



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2690-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T1
 Location: Cohocton, NY
 Latitude: 42-30-10.79N NAD 83
 Longitude: 77-32-14.49W
 Heights: 2058 feet site elevation (SE)
 493 feet above ground level (AGL)
 2551 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2690-OE.

Signature Control No: 253319841-309223613

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2690-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

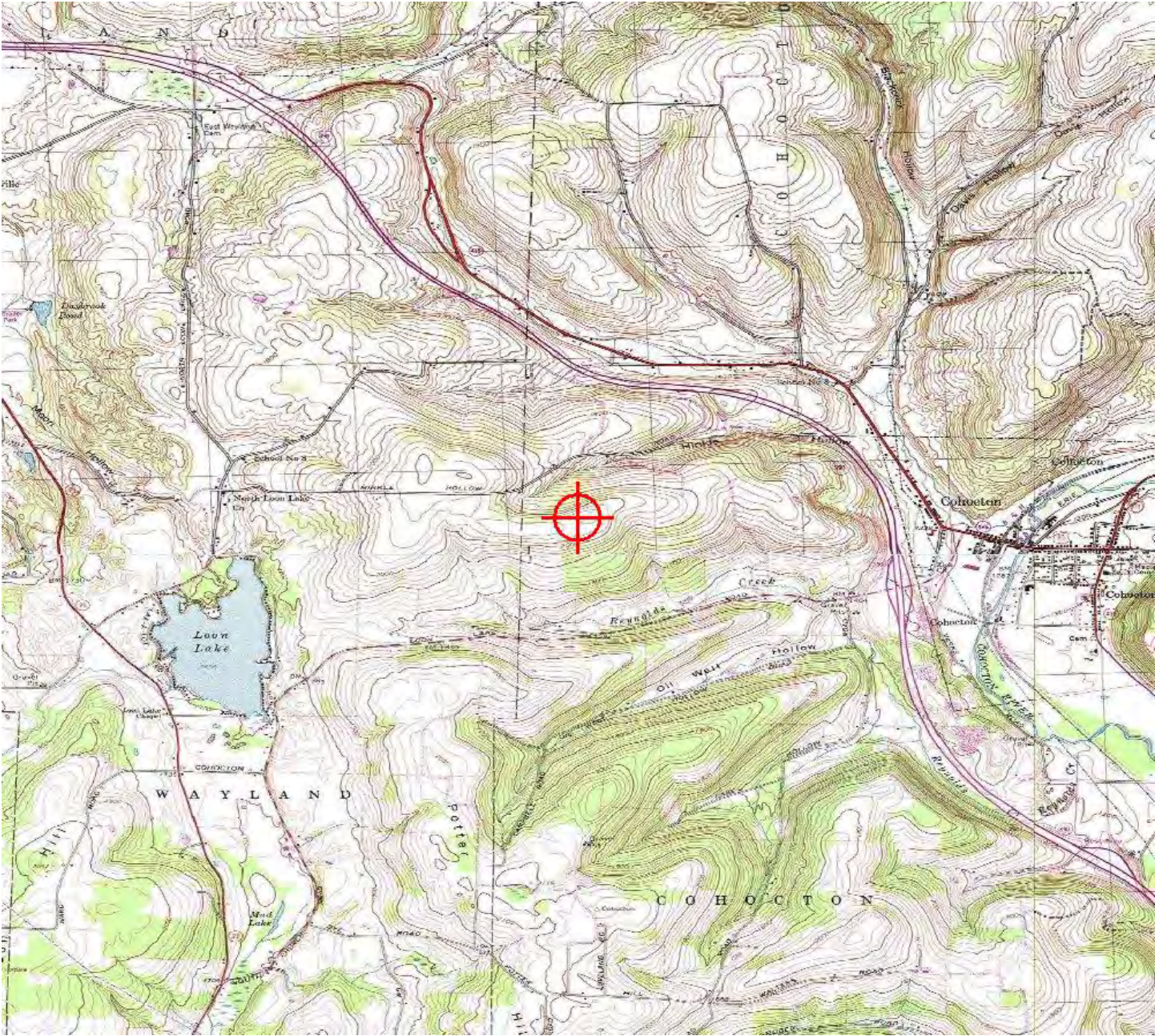
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.

TOPO Map for ASN 2015-WTE-2690-OE







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 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T2
 Location: Cohocton, NY
 Latitude: 42-30-33.92N NAD 83
 Longitude: 77-33-06.21W
 Heights: 2048 feet site elevation (SE)
 493 feet above ground level (AGL)
 2541 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2691-OE.

Signature Control No: 253319842-309224491

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

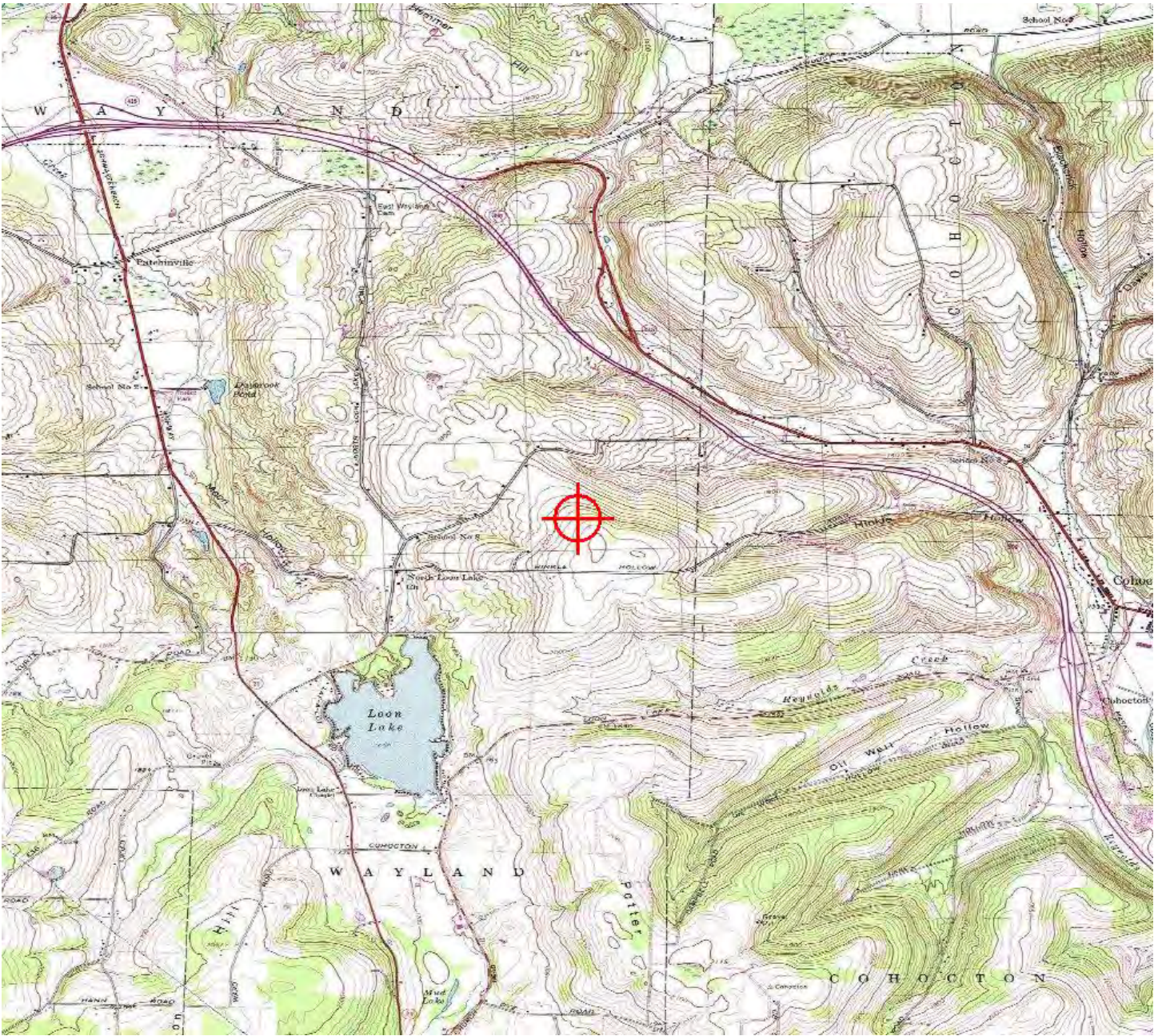
Additional information for ASN 2015-WTE-2691-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

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2015-WTE-2692-OE

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1251 Waterfront Place
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Structure: Wind Turbine T3
Location: Cohocton, NY
Latitude: 42-30-26.08N NAD 83
Longitude: 77-32-52.66W
Heights: 2091 feet site elevation (SE)
493 feet above ground level (AGL)
2584 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

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This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

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An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2692-OE.

Signature Control No: 253319843-309223612

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2692-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

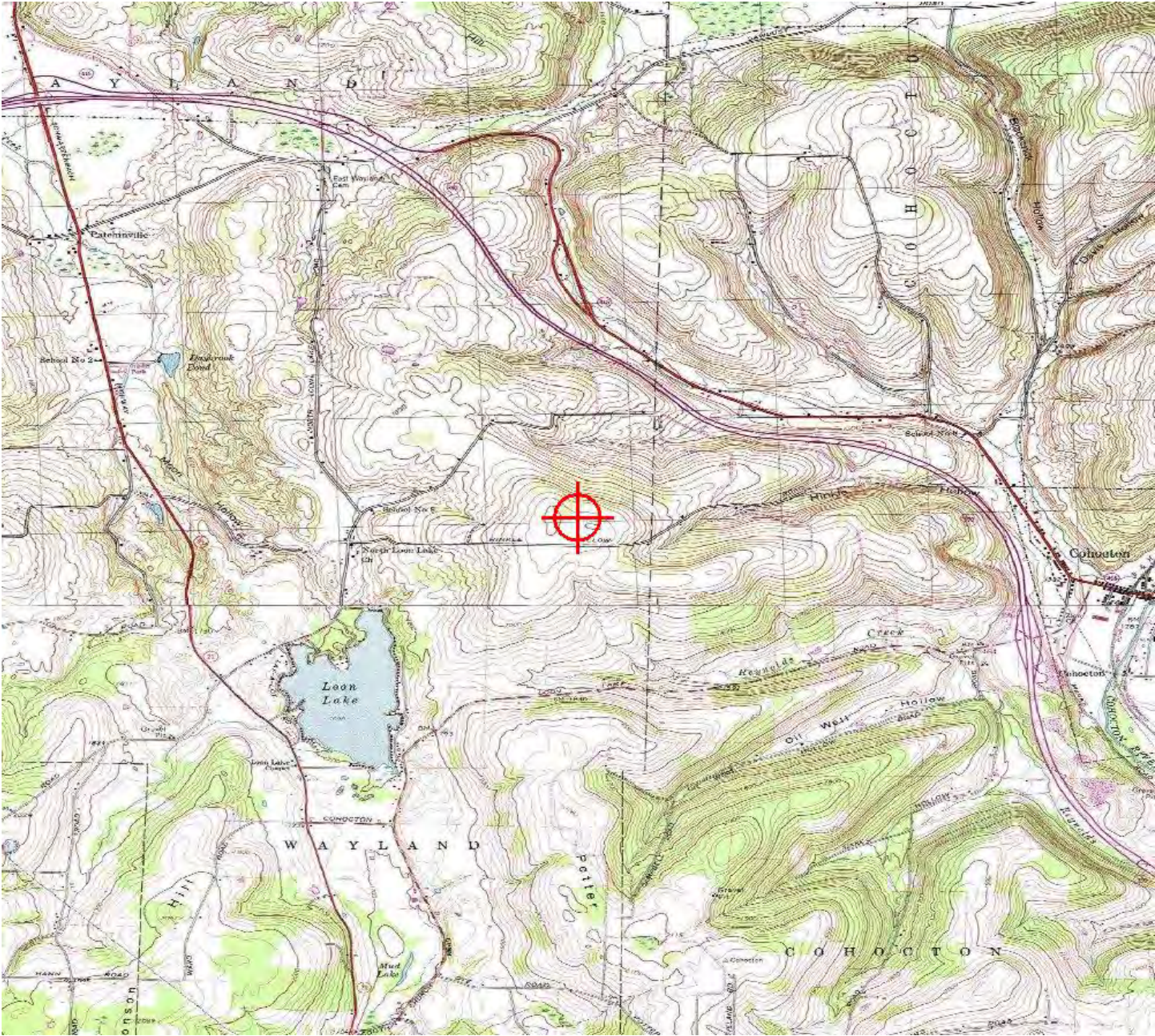
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2693-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T4
 Location: Cohocton, NY
 Latitude: 42-30-15.04N NAD 83
 Longitude: 77-31-51.10W
 Heights: 1967 feet site elevation (SE)
 493 feet above ground level (AGL)
 2460 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2693-OE.

Signature Control No: 253319844-309224493

(DNE -WT)

Brenda Mumper
Specialist

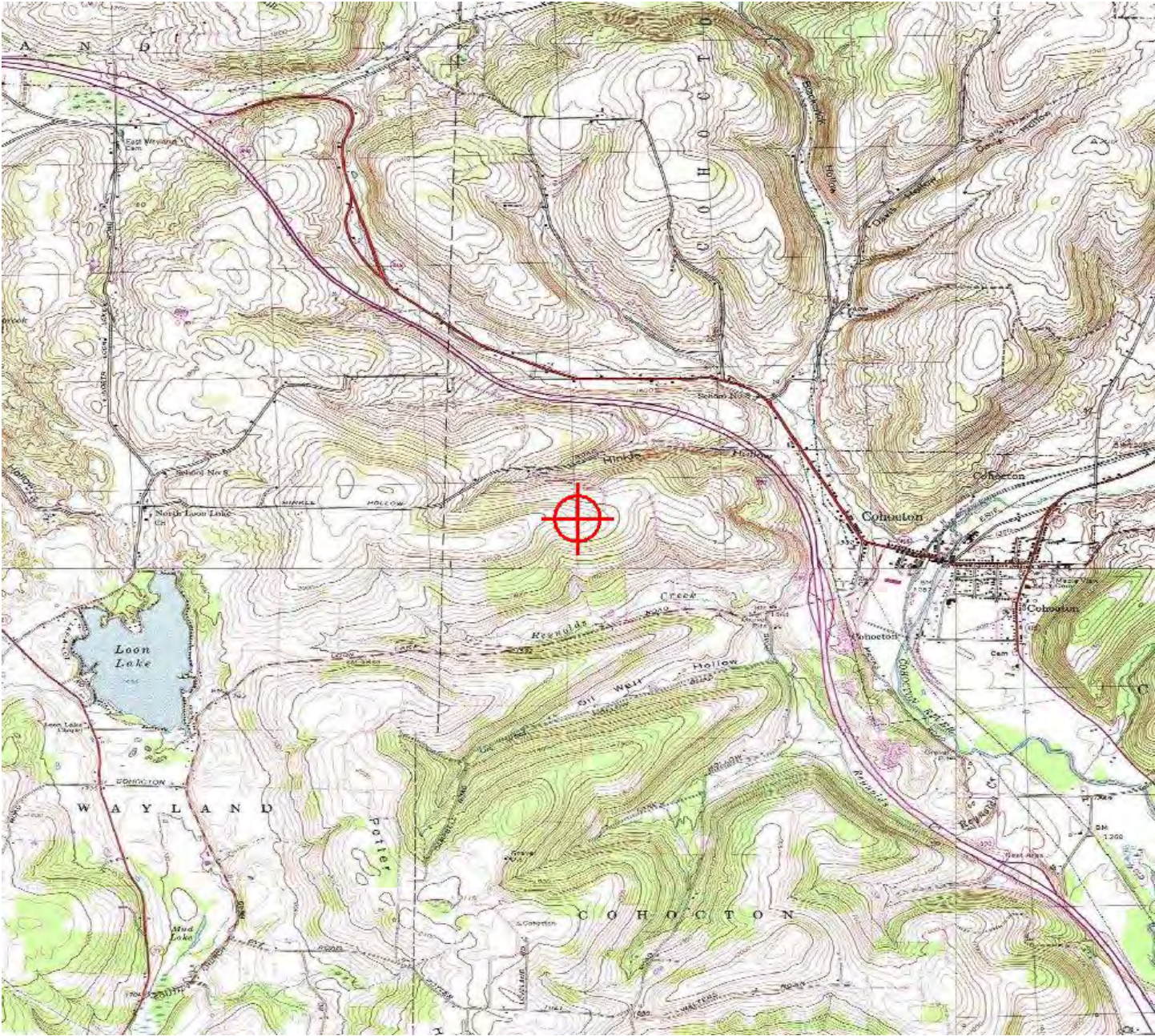
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2693-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2694-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T5
 Location: Cohocton, NY
 Latitude: 42-28-10.94N NAD 83
 Longitude: 77-30-50.65W
 Heights: 2038 feet site elevation (SE)
 493 feet above ground level (AGL)
 2531 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2694-OE.

Signature Control No: 253319845-309224497

(DNE -WT)

Brenda Mumper
Specialist

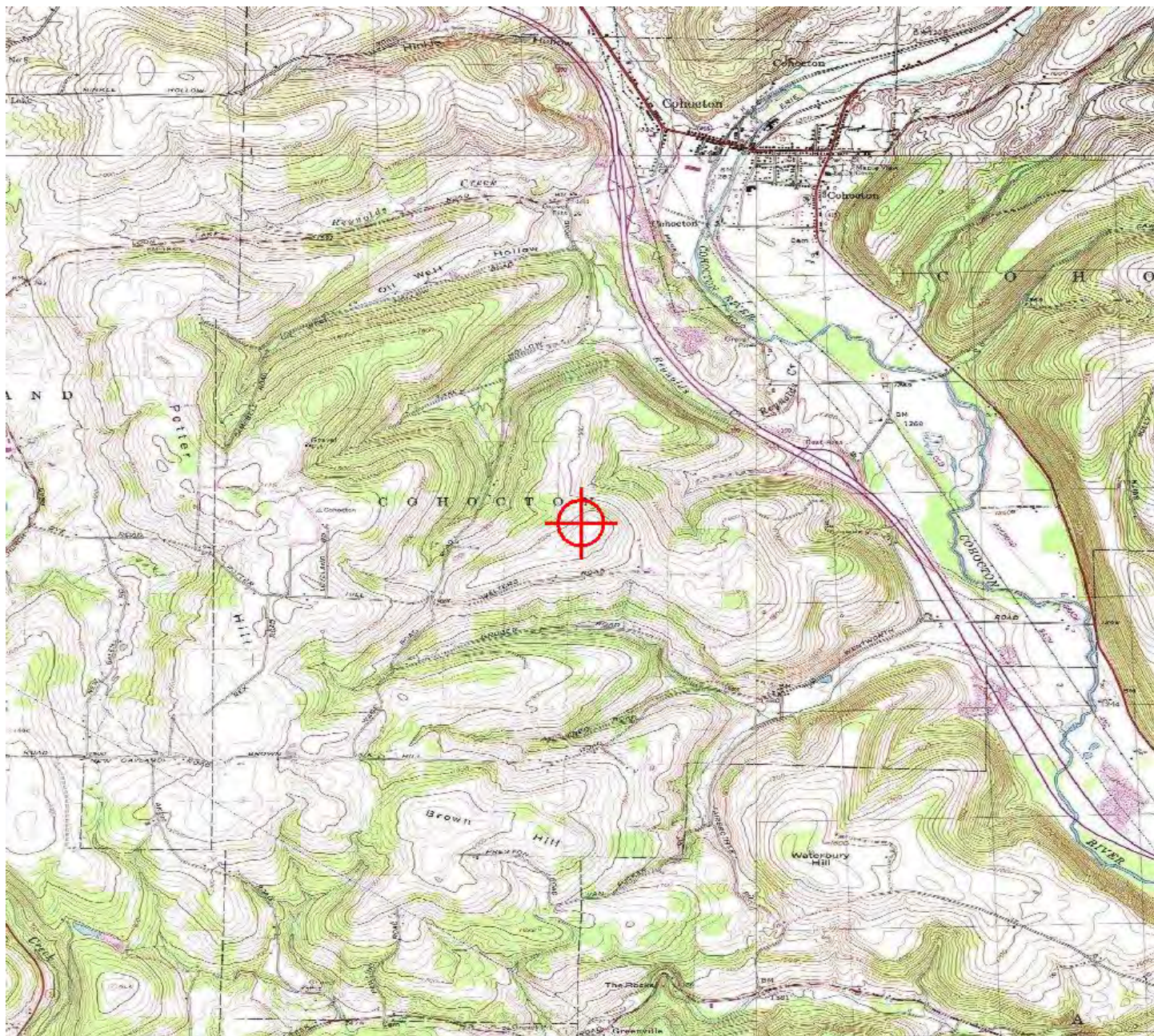
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2694-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2695-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T6
 Location: Cohocton, NY
 Latitude: 42-29-02.60N NAD 83
 Longitude: 77-31-41.52W
 Heights: 1946 feet site elevation (SE)
 493 feet above ground level (AGL)
 2439 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2695-OE.

