T3?
17. Would the utilization of noise reduction or ice reduction modes have an impact on annual energy output? If so, please explain.

Interconnection

18. Would T3 connect to existing three-phase electric distribution on Flagg Hill Road? If yes, please respond to the following:
 - a) What is the line voltage of the existing electric distribution?
 - b) Would any upgrades to the existing electric distribution be necessary to accommodate the interconnection?
 - c) What entity is responsible for the electric distribution upgrades work, if applicable?
19. Referencing Sheet E100, the top right corner notes "Ex. Xfmr Pads." What is the line voltage leaving T3? Would that voltage be changed to the distribution level voltage at the transformer pad area? Are any new or larger transformers needed?
20. Referencing Drawing E102 of D&M Plan Modification, why are two 5-inch electrical conduits proposed in the duct bank? Would there be two circuits?
21. Is the project interconnection required to be reviewed by ISO-NE?
22. Has a system impact study from the electric distribution utility been performed to ensure that the additional 4.2 MW for T3 can be accommodated? Does BNE have an Interconnection Agreement and with whom? Provide the status of such studies and agreements.

Public Safety

23. Would the project comply with the National Electrical Code, the National Electrical Safety Code and any applicable National Fire Protection Association codes and standards? Please explain.
24. Condition No. 2(a) of the Council's June 2, 2011 Declaratory Ruling notes that, "The Southern Turbine (T1) shall have a location and/or rotor diameter that ensures rotating turbine blades would be confined to the host property." Would the T3 rotating blades extend over the property boundaries? Consider the "host property" to consist of the original host property plus the additional acreage to be acquired under the Option Agreements.
25. Would the proposed access drive and precast concrete bridge over the wetland be able to support cranes and other equipment to reach the site for construction?
26. Provide a drawing to depict any proposed fence, if applicable. Include the height and type of fence and any appropriate signage.
27. Please submit the noise specifications for the Enercon 4.2.
28. Referencing Finding of Fact (FOF) No. 101 from the June 2, 2011 Declaratory Ruling, BNE modeled noise at all of the receptor locations for Colebrook North and South and assumed noise from all six of the turbines. Would BNE expect that the operation of T3 would comply with the applicable Department of Energy and Environmental Protection (DEEP) Noise Control Standards, including infrasound and ultrasound, at the nearest residential receptors?
29. Referencing the December 2016 Noise Compliance Measurement Study submitted in compliance with Condition No. 2(j) of the June 2, 2011 Declaratory Ruling, noise levels from T1 and Turbine 2 (T2) ranged from 40-49 dBA at both the long term monitoring locations and at the nearest residential receptors. With the addition of T3, would the cumulative noise levels from all three of the turbines comply with the DEEP Noise Control Standards at monitoring locations L1, M1 and M3, as well as at the nearest residential receptors? Please explain.
30. BNE notes that Enercon 4.2 is capable operating at reduced sound outputs if needed. Does BNE anticipate such measures would be necessary to comply with DEEP Noise Control Standards at the nearest residential receptors?
31. Is Federal Aviation Administration (FAA) notice required? Has or will BNE filed notice with the FAA for T3 and/or any temporary construction structures, such as cranes?
32. Is FAA AC70/7460-1L marking and/or lighting required for T3? Please describe the required marking and/or lighting scheme for T3 during construction and operation. Would the installation of T3 require any modifications to the existing marking and lighting scheme currently employed for T1 and T2?
33. Referencing FOF Nos. 81 and 82 from the June 2, 2011 Declaratory Ruling, would T3 have emergency stop buttons located within the tower base and within the nacelle to stop the turbine in the event of an emergency? Would T3 also have an automatic fire suppression system and hand-held fire extinguishers?

34. Would the access to T3 be able to accommodate emergency responders? Could T3 be shut down and de-energized in the event of a fire? If so, how?
35. Referencing page 4 of the D&M Plan Modification, BNE states, "GE's ice setbacks are among the strictest in the industry and would result in a setback of 711 feet from the nearest residence to T3." Does Enercon have setback standards? If yes, how do such standards compare to the GE standards noted behind Tab F of the D&M Plan Modification?
36. Referencing page 4 of the D&M Plan Modification, BNE states, "Specifically, the Enercon 4.2 MW turbine has an option for a blade heating system which may be utilized for T3 to warm up the blade surface and melt ice which may form on the blades." When would the heaters operate, e.g. continuously when the ambient temperatures are below freezing, or only during an ice event shutdown to speed the melting process?

