



Federal Aviation Administration
Air Traffic Airspace Branch, ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-0520

Aeronautical Study No.
2008-ANE-100-OE

Issued Date: 04/26/2008

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**** NOTICE OF PRESUMED HAZARD ****

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

| | |
|------------|----------------------------------------------------------------------------|
| Structure: | Wind Turbine Turbine 3 |
| Location: | Paxton, MA |
| Latitude: | 42-17-48.10N NAD 83 |
| Longitude: | 71-53-49.90W |
| Heights: | 425 feet above ground level (AGL) 1690 feet above mean sea level (AMSL) |

Initial findings of this study indicate that the structure as described exceeds obstruction standards and/or would have an adverse physical or electromagnetic interference effect upon navigable airspace or air navigation facilities. Pending resolution of the issues described below, the structure is presumed to be a hazard to air navigation.

If the structure were reduced in height so as not to exceed 0 feet above ground level (1265 feet above mean sea level), it would not exceed obstruction standards and a favorable determination could subsequently be issued.

Any height exceeding 200 feet above ground level (1465 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

See Attachment for Additional information.

NOTE: PENDING RESOLUTION OF THE ISSUE(S) DESCRIBED ABOVE, THE STRUCTURE IS PRESUMED TO BE A HAZARD TO AIR NAVIGATION. THIS LETTER DOES NOT AUTHORIZE CONSTRUCTION OF THE STRUCTURE EVEN AT A REDUCED HEIGHT. ANY RESOLUTION OF THE ISSUE(S) DESCRIBED ABOVE MUST BE COMMUNICATED TO THE FAA SO THAT A FAVORABLE DETERMINATION CAN SUBSEQUENTLY BE ISSUED.

IF MORE THAN 60 DAYS FROM THE DATE OF THIS LETTER HAS ELAPSED WITHOUT ATTEMPTED RESOLUTION, IT WILL BE NECESSARY FOR YOU TO REACTIVATE THE STUDY BY FILING A NEW FAA FORM 7460-1, NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION.

If we can be of further assistance, please contact our office at (770) 909-4329. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2008-ANE-100-OE.

Signature Control No: 558373-102083923

Michael Blaich
Specialist

(NPH)

Attachment(s)

Additional Information

Additional information for ASN 2008-ANE-100-OE

Proposal: To construct a(n) Wind Turbine to a height of 425 feet above ground level, 1690 feet above mean sea level.

Location: The structure will be located approximately 2.00 nautical miles northwest of the Worcester Regional Airport (ORH) reference point.

Federal Aviation Regulations, FAR Part 77 Obstruction Standard(s) Exceeded:

Section 77.23 (a)(2) by 225 feet - a height that exceeds 200 feet above ground level within 2.00 nautical miles of ORH.

Section 77.23 (a)(5) a height that affects an Airport Surface by penetrating

Section 77.25 (a) Horizontal Surface by 531 feet as applied to ORH.

The proposed wind turbine would be located within the traffic pattern airspace for Category C/D aircraft that would utilize Runways 15/33 and 11/29. For proposals located beyond the lateral limits of the conical surface and in the climb/descent area, the structure height allowed is 350 feet above the airport elevation or the height that would not exceed Section 77.23 (a)(2), whichever is greater (not to exceed 500 feet AGL). The height that would not exceed Section 77.23 (a)(2) for your proposal would be 200 feet AGL/1465 feet AMSL. The airport elevation for ORH is 1009 feet AMSL plus 350 feet equals 1359 feet AMSL. The greater of these two heights is 1465 feet AMSL.

This adverse effect, combined with a significant number of operations, would constitute substantial adverse effect. A significant number is defined as an average of one VFR operation per day. FAA records indicate that at least one VFR operation was conducted on each runway for the period ending 3/31/08. Therefore, the structure at the requested height would create substantial adverse effect and would be a hazard to air navigation.

If the structure were lowered by 225 feet, it would eliminate the substantial adverse effect to the traffic pattern but would still exceed an obstruction standard and further study would be necessary. Further study entails circularization to the public for comment. This process requires approximately 90 to 120 days from the date that further study is requested before any subsequent determination would be effective. The outcome cannot be predicted prior to public circularization.

The proposal has the following Instrument Flight Rule (IFR) effects at ORH:

Exceeds ORH 40:1 from RWY 29 by 179'.

Take-Off increase to 700-3 or 268/2000, RWY 33 by 425.

Take-Off increase to 700-2 or 612/2000, CAT D Circling by 288' w/2c.

CAT D Minimum Descent Altitude (MDA) from 1720 to 2040.

NDB RWY 11 final by 296'. MDA from 1680 to 2020.

GPS RWY 33 missed approach. MDA from 1340 to 1680.

RNAV RWY 29 missed approach by 280. Decision Altitude (DA) from 1361 to 1616.