Signature Control No: 253319846-309224492

(DNE -WT)

Brenda Mumper
Specialist

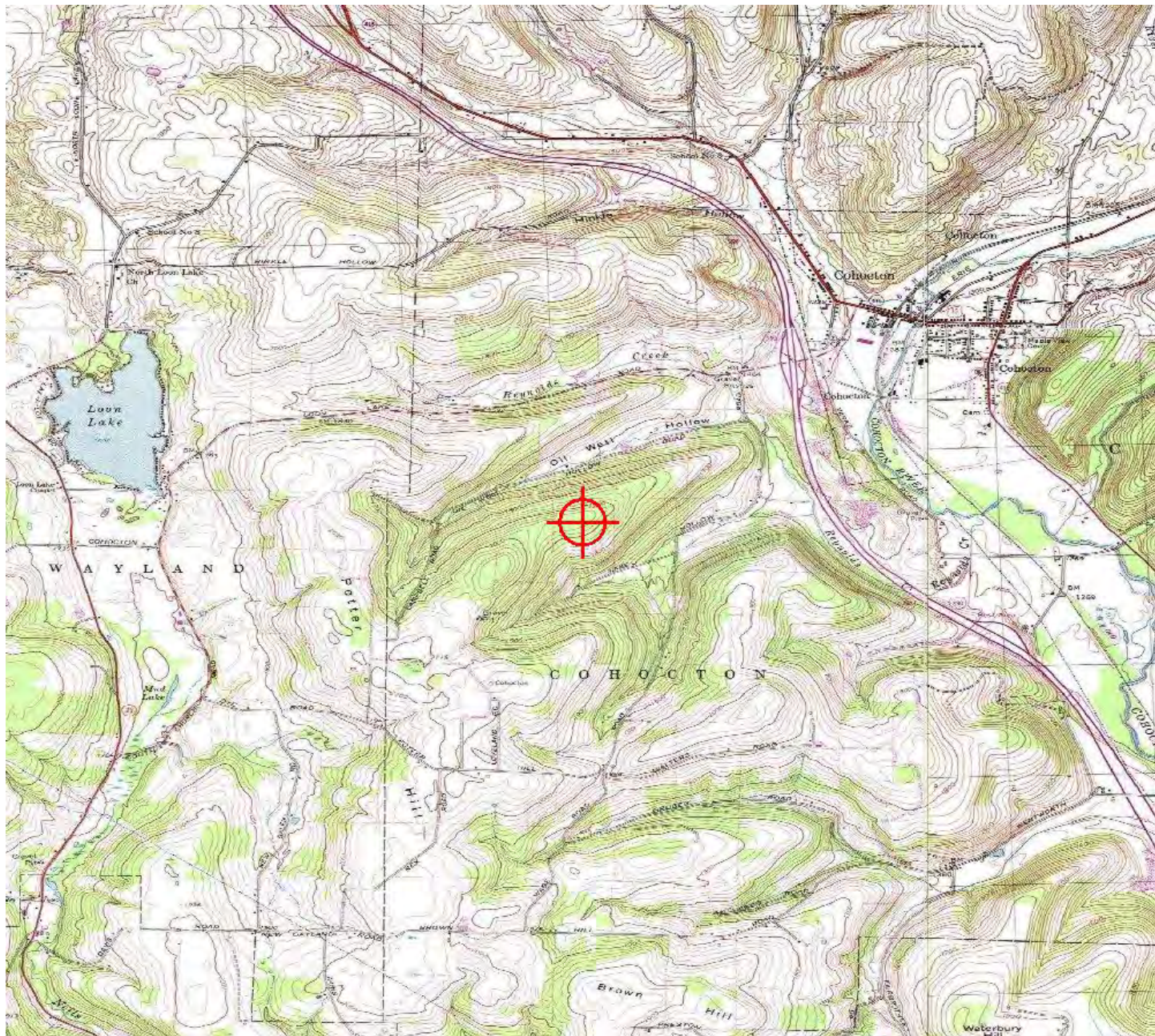
Attachment(s)
Additional Information
Map(s)

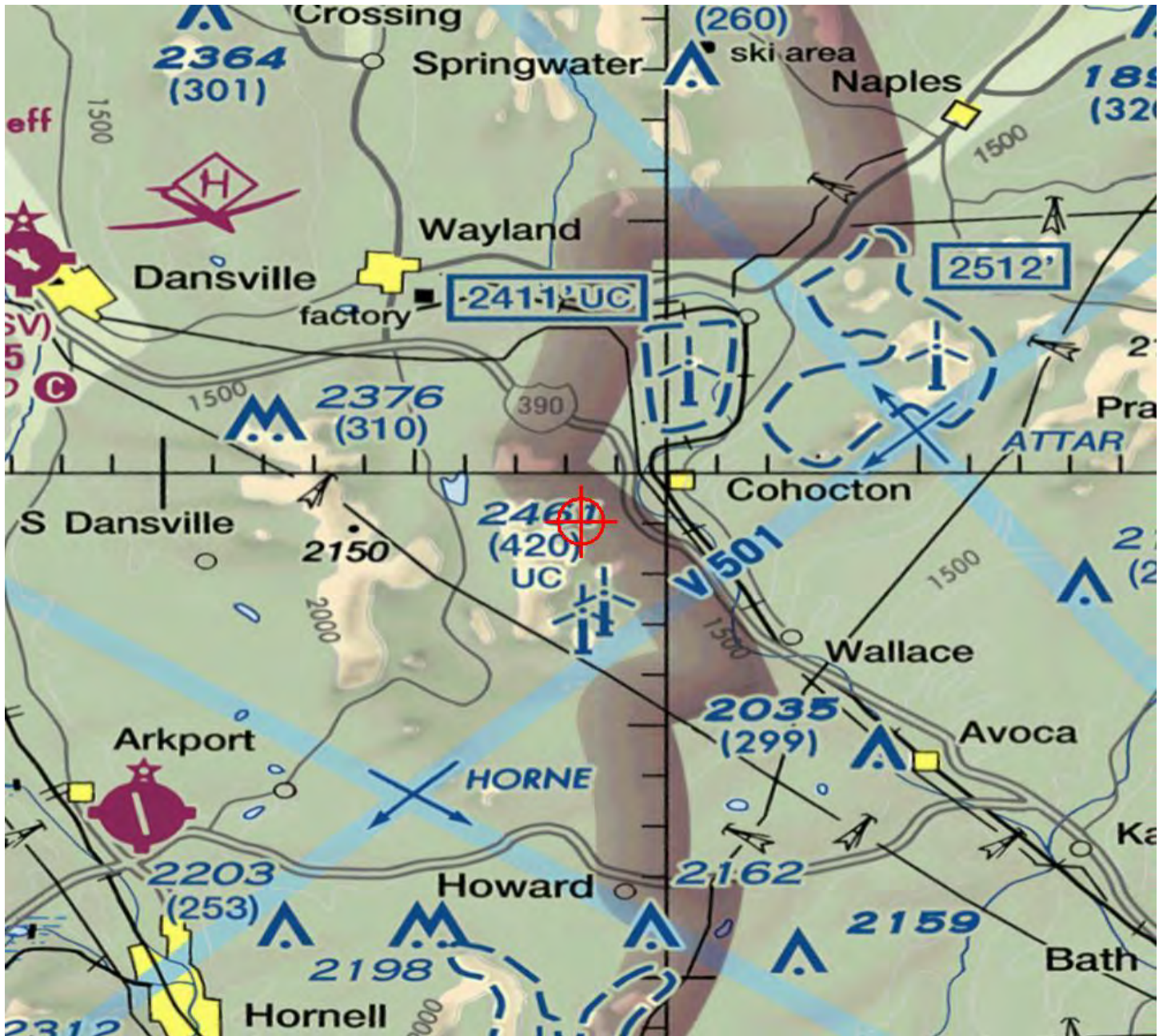
Additional information for ASN 2015-WTE-2695-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







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 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2696-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T7
 Location: Cohocton, NY
 Latitude: 42-30-26.07N NAD 83
 Longitude: 77-31-31.69W
 Heights: 1849 feet site elevation (SE)
 493 feet above ground level (AGL)
 2342 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2696-OE.

Signature Control No: 253319847-309224504

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

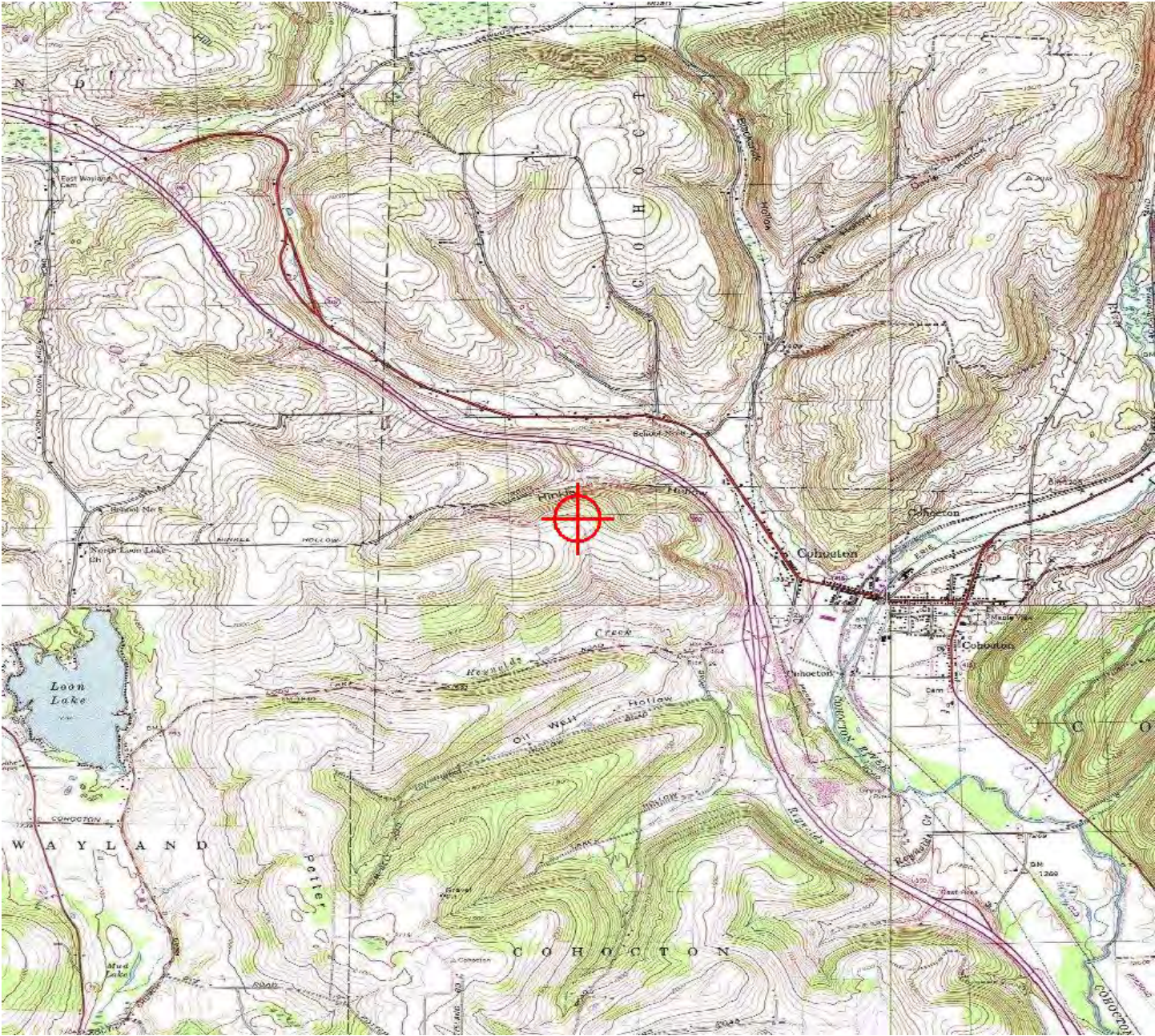
Additional information for ASN 2015-WTE-2696-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2696-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2698-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T9
 Location: Cohocton, NY
 Latitude: 42-28-00.12N NAD 83
 Longitude: 77-31-05.33W
 Heights: 2020 feet site elevation (SE)
 493 feet above ground level (AGL)
 2513 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2698-OE.

Signature Control No: 253319849-309224509

(DNE -WT)

Brenda Mumper
Specialist

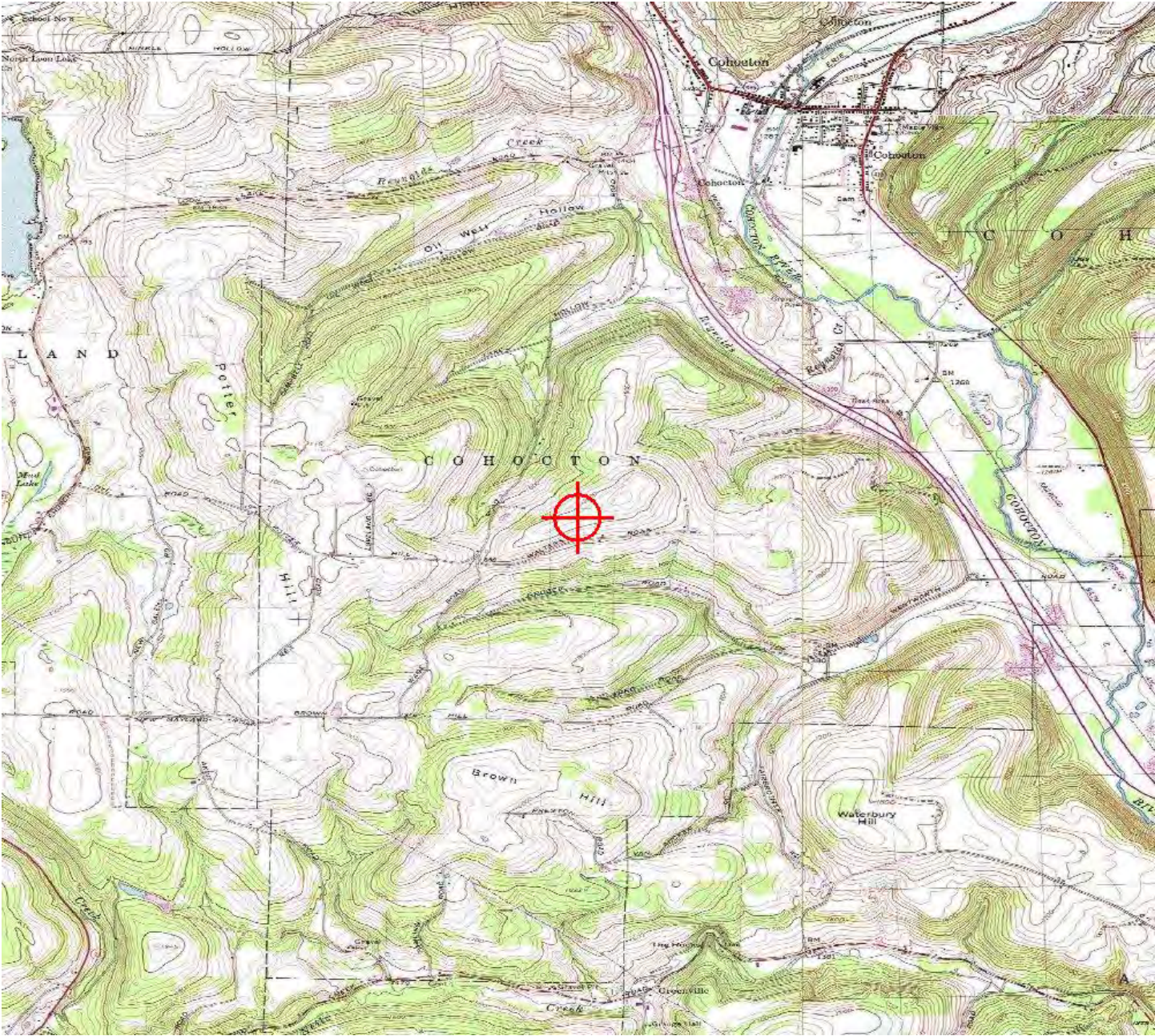
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2698-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2699-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T10
 Location: Cohocton, NY
 Latitude: 42-28-40.94N NAD 83
 Longitude: 77-30-57.46W
 Heights: 1903 feet site elevation (SE)
 493 feet above ground level (AGL)
 2396 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2699-OE.

Signature Control No: 253319850-309224498

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

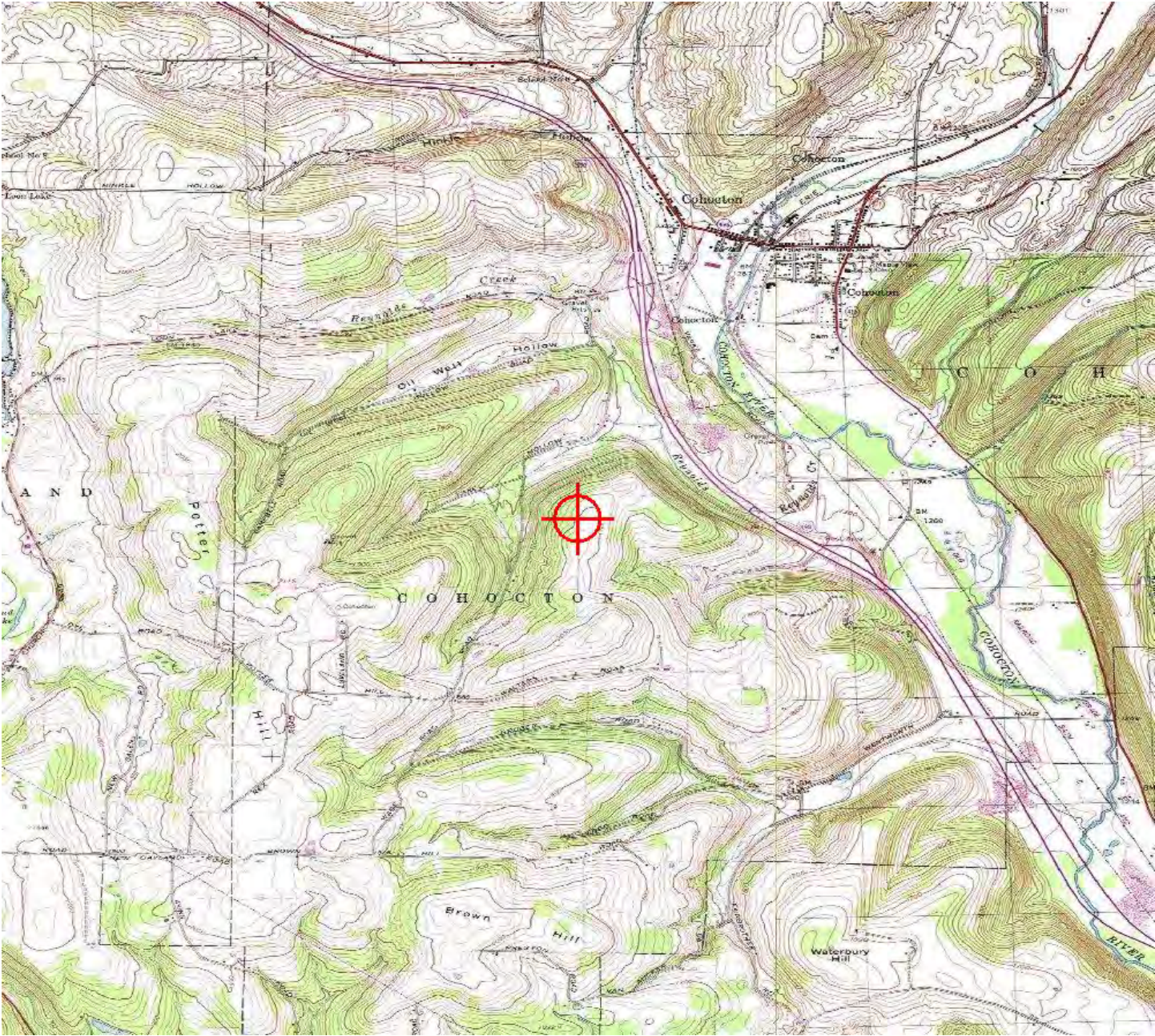
Additional information for ASN 2015-WTE-2699-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2699-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2700-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T11
 Location: Cohocton, NY
 Latitude: 42-28-25.63N NAD 83
 Longitude: 77-31-42.17W
 Heights: 2045 feet site elevation (SE)
 493 feet above ground level (AGL)
 2538 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2700-OE.