Environmental

37. Referencing FOF No. 134 of the Council's June 2, 2011 Declaratory Ruling, would shadow flicker beyond approximately 1.25 miles from T3 be negligible similar to shadow flicker beyond approximately 1.25 miles from T1 and T2? Please explain.
38. Taking into account the direction of the sun, would any shadow flicker from T3 be expected at any residences?
39. Were other wetland crossing methods in addition to the bridge considered? What are the environmental benefits of the bridge over any other crossing methods? Please explain.
40. It appears the bridge abutments are within the wetlands. If so, can the bridge span be extended so that the abutment construction areas remain out of the wetland?
41. Referencing page 2 of the D&M Plan Modification, it states, "The new location is approximately 930' away (430' further) from the on-site vernal pools and entirely outside of the 750' protective boundary." Would the D&M Plan Modification be consistent with the 2015 U.S. Army Corps of Engineers Vernal Pool Best Management Practices?
42. Provide a viewshed map based on a 5-five mile radius from the center of the T3 tower location that includes an estimate of year-round and seasonal visibility. Provide photo simulations of T3. If possible, estimate which portion(s) of T3 would be visible.
43. Describe the visibility of T3 from the two closest residences noted on page 4 of the D&M Plan Modification.
44. With regard to construction, operation and maintenance of T3, would any of the following previously approved plans and protocols require revisions and if so, please explain.
 - a) Wetland and Wildlife Restoration Plan;
 - b) Ice Safety Management Plan;
 - c) Post Construction Noise Monitoring Protocol;
 - d) Post Construction Bird and Bat Monitoring Protocol; and
 - e) Decommissioning Plan.

Construction

45. If the D&M Plan Modification is approved, identify all additional permits necessary for construction and operation.
46. Will construction of T3 require a modification to the existing General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) for the site or would a new General Permit be required?
47. On December 31, 2019, DEEP published notice of intent to reissue the General Permit (effective September 30, 2020). A redlined version of the proposed reissuance of the General Permit is available at:
https://www.ct.gov/deep/lib/deep/public_notice_attachments/general_permits/2019december27constructiongpwithmodificationsmarkup-draftpermit.pdf

If a new General Permit or a re-registration of an existing General Permit is required, would construction of T3 comply with the proposed reissued DEEP General Permit? Please explain.

48. Has BNE met with the DEEP Stormwater Division? If yes, when? Please describe any recommendations, comments or concerns about construction of T3 provided by the Stormwater Division.
49. As part of the General Permit, would BNE retain a qualified, independent third party inspector to monitor on-site E&S controls and appropriate environmental safeguards during construction?
50. What would be the construction timeline of the project from groundbreaking to full operation?
51. Provide the estimated typical construction hours and days of the week (e.g. Monday through Friday 8 AM to 5 PM)?
52. Referring to Sheet C003:
 - a) Are the 1.25 acres that are already noted as cleared within the project development area?
 - b) Is the generally flat area with elevations between 1440 -1450 above mean sea level located northwest of Turbine 2 and east of the onsite wetland a viable location for T3?
53. Referring to Sheet C300:
 - a) What type of equipment will be used to install the utility trench from Flagg Hill Road to T3? For the segment extending uphill from Flagg Hill Road, can the new utility line be installed adjacent to the existing cleared "collection trench" corridor (refer to Sheet E100) rather than extending through a new forested area?
 - b) Indicate what types of pre and post construction E&S controls would be used for the utility corridor.
54. Referring to Sheet C302:
 - a) The bridge construction area detail shows two separate rows of erosion and control barriers on the south side of the bridge and a single barrier on the north side of the bridge to protect adjacent wetlands. Should a second separate barrier also be installed on the north side?
 - b) How would the wetland area at the bridge location be crossed prior to bridge installation? Provide crossing detail.

55. Referring to Sheet C600:
- a) A wetland impact figure of 2,320 square feet is provided related to the installation of the access road bridge. Is this temporary or permanent impact?
 - b) provide a narrative/sequence describing how the bridge would be constructed.
56. Referring to Sheet C601: The Temporary Sediment Trap Outlet detail includes an amphibian barrier to be installed as noted on the Site Plans; however, the Site Plans do not have any marking indicating where the barriers would be installed. Please clarify.
57. Referring to Sheet C602: How will the swales, infiltration trenches, and detention basins be installed if shallow ledge is encountered? How would ledge affect runoff infiltration rates?
58. Referencing FOF No. 73 of the Council's June 2, 2011 Declaratory Ruling, would maintenance of T3 generally be scheduled every six months, require T3 to shut down for approximately one-and-a-half days and include tightening of bolts, changing filters and topping off lubricants in the nacelle similar to the maintenance of T1 and T2? Please explain.