Signature Control No: 253319851-309224506

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

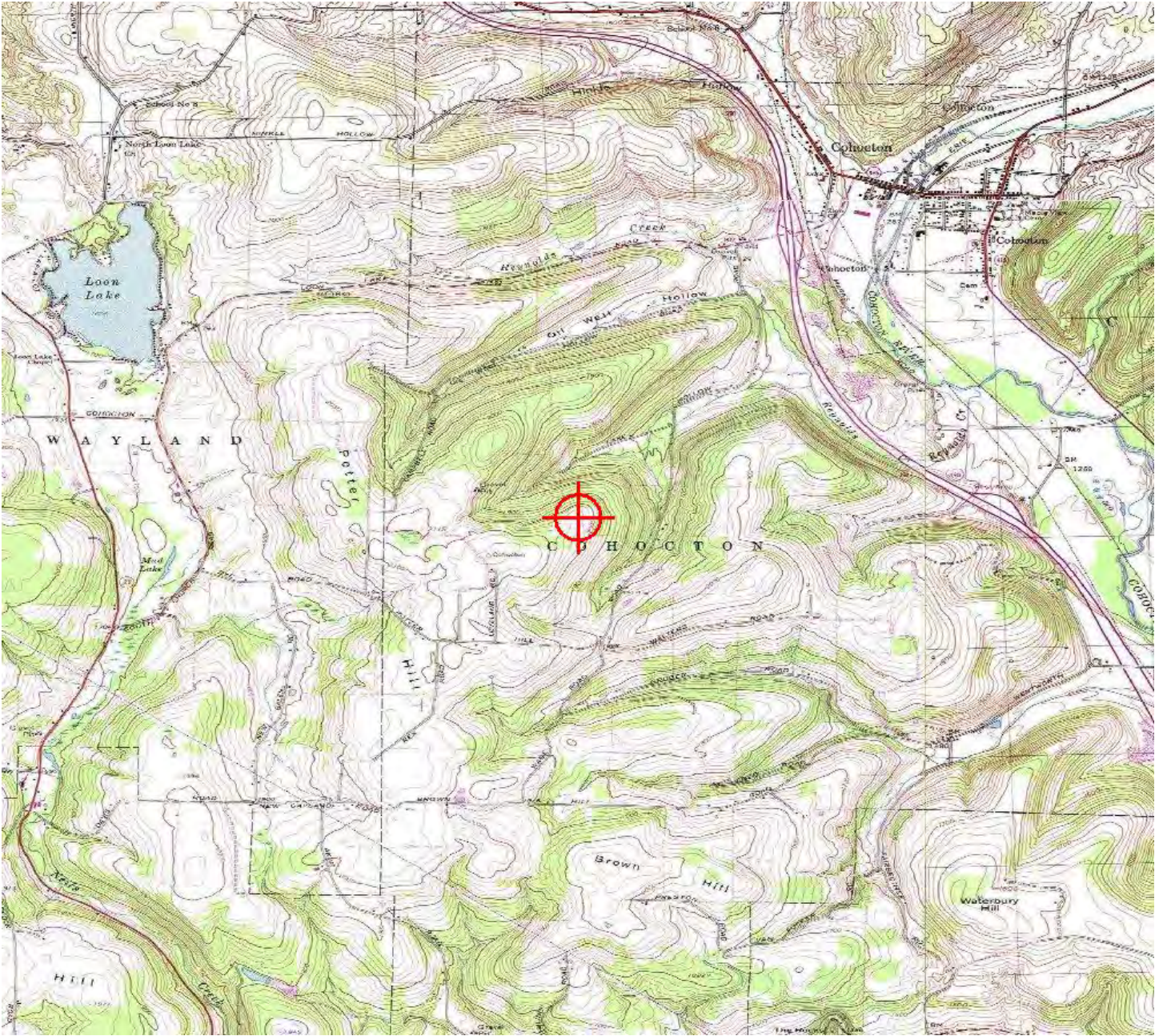
Additional information for ASN 2015-WTE-2700-OE

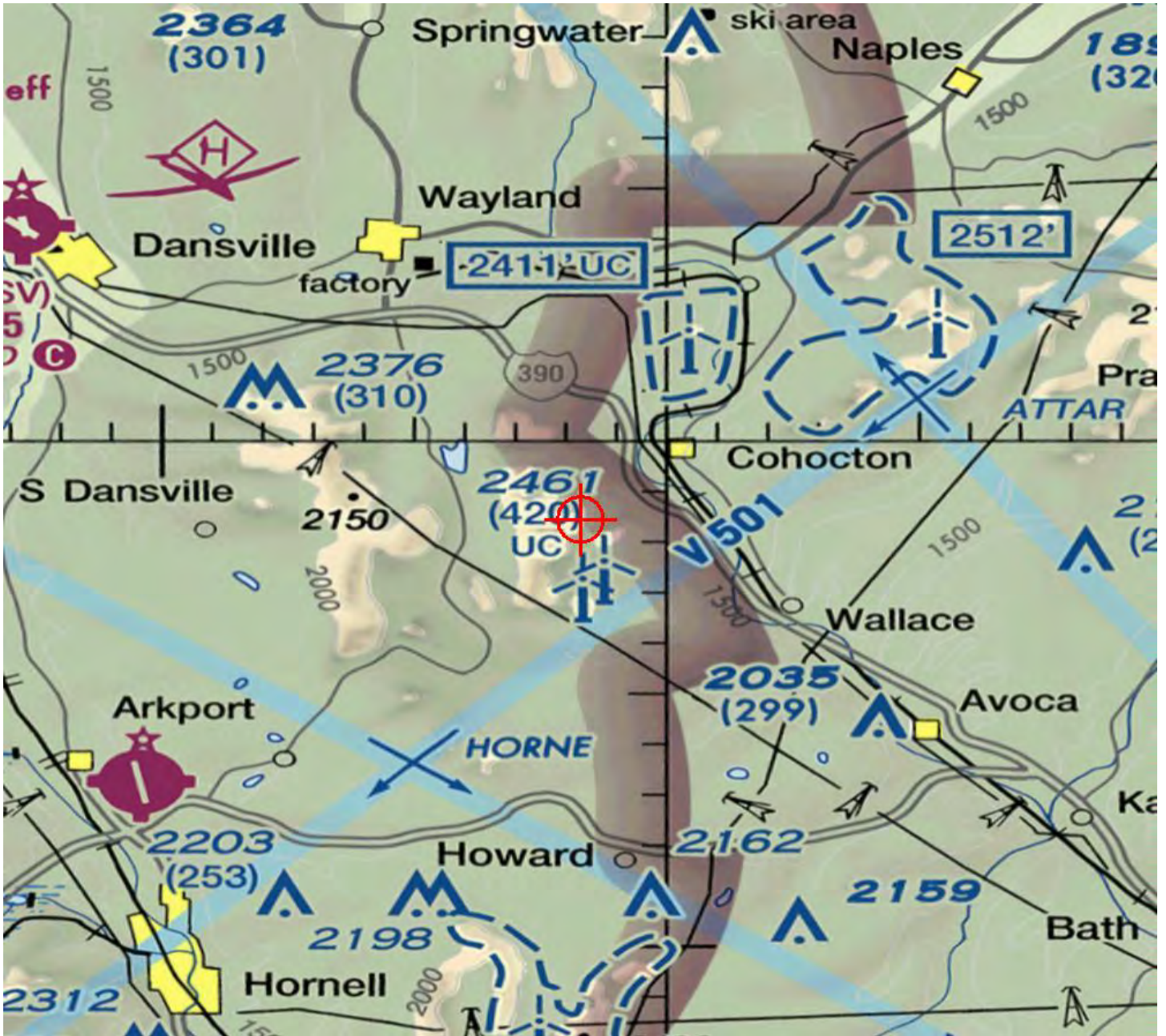
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2700-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2701-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T12
Location: Cohocton, NY
Latitude: 42-28-30.91N NAD 83
Longitude: 77-32-52.37W
Heights: 2100 feet site elevation (SE)
493 feet above ground level (AGL)
2593 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2701-OE.

Signature Control No: 253319852-309223615

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2701-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

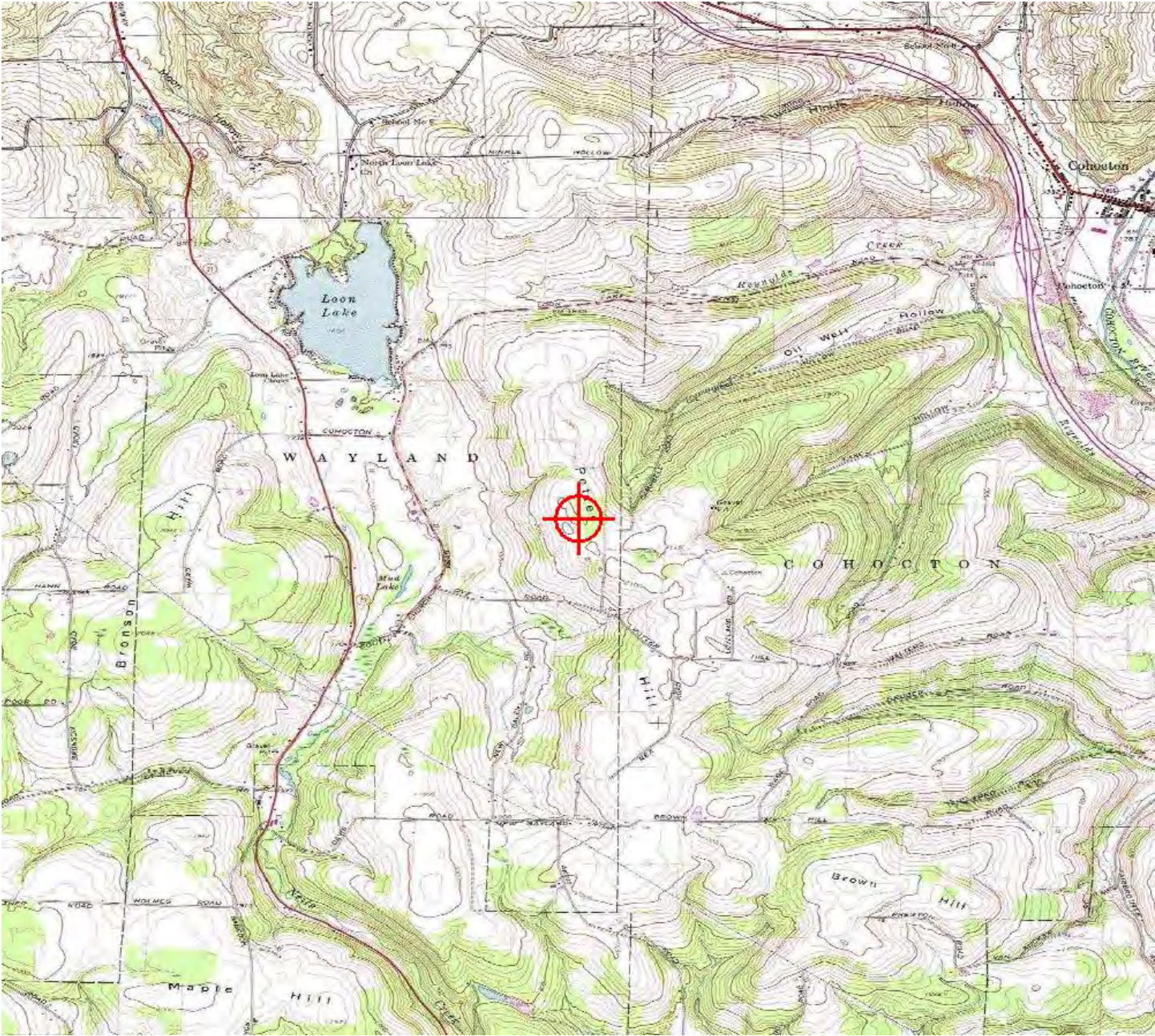
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

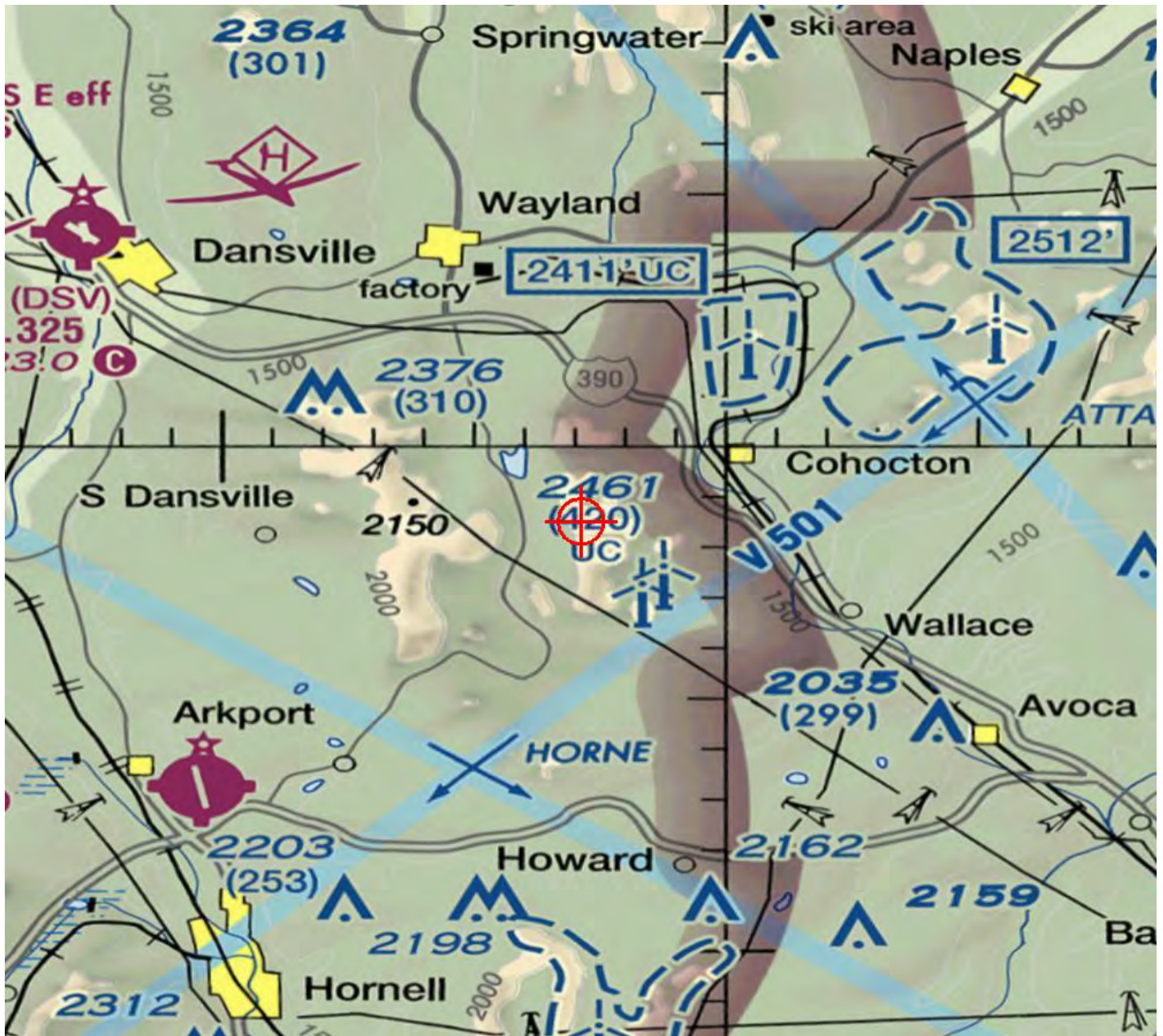
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2702-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T13
 Location: Cohocton, NY
 Latitude: 42-28-50.91N NAD 83
 Longitude: 77-31-59.70W
 Heights: 2025 feet site elevation (SE)
 493 feet above ground level (AGL)
 2518 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2702-OE.

Signature Control No: 253319853-309224496

(DNE -WT)

Brenda Mumper
Specialist

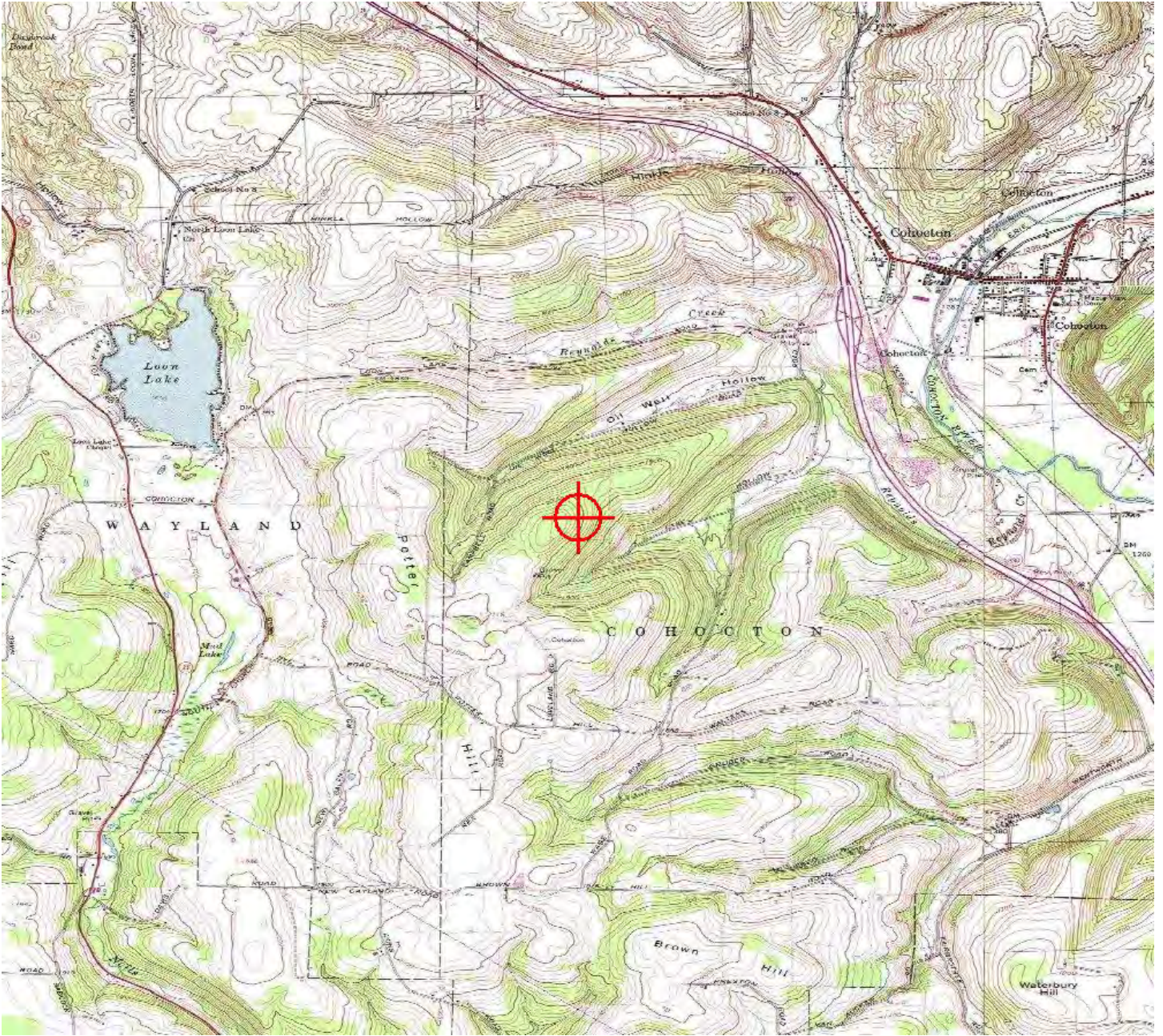
Attachment(s)
Additional Information
Map(s)

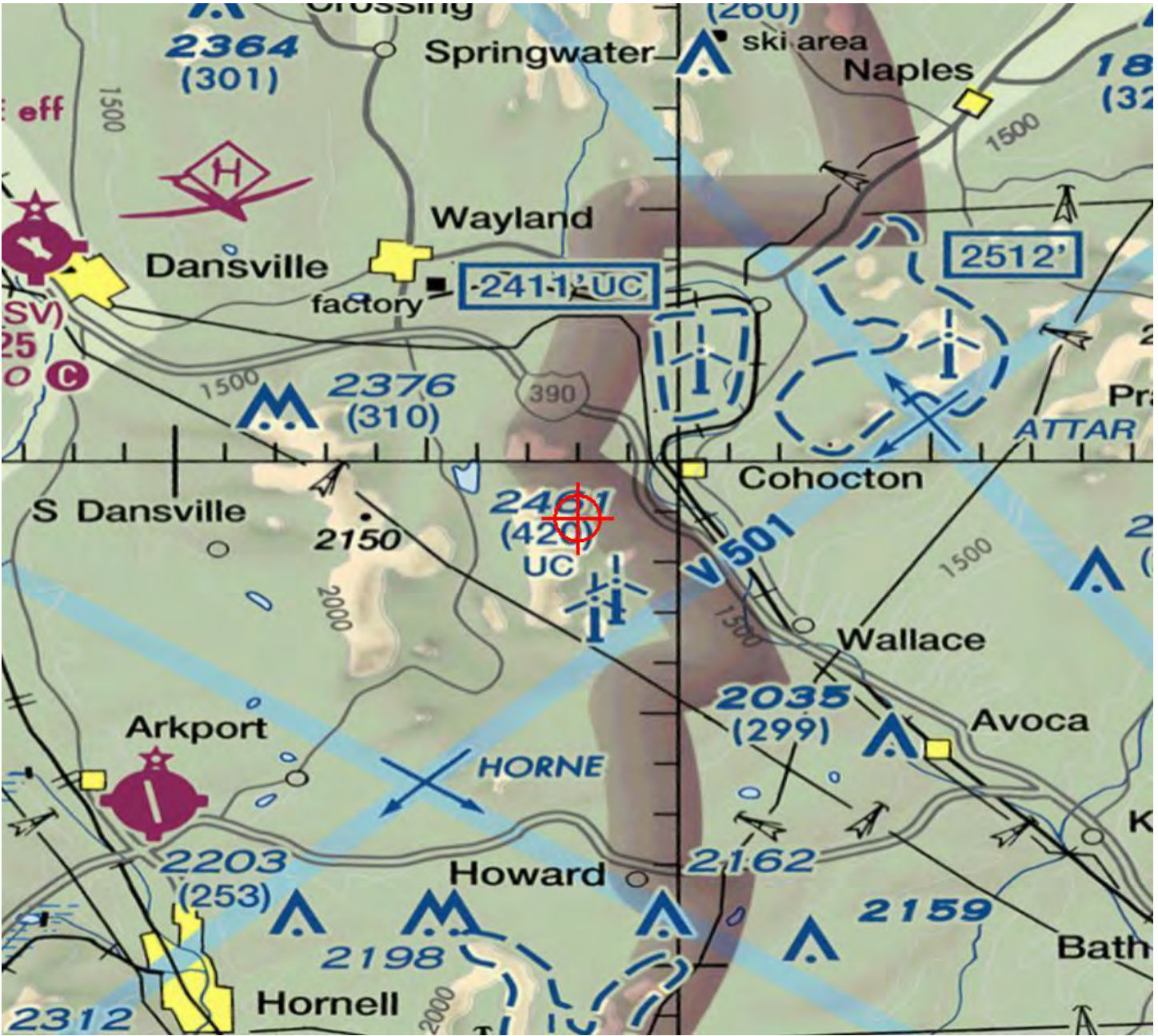
Additional information for ASN 2015-WTE-2702-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2703-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T14
 Location: Cohocton, NY
 Latitude: 42-30-18.23N NAD 83
 Longitude: 77-31-18.15W
 Heights: 1844 feet site elevation (SE)
 493 feet above ground level (AGL)
 2337 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2703-OE.

Signature Control No: 253319854-309224503

(DNE -WT)

Brenda Mumper
Specialist

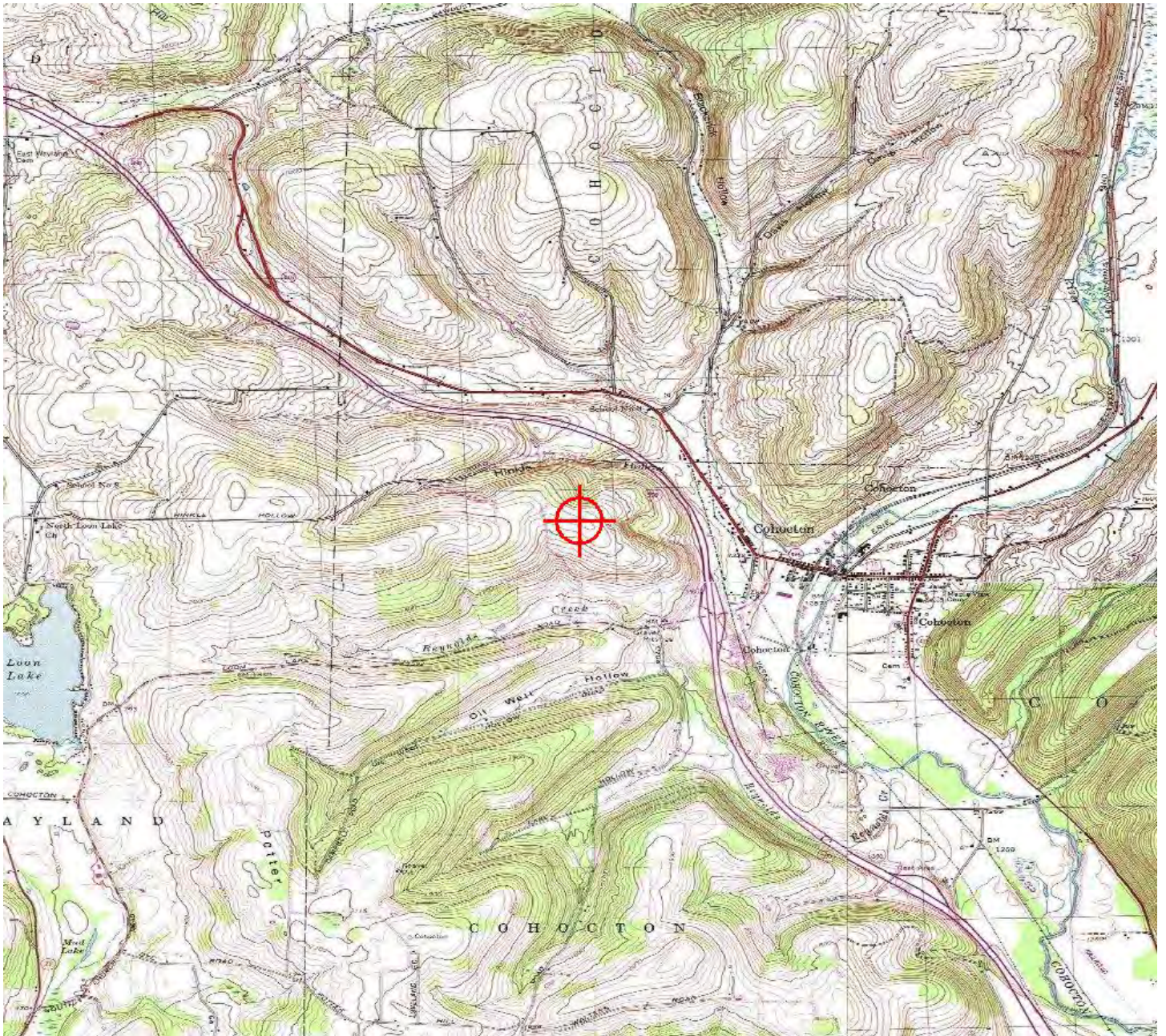
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2703-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2704-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T15
 Location: Cohocton, NY
 Latitude: 42-27-46.40N NAD 83
 Longitude: 77-30-07.90W
 Heights: 1886 feet site elevation (SE)
 493 feet above ground level (AGL)
 2379 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2704-OE.

Signature Control No: 253319855-309224502

(DNE -WT)

Brenda Mumper
Specialist

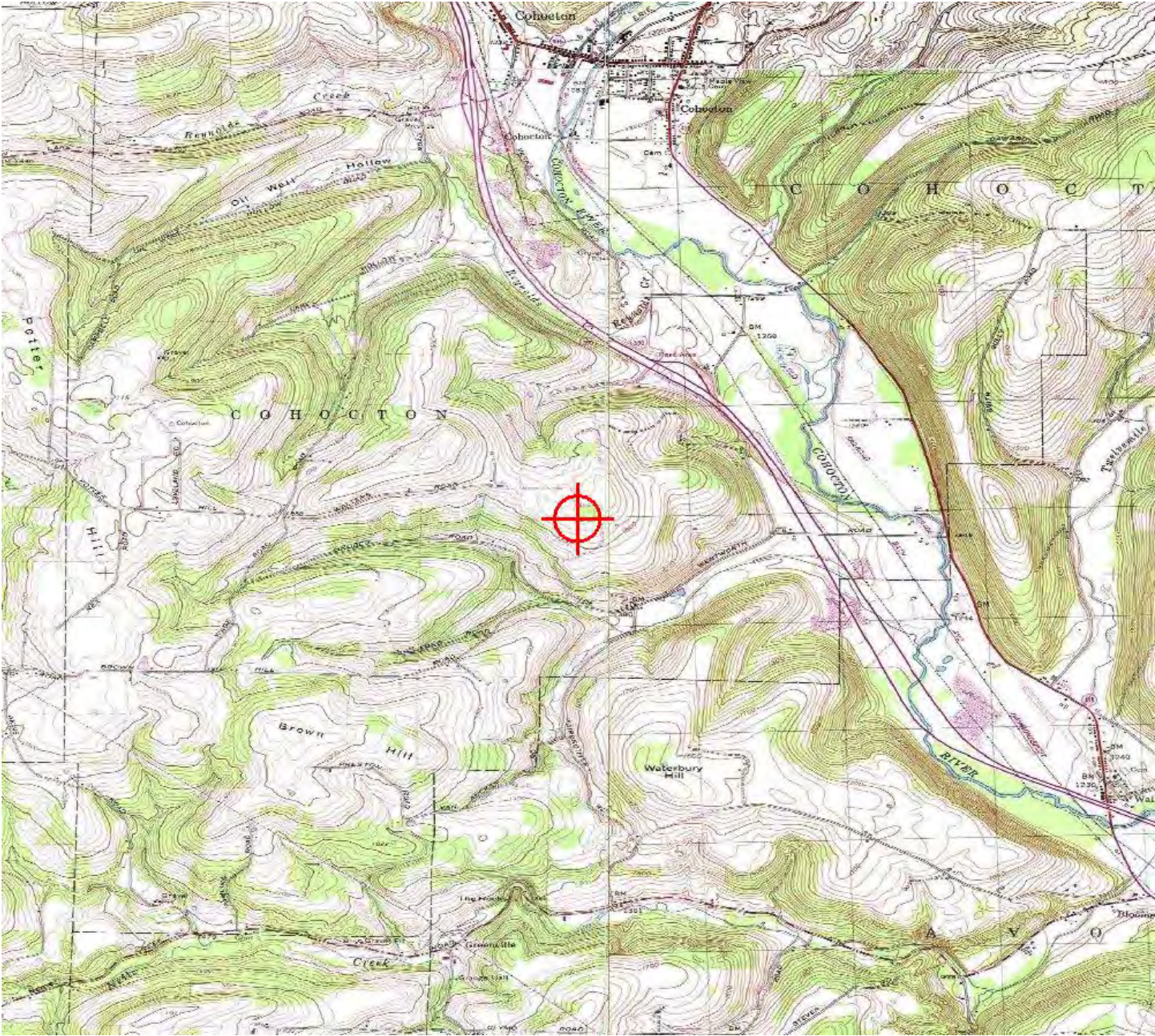
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2704-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2707-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T18
 Location: Cohocton, NY
 Latitude: 42-29-14.26N NAD 83
 Longitude: 77-31-23.02W
 Heights: 1818 feet site elevation (SE)
 493 feet above ground level (AGL)
 2311 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2707-OE.

Signature Control No: 253319858-309224510

(DNE -WT)

Brenda Mumper
Specialist

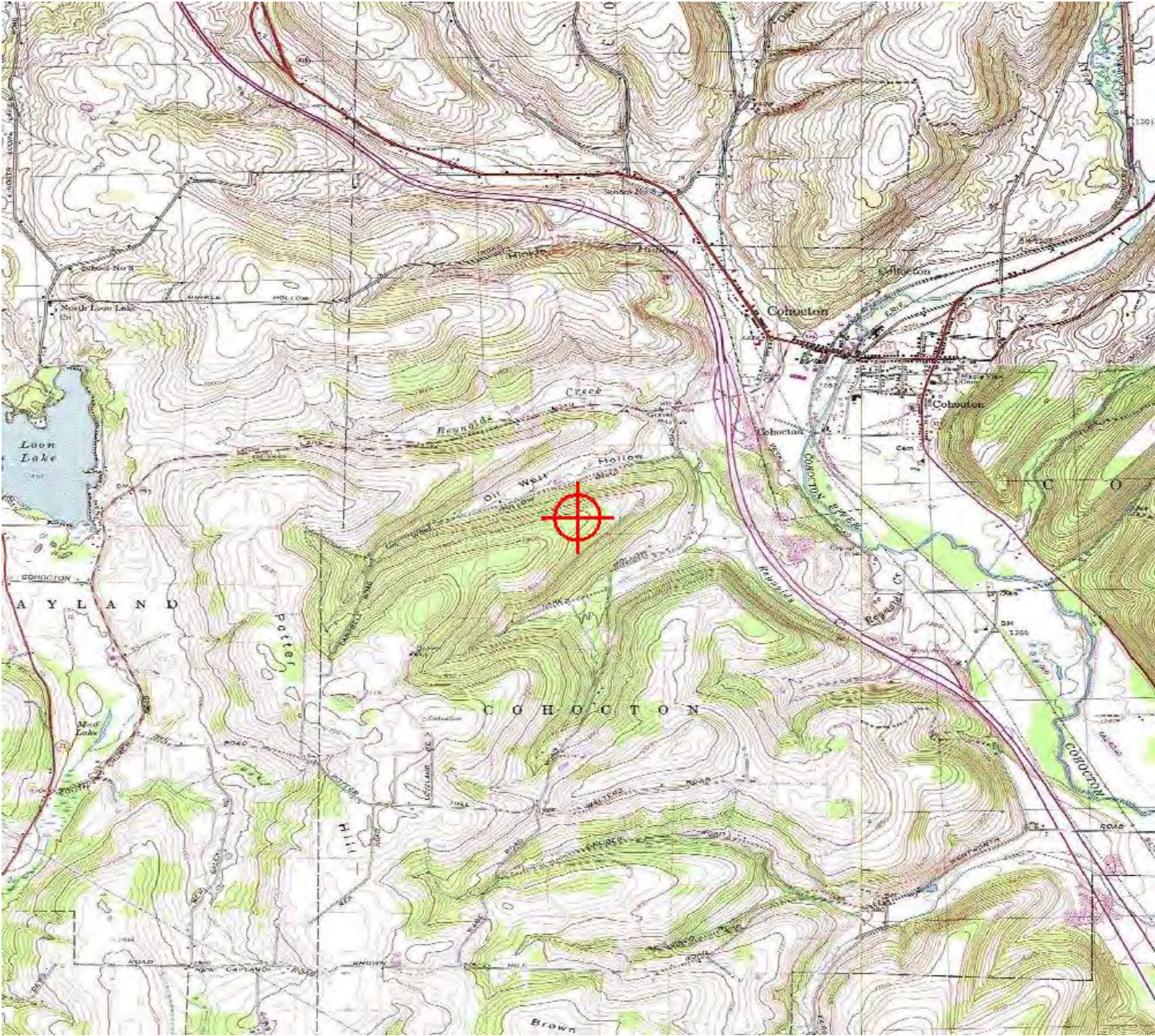
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2707-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2708-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T19
 Location: Cohocton, NY
 Latitude: 42-29-18.38N NAD 83
 Longitude: 77-32-34.28W
 Heights: 2017 feet site elevation (SE)
 493 feet above ground level (AGL)
 2510 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2708-OE.

Signature Control No: 253319859-309224494

(DNE -WT)

Brenda Mumper
Specialist

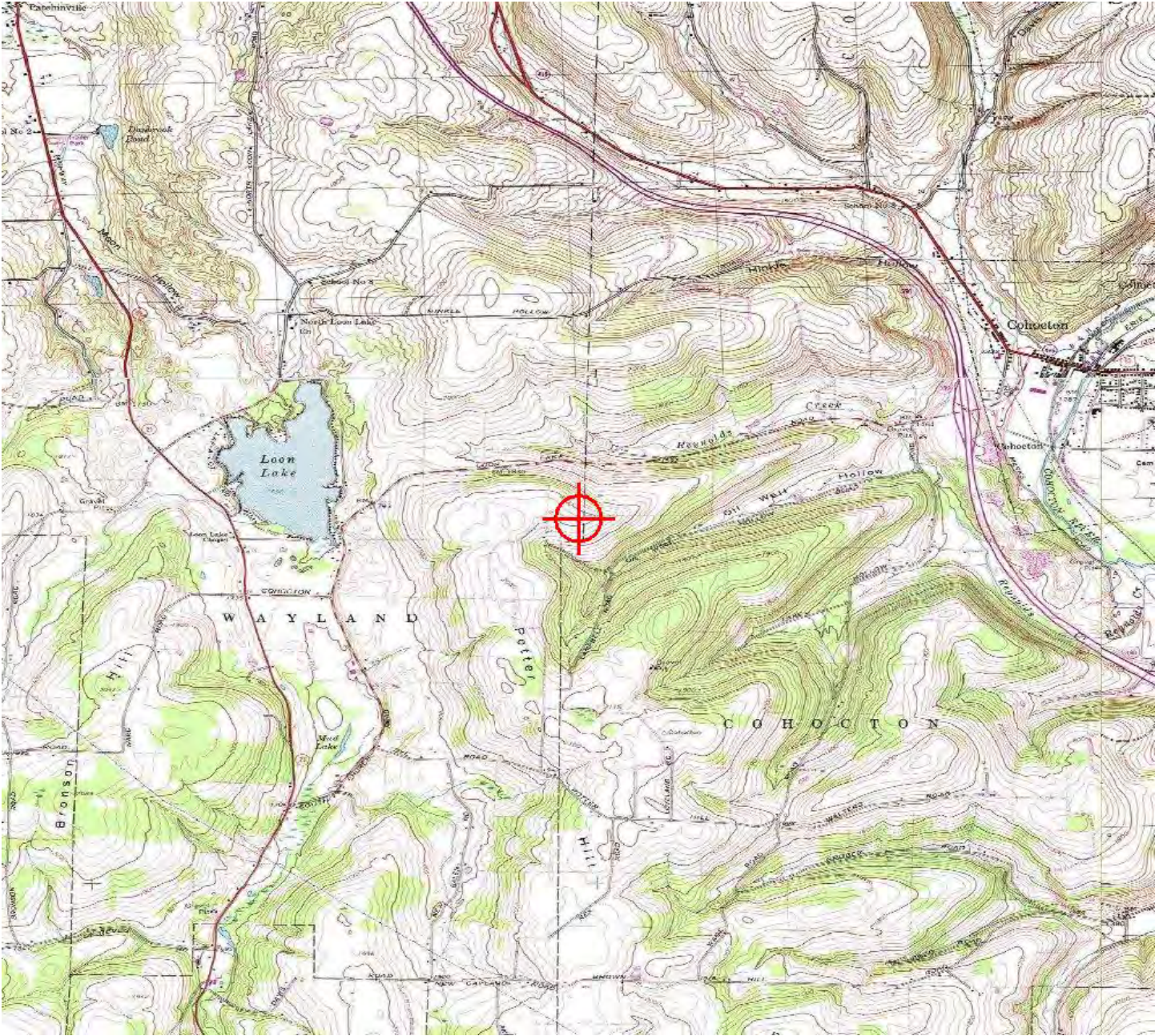
Attachment(s)
Additional Information
Map(s)

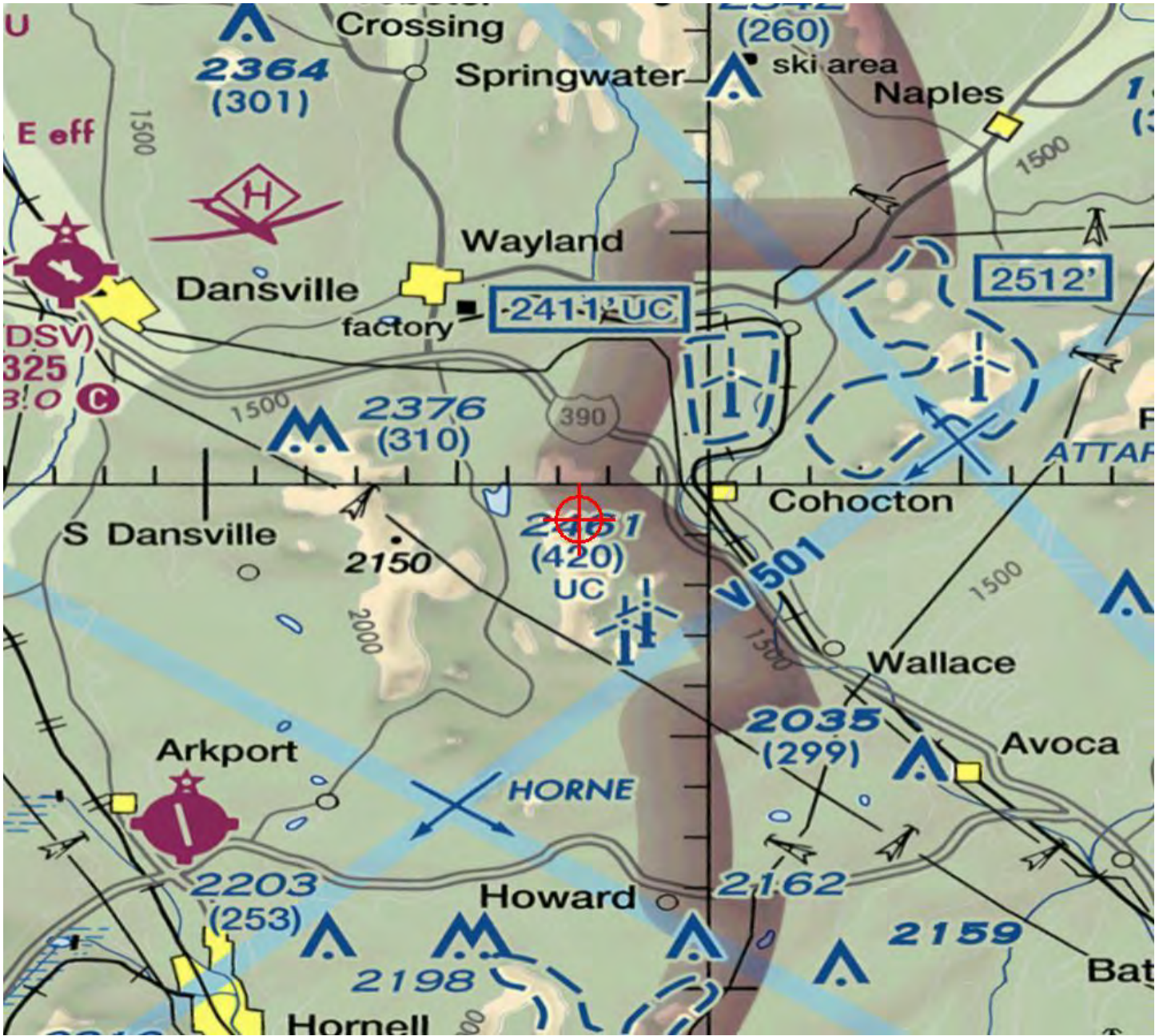
Additional information for ASN 2015-WTE-2708-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2710-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T21
Location: Cohocton, NY
Latitude: 42-28-55.94N NAD 83
Longitude: 77-32-55.09W
Heights: 2085 feet site elevation (SE)
493 feet above ground level (AGL)
2578 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2710-OE.

Signature Control No: 253319861-309223614

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2710-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

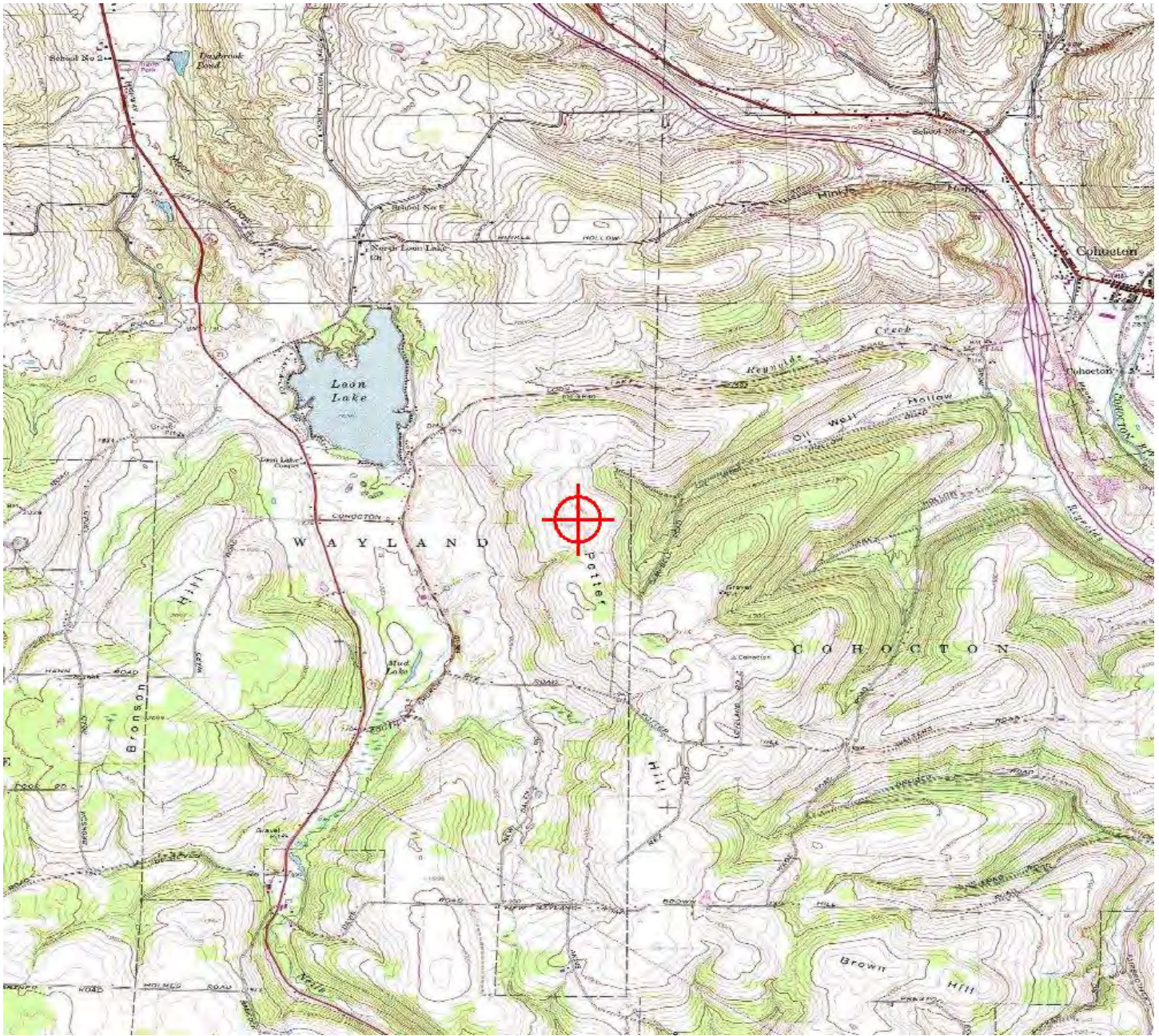
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

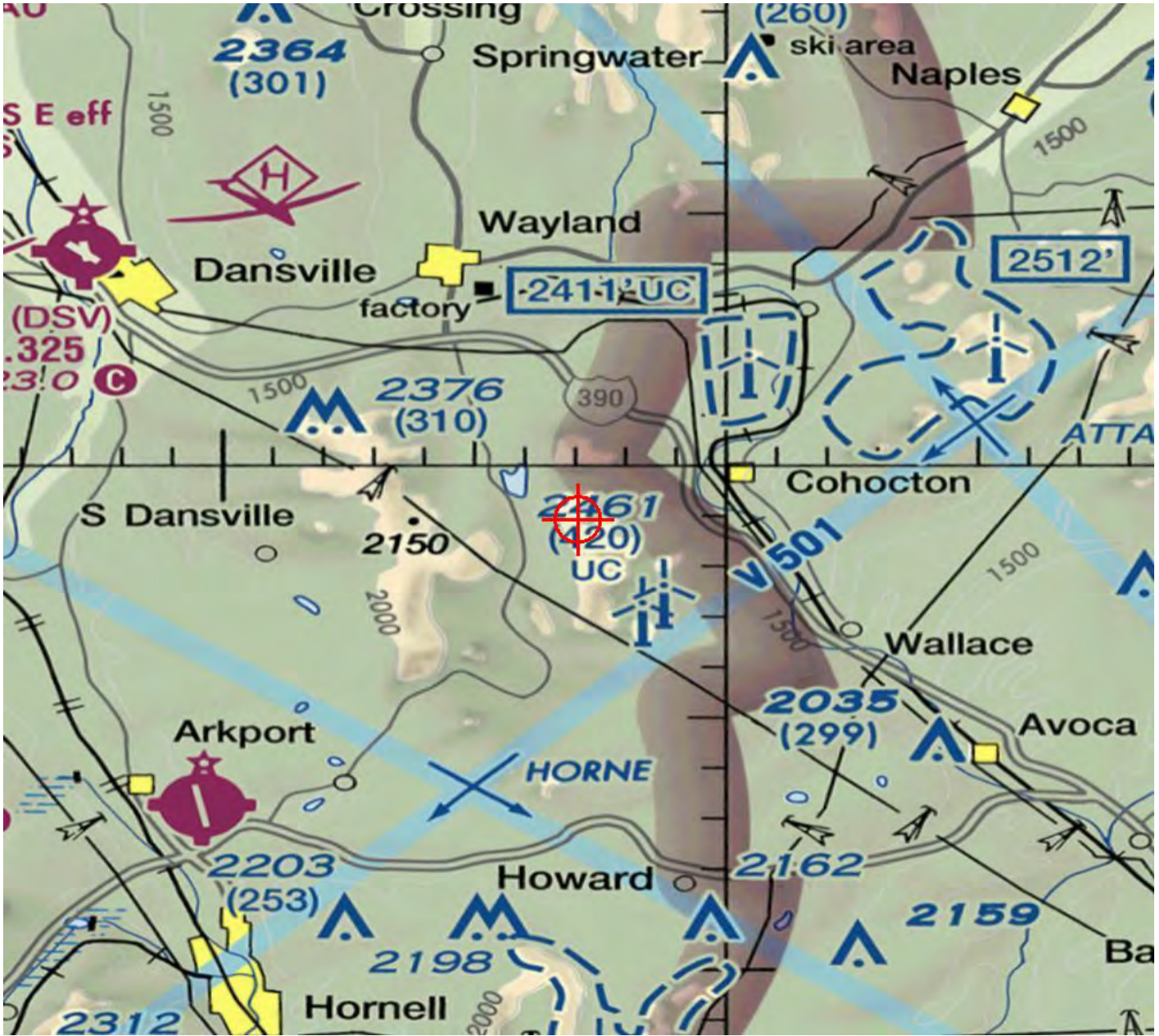
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.



Sectional Map for ASN 2015-WTE-2710-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2711-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T22
 Location: Cohocton, NY
 Latitude: 42-29-17.26N NAD 83
 Longitude: 77-32-58.45W
 Heights: 2054 feet site elevation (SE)
 493 feet above ground level (AGL)
 2547 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2711-OE.

Signature Control No: 253319862-309224507

(DNE -WT)

Brenda Mumper
Specialist

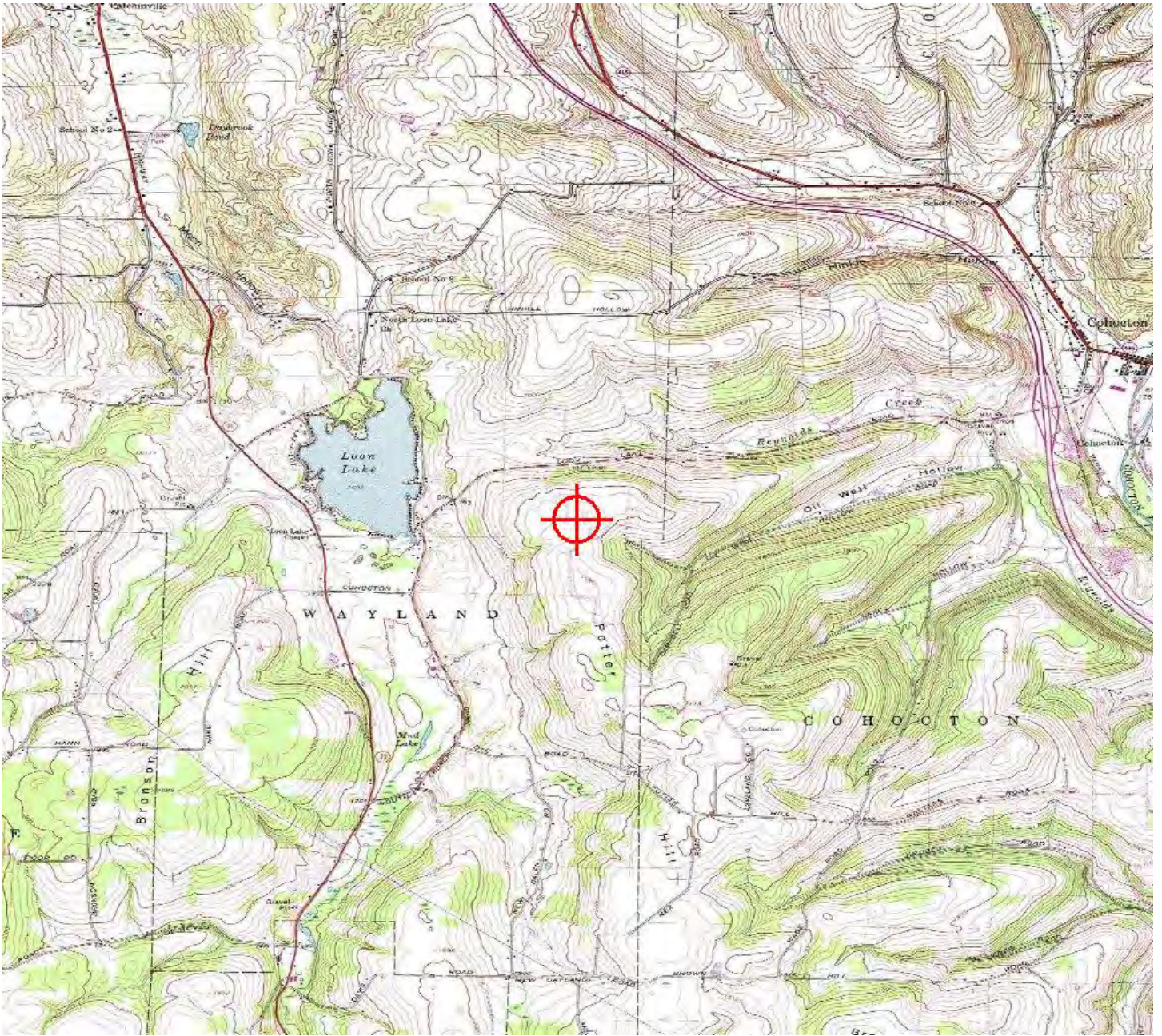
Attachment(s)
Additional Information
Map(s)

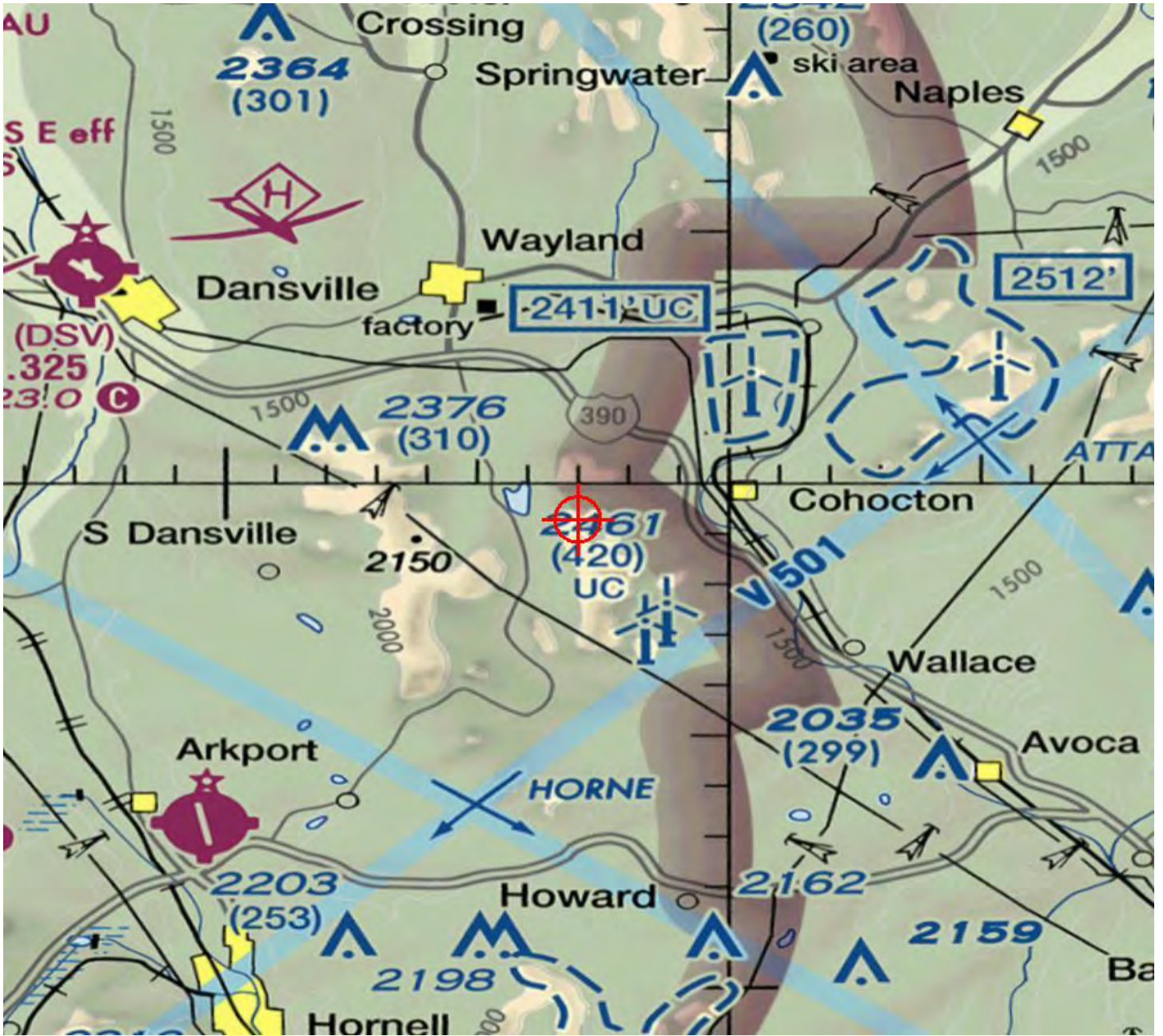
Additional information for ASN 2015-WTE-2711-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2712-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T23
Location: Cohocton, NY
Latitude: 42-28-43.62N NAD 83
Longitude: 77-32-54.85W
Heights: 2079 feet site elevation (SE)
493 feet above ground level (AGL)
2572 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2712-OE.

Signature Control No: 253319863-309223611

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2712-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

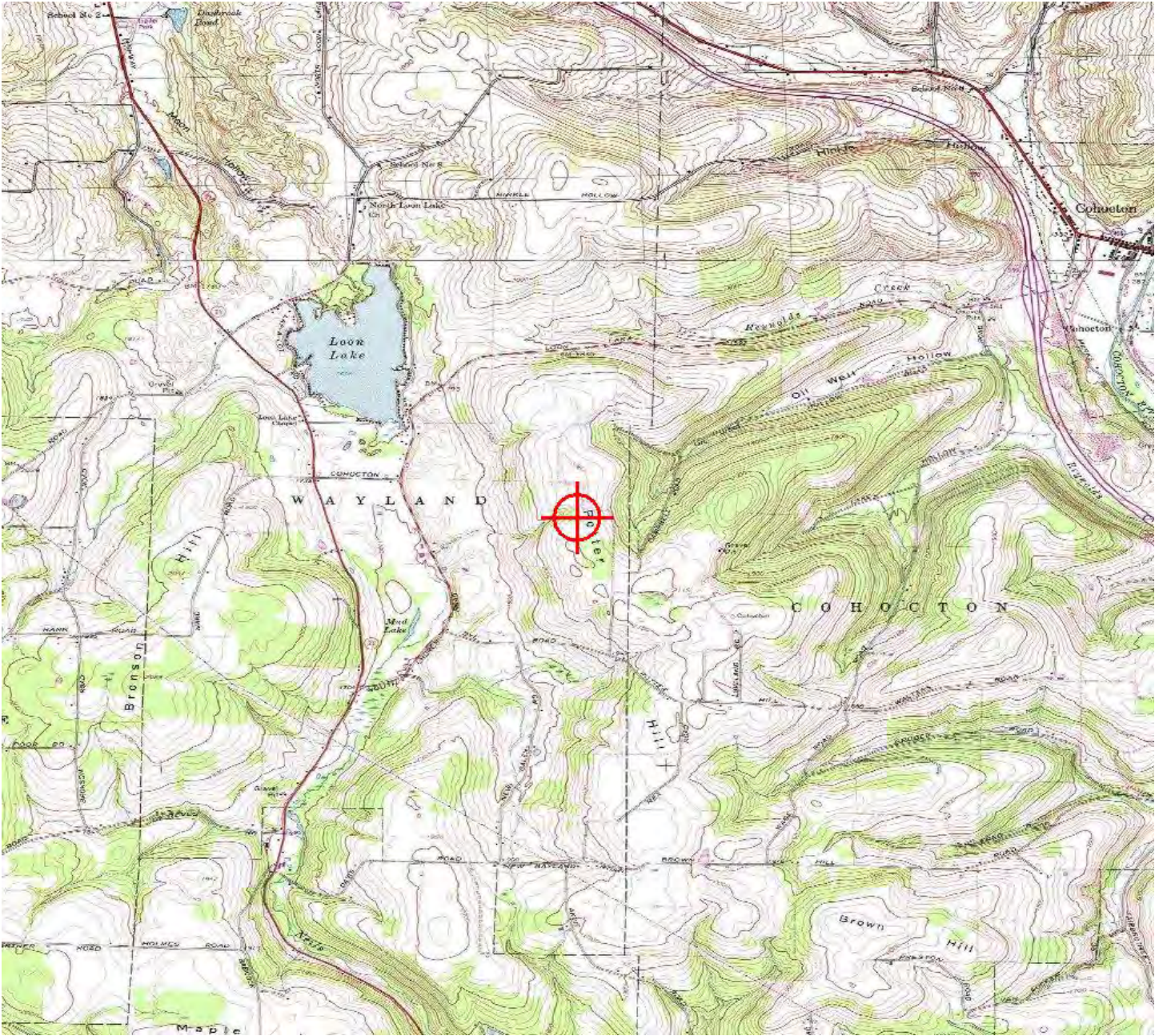
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

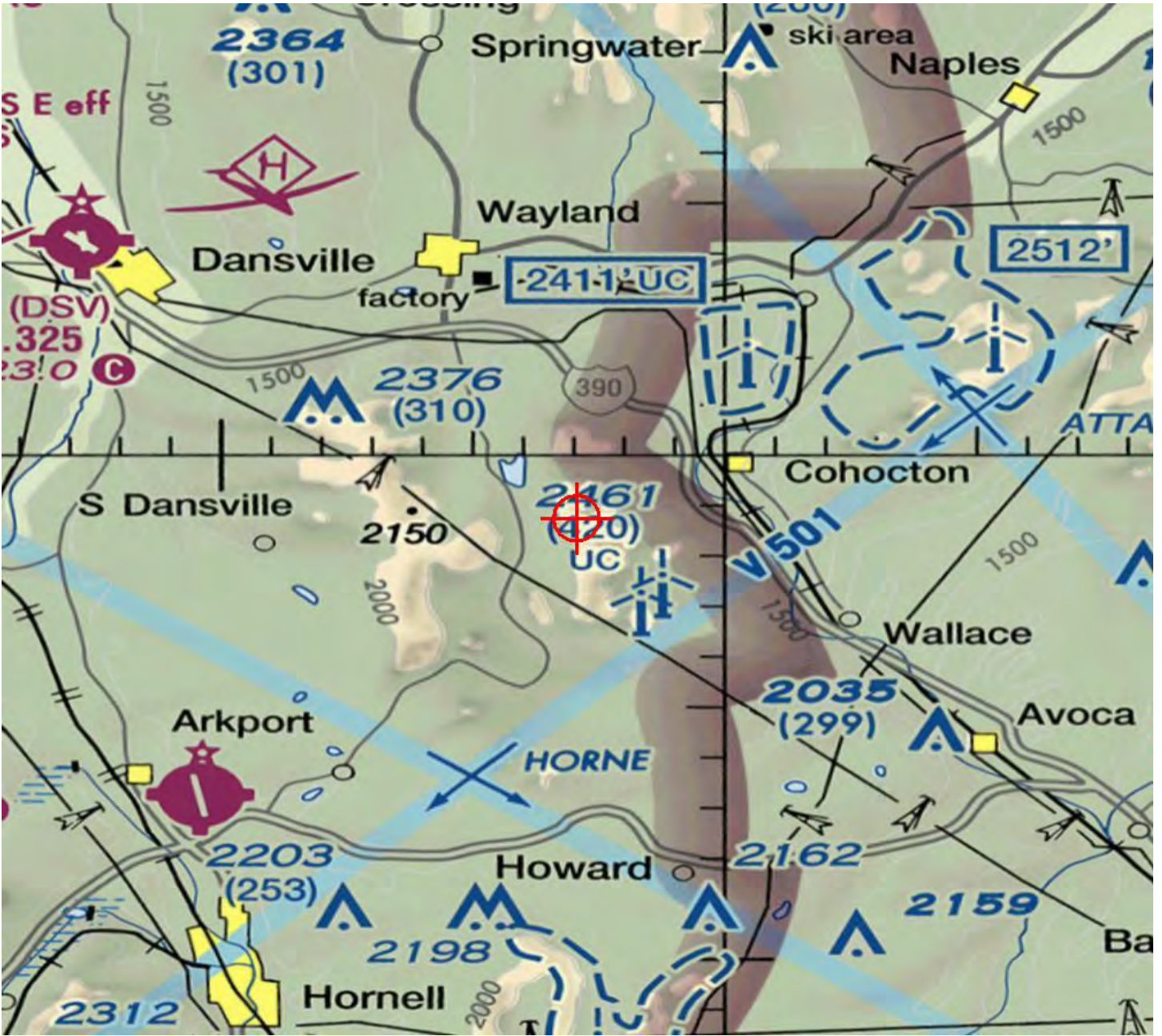
Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.

TOPO Map for ASN 2015-WTE-2712-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2713-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T24
Location: Cohocton, NY
Latitude: 42-28-09.96N NAD 83
Longitude: 77-31-57.04W
Heights: 2118 feet site elevation (SE)
493 feet above ground level (AGL)
2611 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2713-OE.

Signature Control No: 253319864-309223617

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2713-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

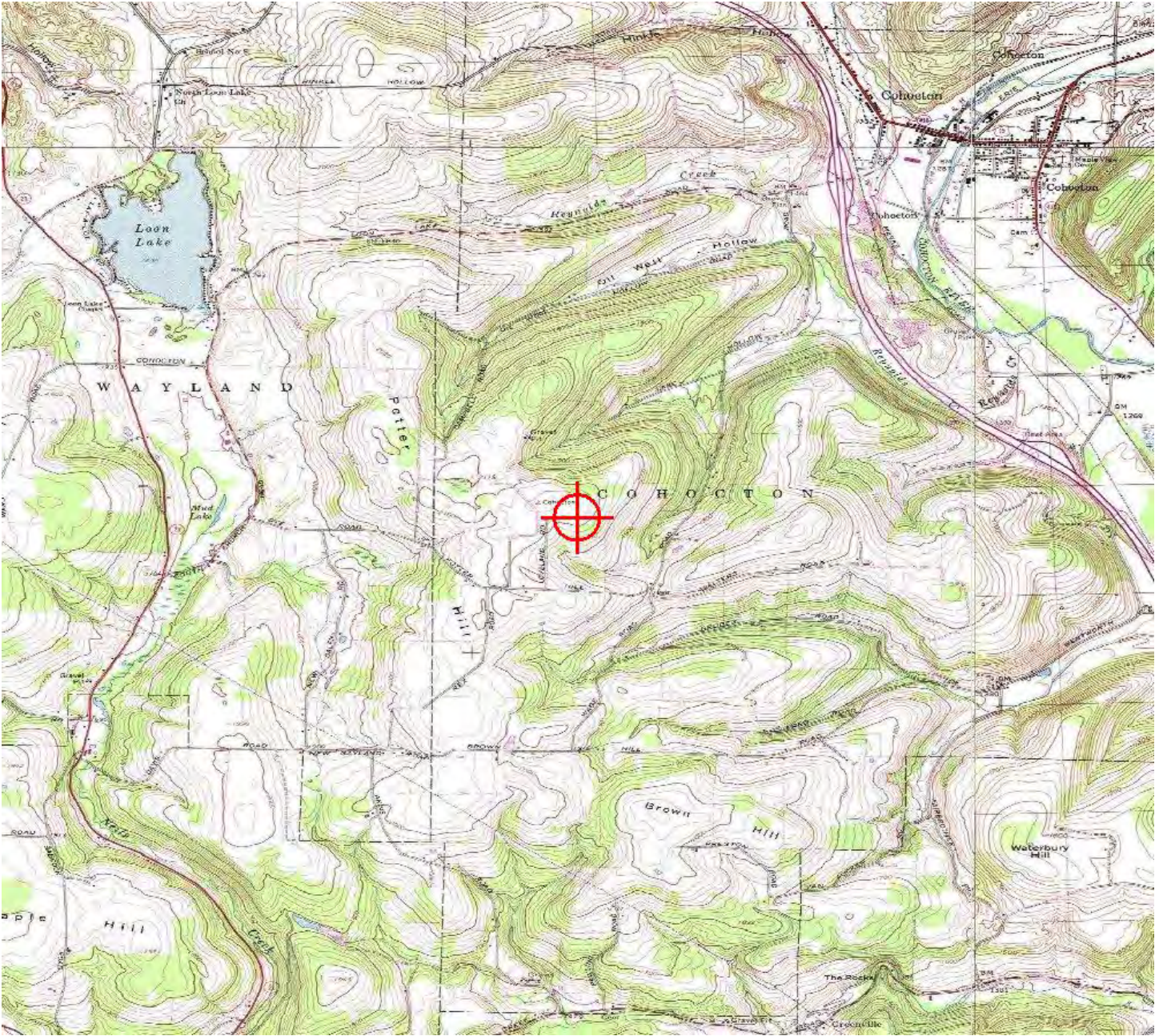
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

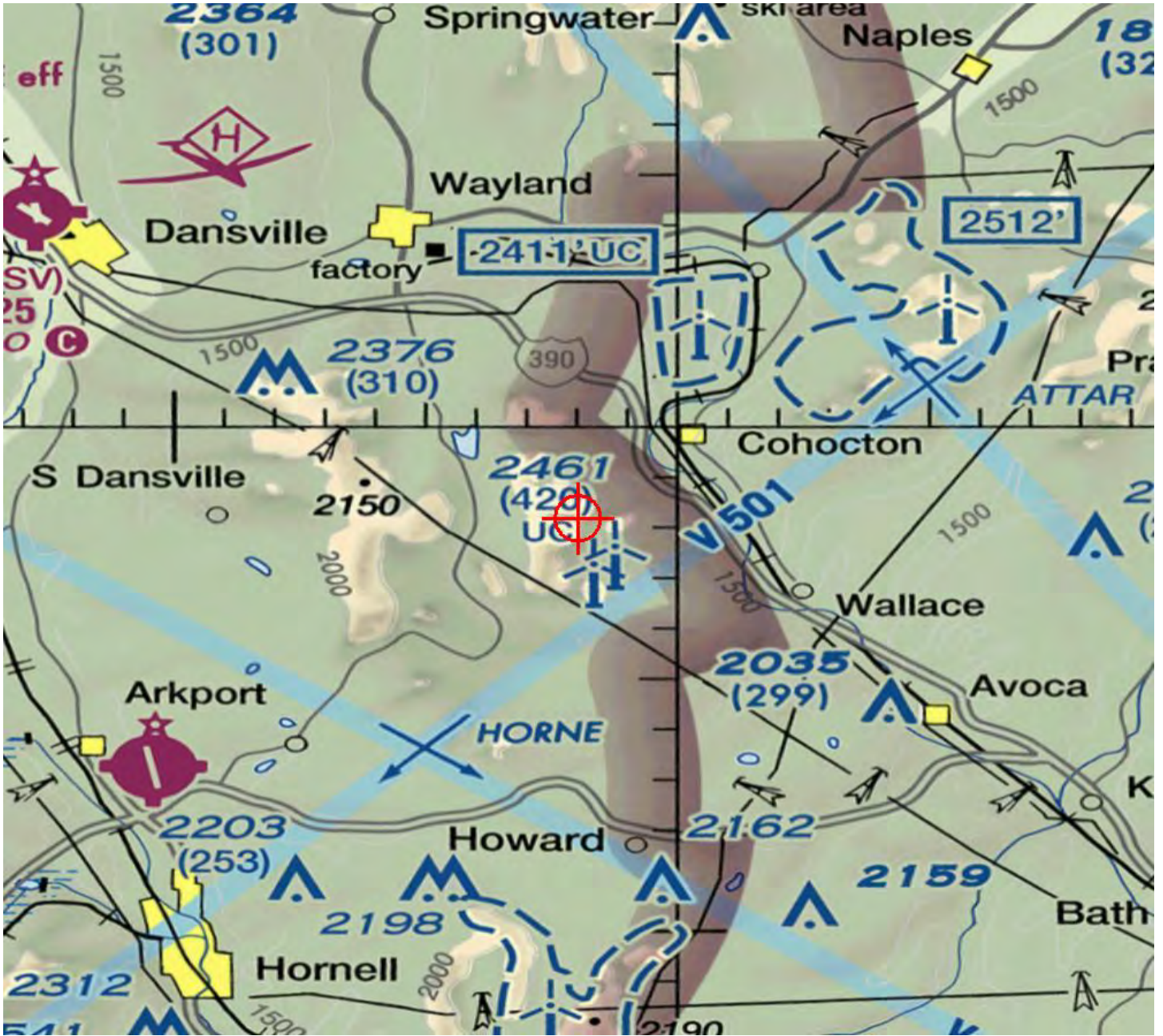
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2714-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T25
 Location: Cohocton, NY
 Latitude: 42-25-58.35N NAD 83
 Longitude: 77-36-16.20W
 Heights: 2054 feet site elevation (SE)
 493 feet above ground level (AGL)
 2547 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2714-OE.

Signature Control No: 253319865-309224127

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2714-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

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2015-WTE-2715-OE / 58 ft.
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2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
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2015-WTE-2743-OE / 87 ft.
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2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
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2015-WTE-2770-OE / 61 ft.
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2015-WTE-2775-OE / 22 ft.
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2015-WTE-2783-OE / 188 ft.
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2015-WTE-2796-OE / 139 ft.
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2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
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2015-WTE-2805-OE / 85 ft.
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2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
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Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
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2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.



Sectional Map for ASN 2015-WTE-2714-OE





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2718-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T29
Location: Cohocton, NY
Latitude: 42-25-48.43N NAD 83
Longitude: 77-36-06.42W
Heights: 2042 feet site elevation (SE)
493 feet above ground level (AGL)
2535 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2718-OE.

Signature Control No: 253319874-309224140

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2718-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

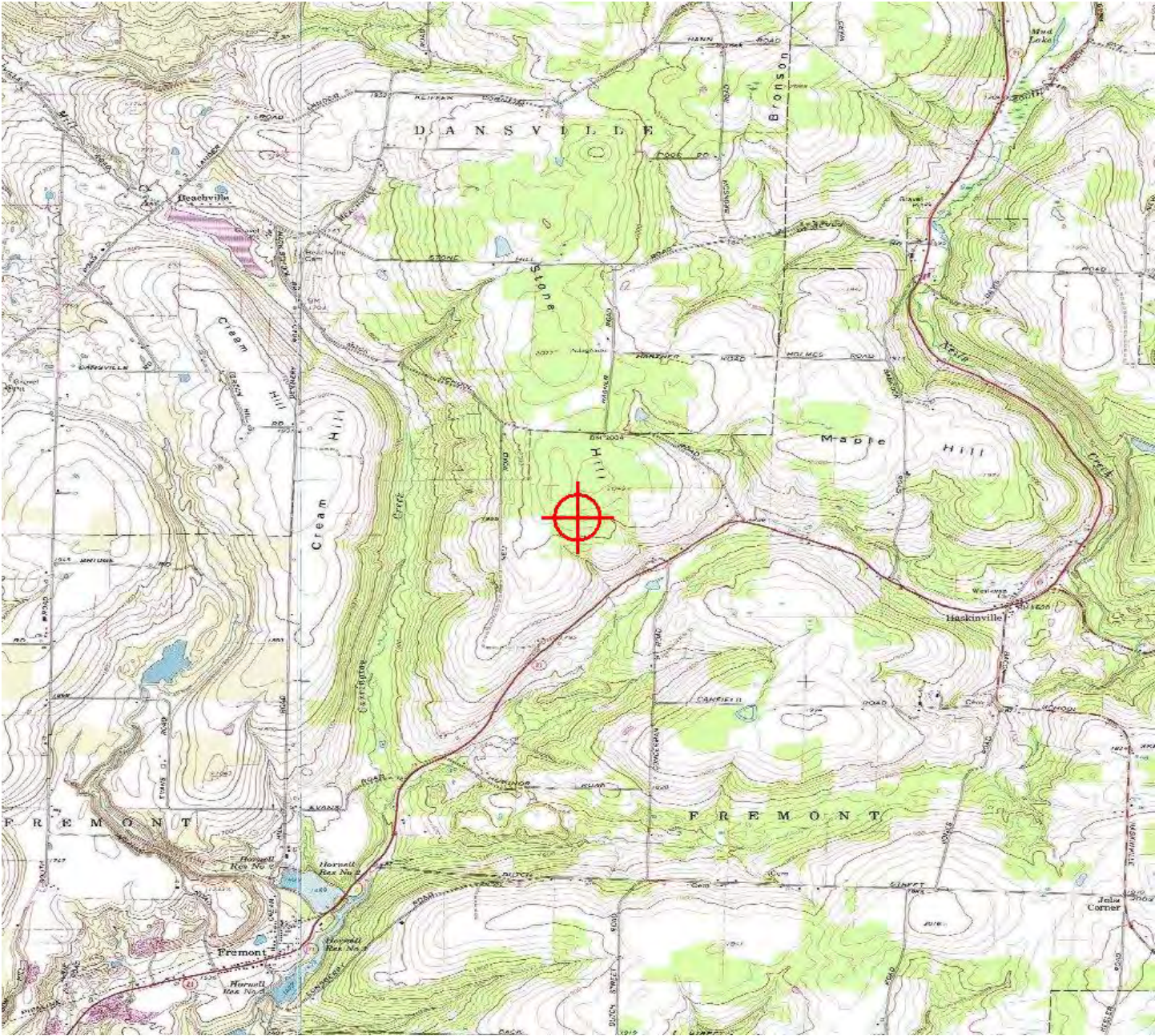
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

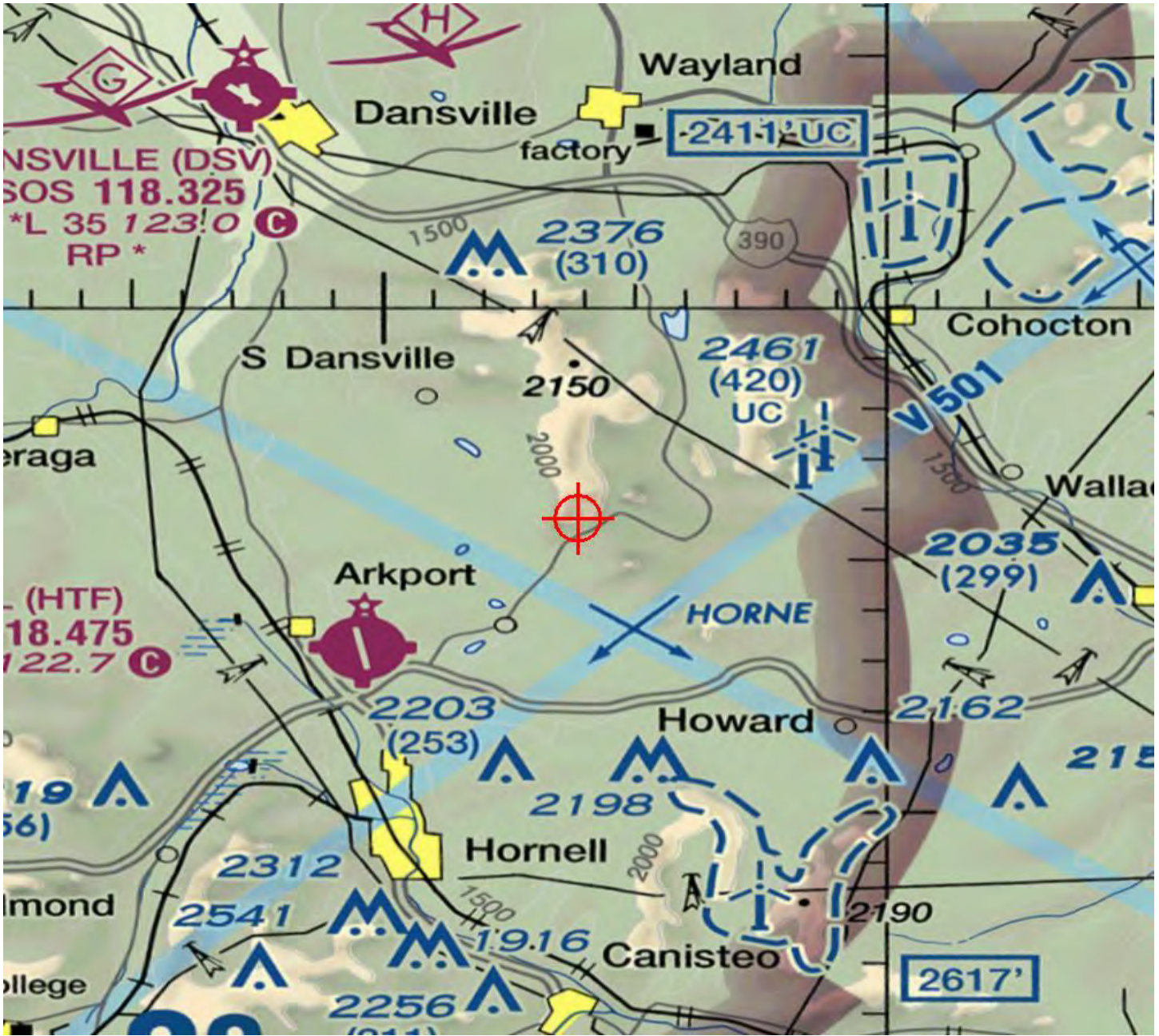
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2718-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2719-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T30
 Location: Cohocton, NY
 Latitude: 42-28-23.08N NAD 83
 Longitude: 77-31-00.29W
 Heights: 1939 feet site elevation (SE)
 493 feet above ground level (AGL)
 2432 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2719-OE.

Signature Control No: 253319876-309224505

(DNE -WT)

Brenda Mumper
Specialist

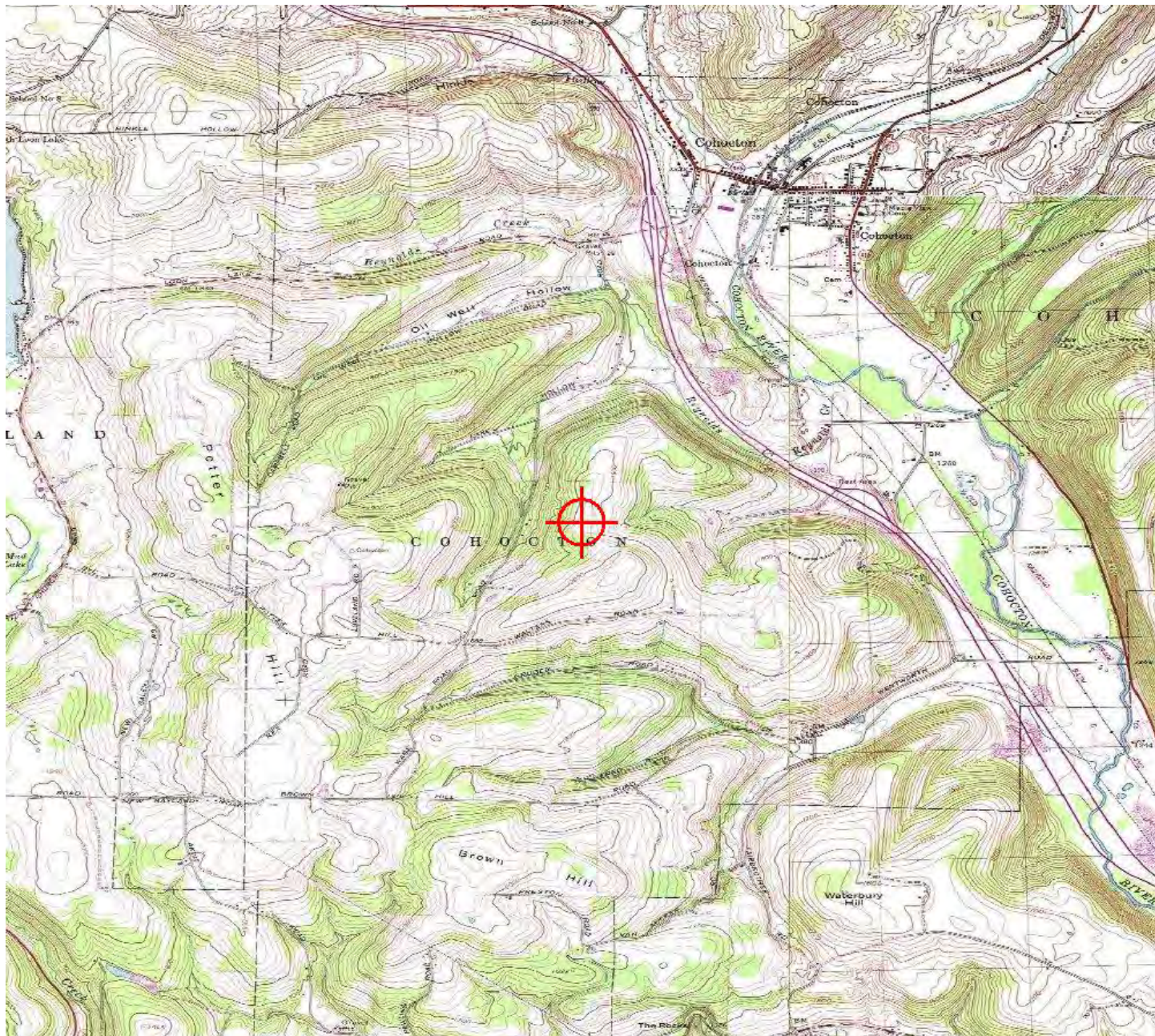
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2719-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2720-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T31
 Location: Cohocton, NY
 Latitude: 42-29-06.85N NAD 83
 Longitude: 77-32-55.75W
 Heights: 2050 feet site elevation (SE)
 493 feet above ground level (AGL)
 2543 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2720-OE.

Signature Control No: 253319877-309224517

(DNE -WT)

Brenda Mumper
Specialist

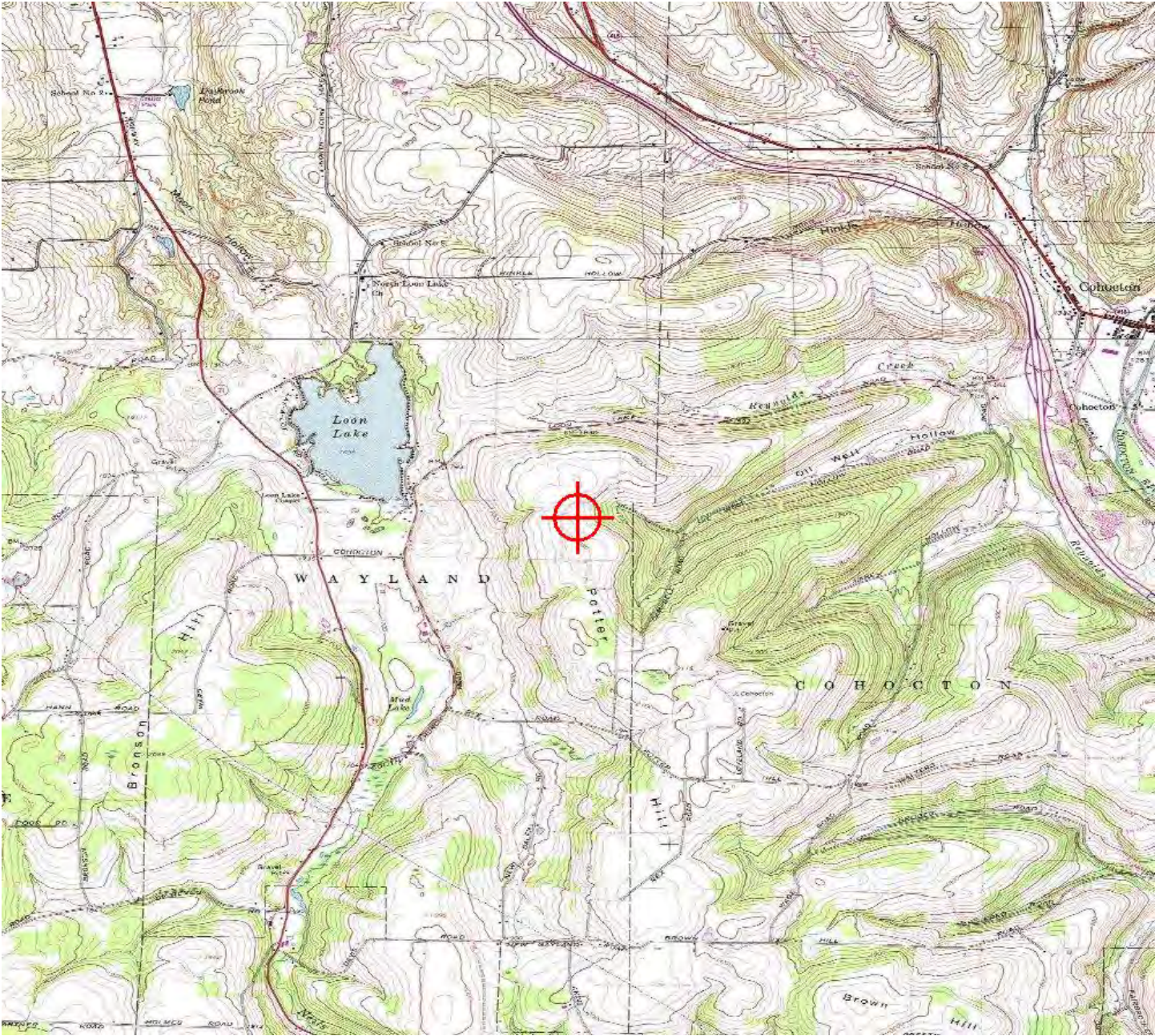
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2720-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2721-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T32
Location: Cohocton, NY
Latitude: 42-26-41.68N NAD 83
Longitude: 77-32-10.47W
Heights: 2024 feet site elevation (SE)
493 feet above ground level (AGL)
2517 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2721-OE.

Signature Control No: 253319878-309224520

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)

Additional Information

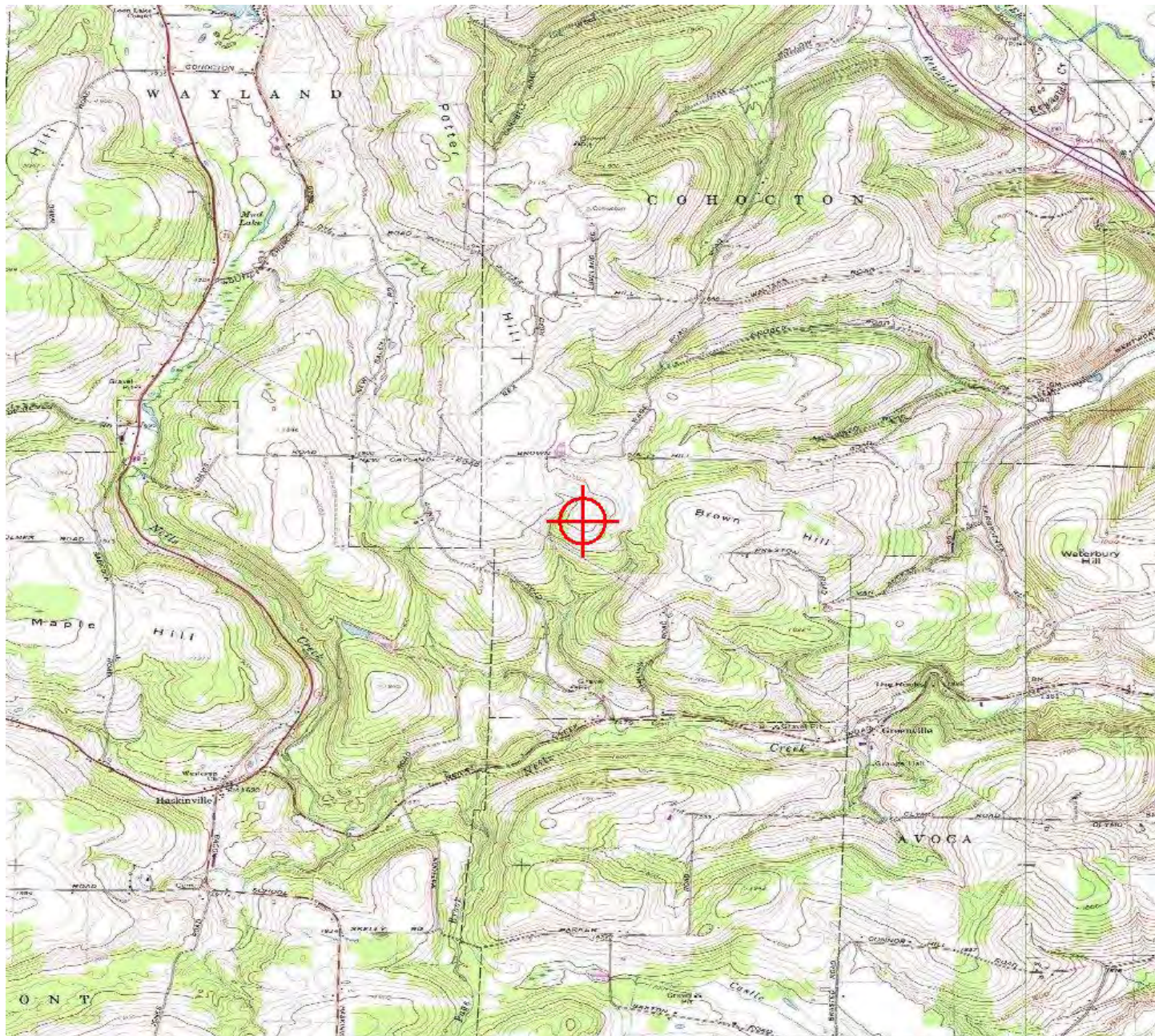
Map(s)

Additional information for ASN 2015-WTE-2721-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2725-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T36
Location: Cohocton, NY
Latitude: 42-28-11.59N NAD 83
Longitude: 77-32-18.74W
Heights: 2118 feet site elevation (SE)
493 feet above ground level (AGL)
2611 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2725-OE.

Signature Control No: 253319886-309223625

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2725-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

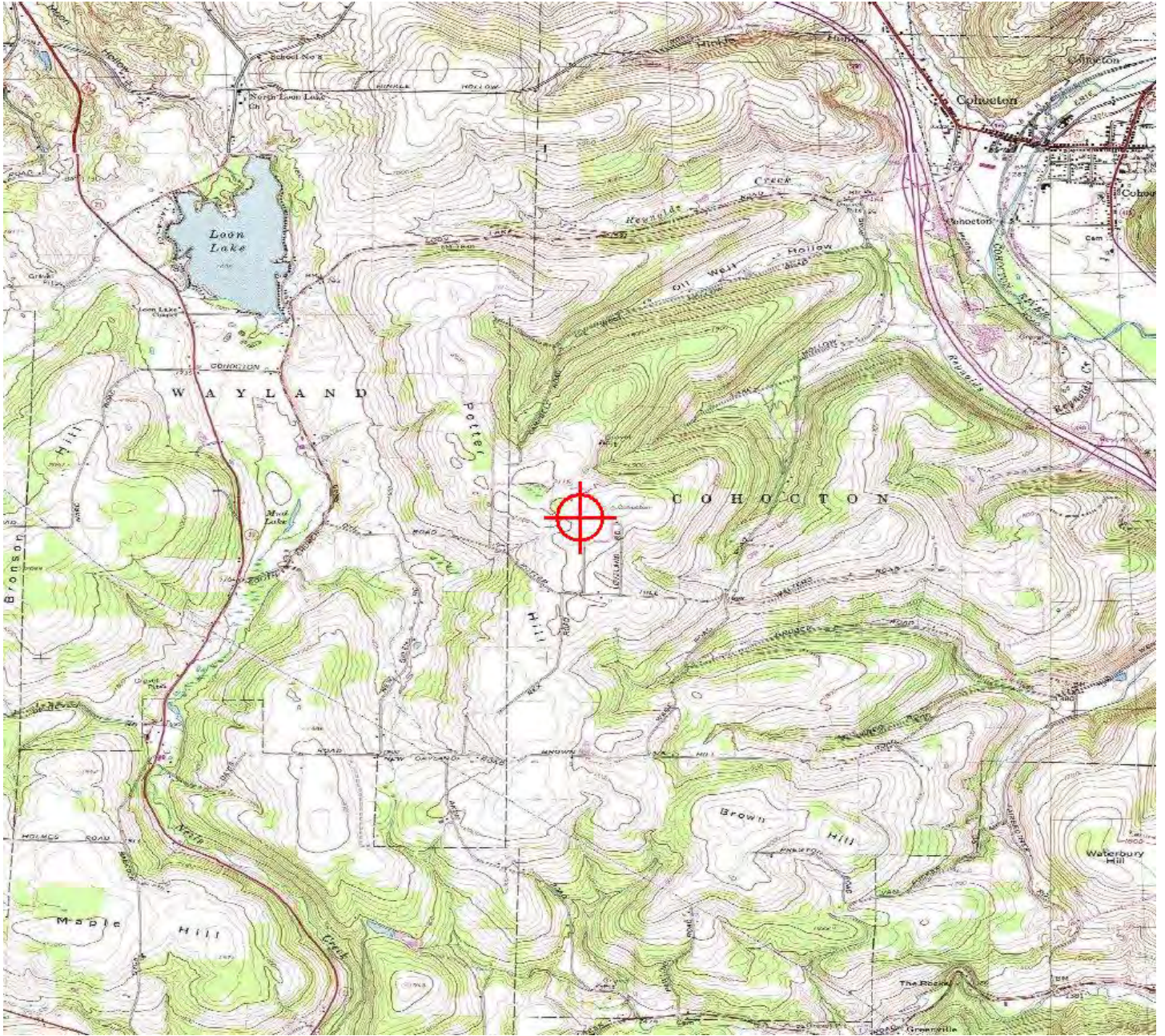
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

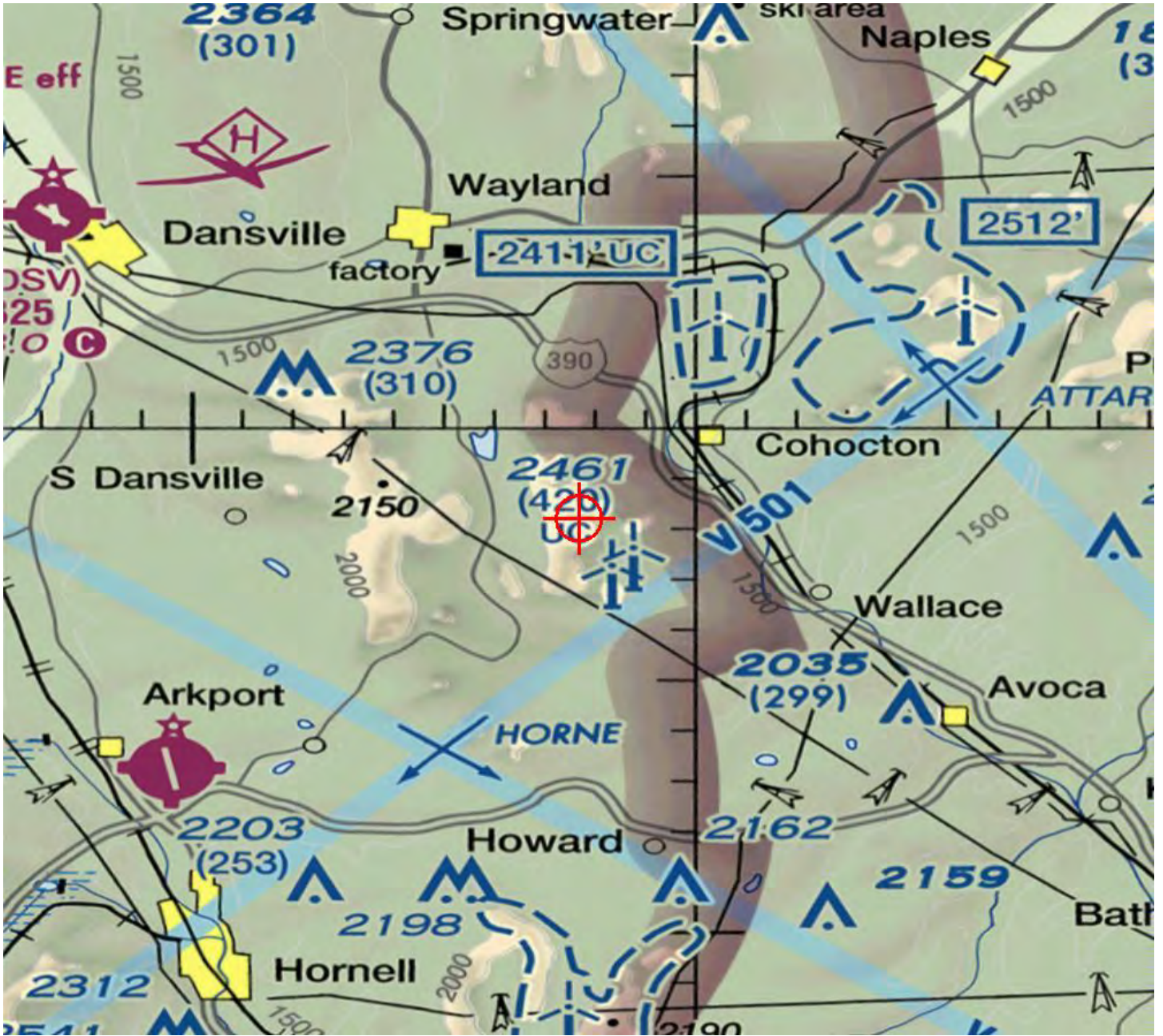
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2727-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T38
 Location: Cohocton, NY
 Latitude: 42-28-36.65N NAD 83
 Longitude: 77-32-21.59W
 Heights: 2062 feet site elevation (SE)
 493 feet above ground level (AGL)
 2555 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2727-OE.

Signature Control No: 253319889-309223623

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2727-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

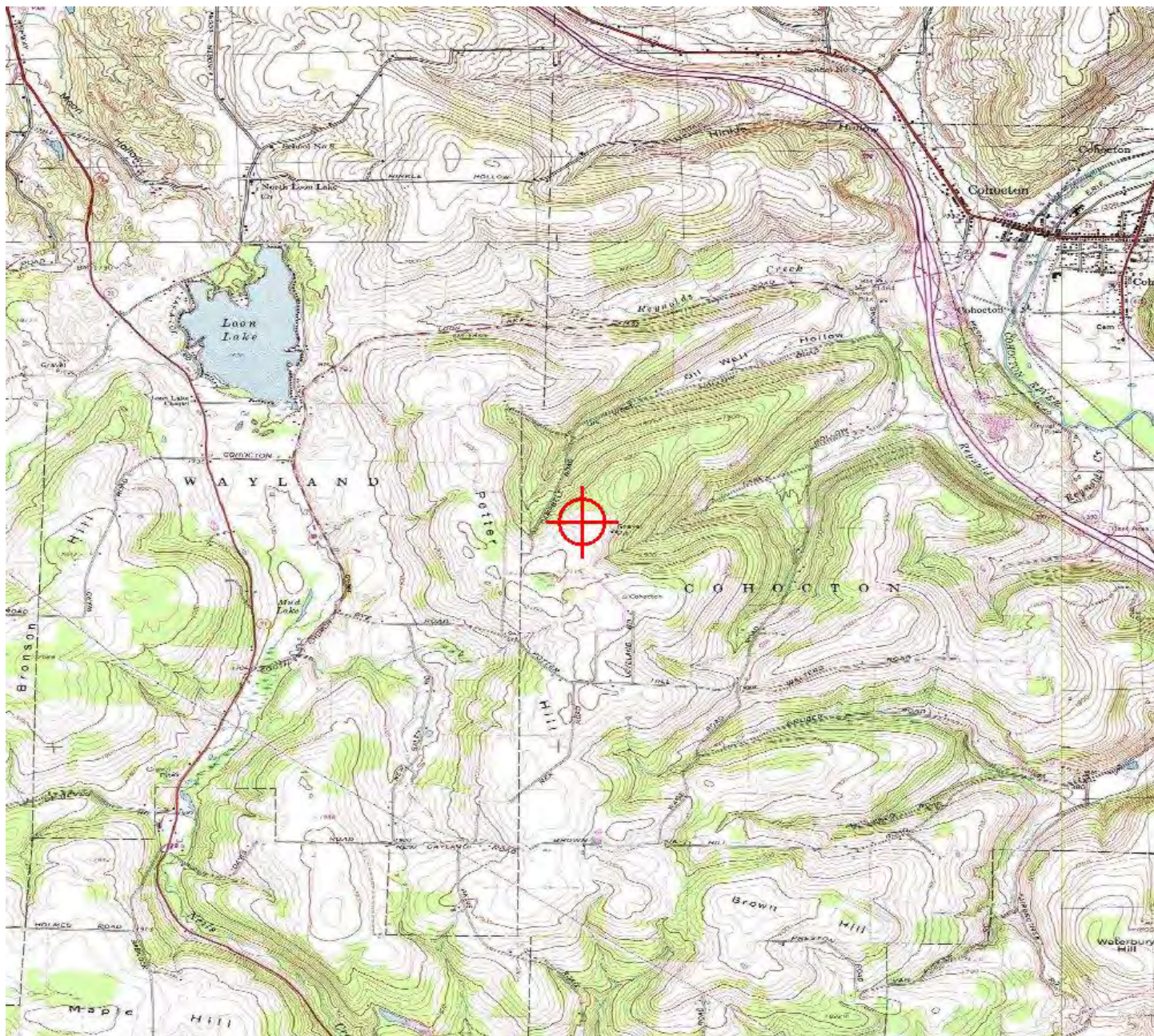
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

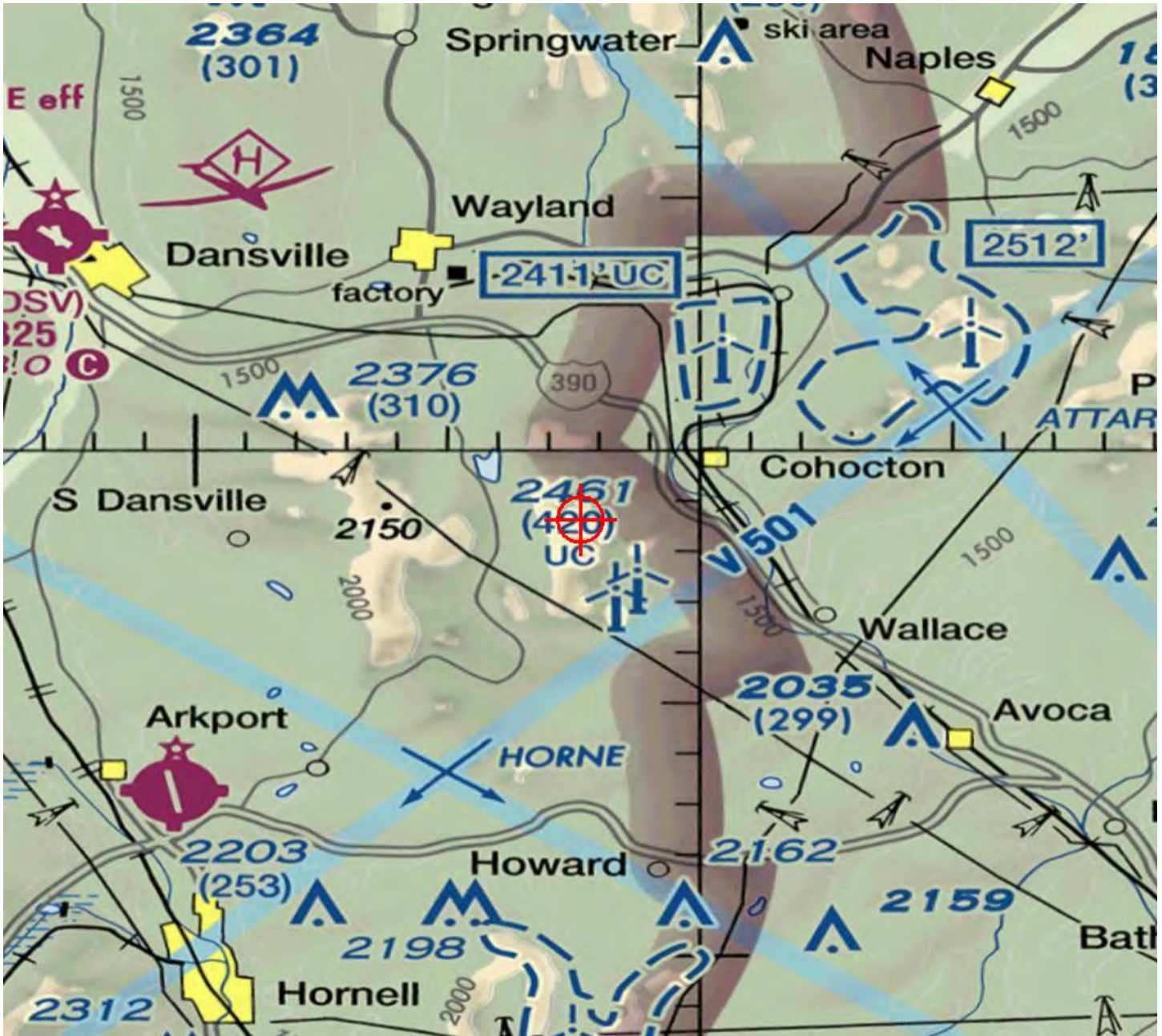
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2728-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T39
 Location: Cohocton, NY
 Latitude: 42-28-20.62N NAD 83
 Longitude: 77-32-26.86W
 Heights: 2098 feet site elevation (SE)
 493 feet above ground level (AGL)
 2591 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2728-OE.

Signature Control No: 253319893-309223619

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2728-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

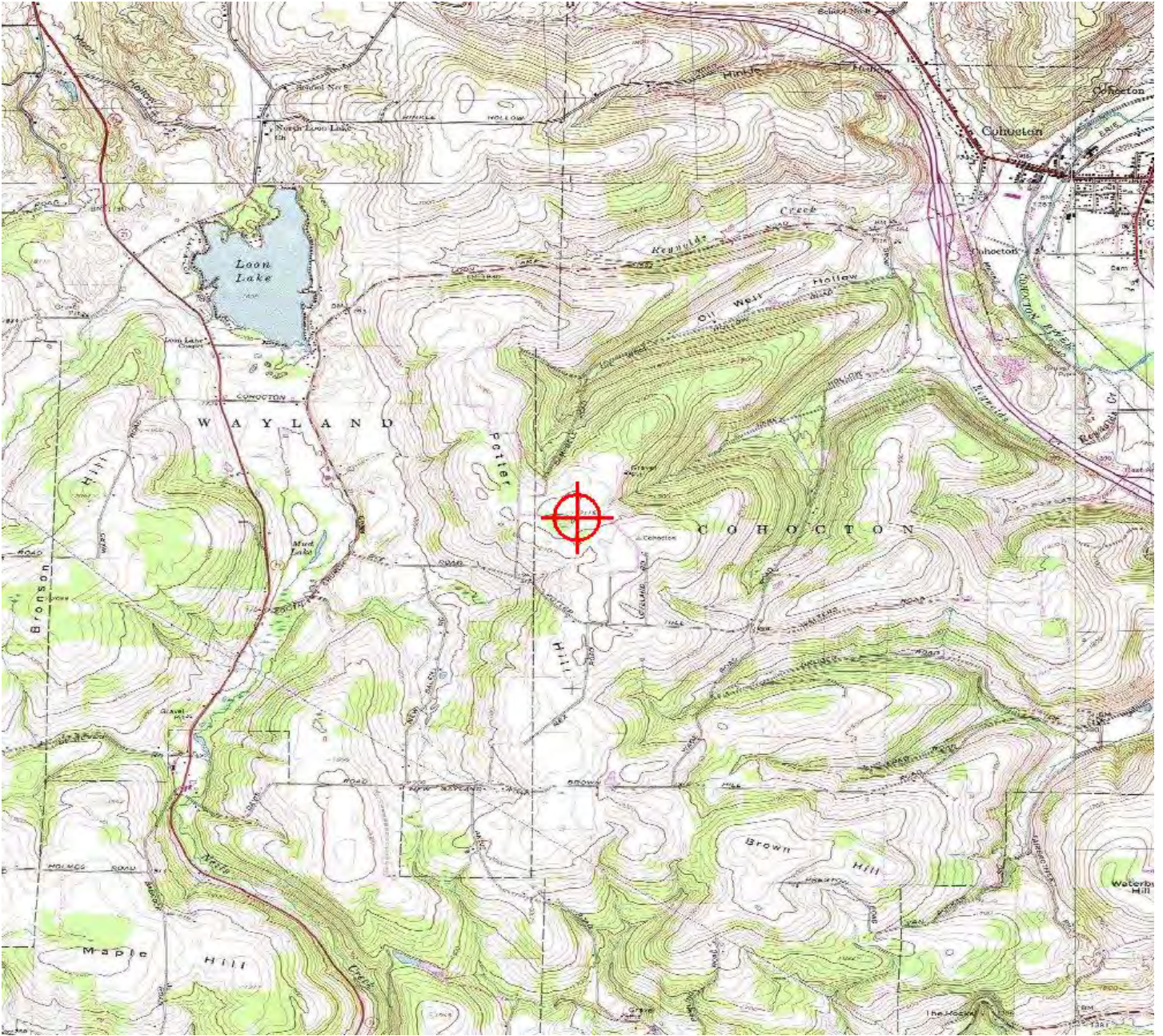
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

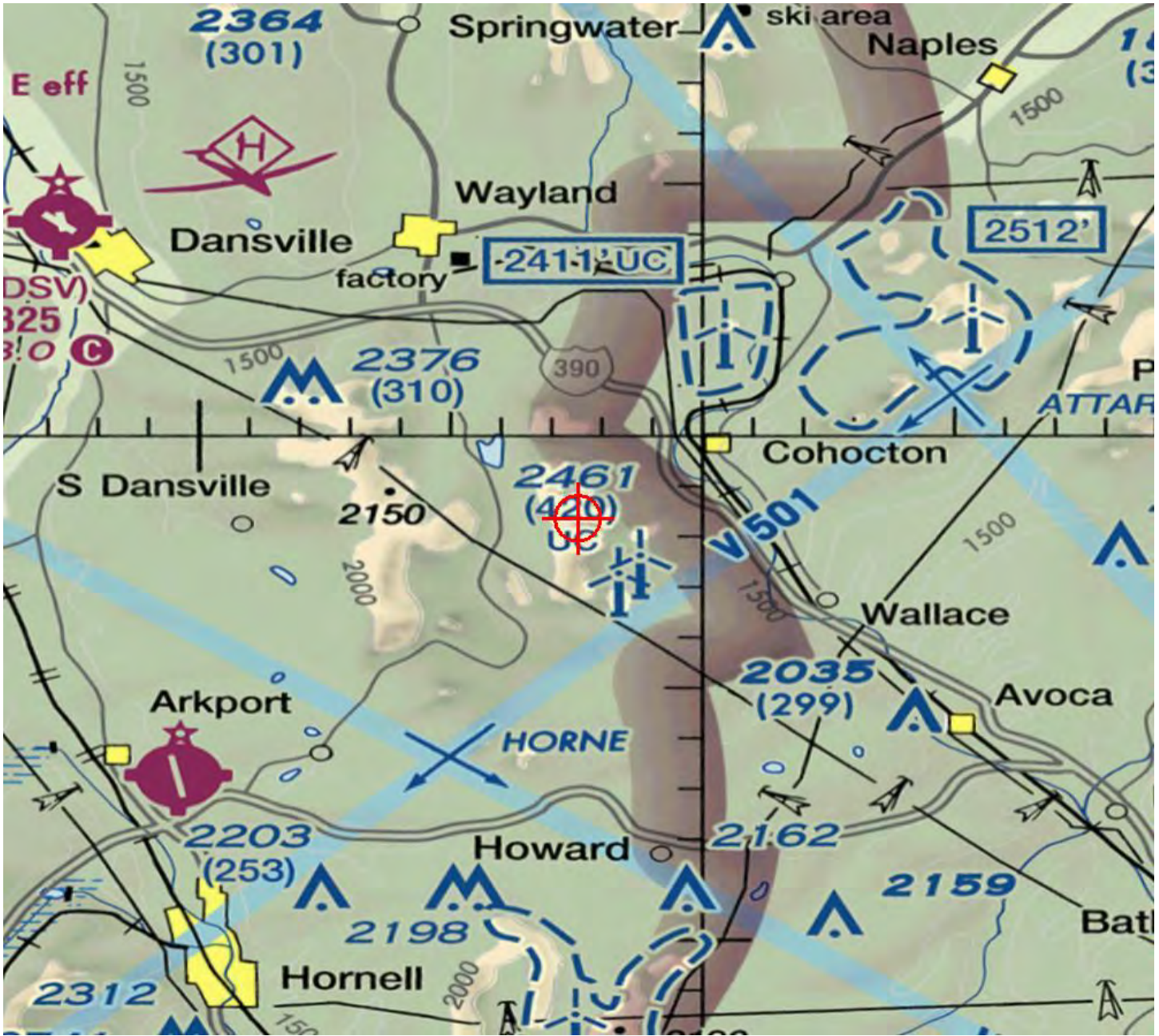
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2729-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T40
Location: Cohocton, NY
Latitude: 42-27-14.80N NAD 83
Longitude: 77-32-30.23W
Heights: 2066 feet site elevation (SE)
493 feet above ground level (AGL)
2559 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 56 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2729-OE.

Signature Control No: 253319895-309223624

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2729-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

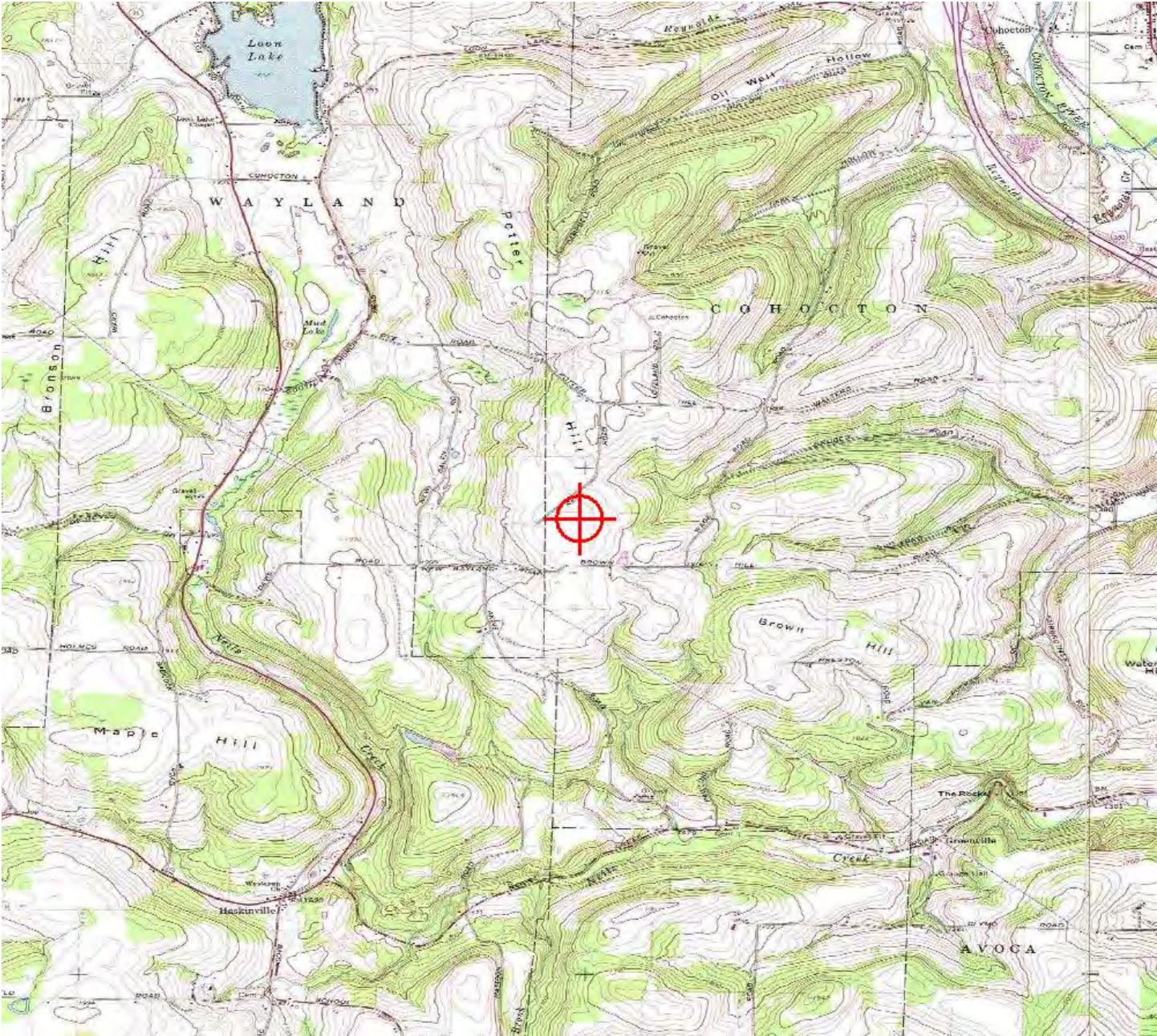
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

NOTE: IT IS IMPERATIVE THAT PART 1 OF THE 7460-2 FORM IS SUBMITTED AT LEAST 8 WEEKS PRIOR TO BEGINNING CONSTRUCTION SO IFR ALTITUDES MAY BE AMENDED AS REQUIRED.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2730-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T41
 Location: Cohocton, NY
 Latitude: 42-24-37.53N NAD 83
 Longitude: 77-35-30.55W
 Heights: 1954 feet site elevation (SE)
 493 feet above ground level (AGL)
 2447 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2730-OE.

Signature Control No: 253319897-309224138

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2730-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

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2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

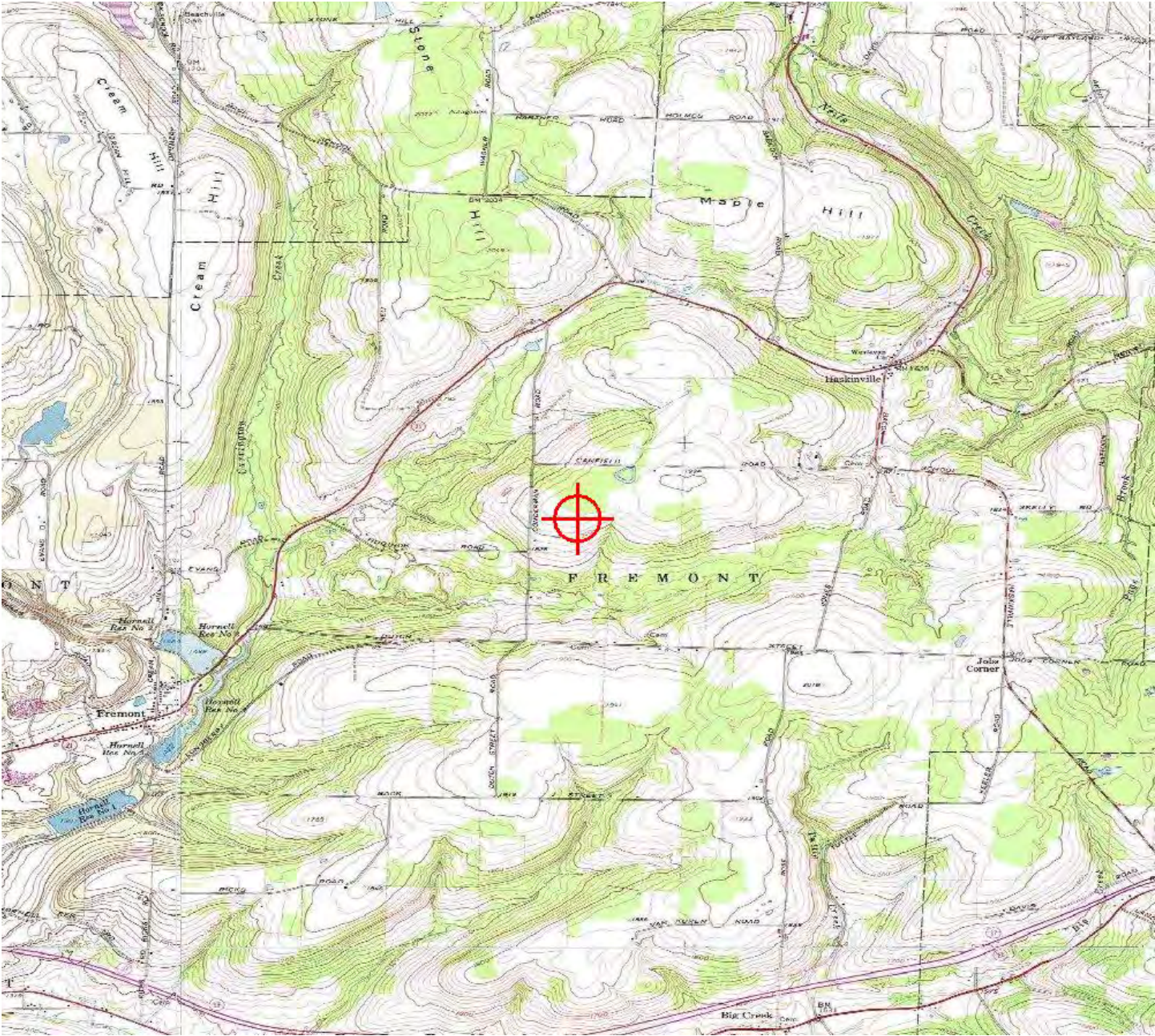
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2730-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2731-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T42
 Location: Cohocton, NY
 Latitude: 42-27-25.26N NAD 83
 Longitude: 77-32-40.60W
 Heights: 2056 feet site elevation (SE)
 493 feet above ground level (AGL)
 2549 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2731-OE.

Signature Control No: 253319899-309224532

(DNE -WT)

Brenda Mumper
Specialist

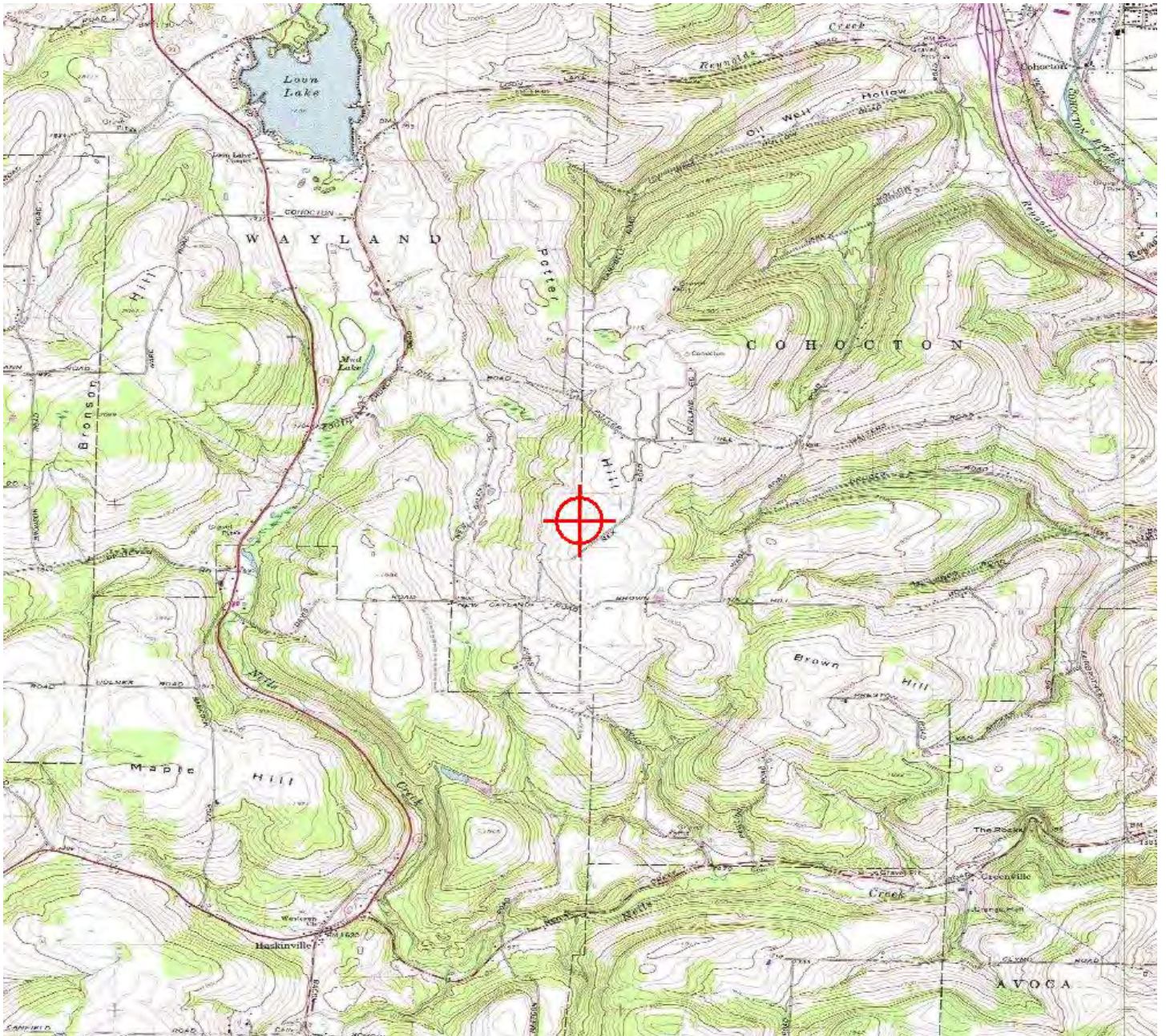
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2731-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







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 Obstruction Evaluation Group
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Aeronautical Study No.
 2015-WTE-2733-OE

Issued Date: 11/03/2016

Bob Ward
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 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T44
 Location: Cohocton, NY
 Latitude: 42-27-53.54N NAD 83
 Longitude: 77-30-23.86W
 Heights: 1857 feet site elevation (SE)
 493 feet above ground level (AGL)
 2350 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

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OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2733-OE.

Signature Control No: 253319903-309224536

(DNE -WT)

Brenda Mumper
Specialist

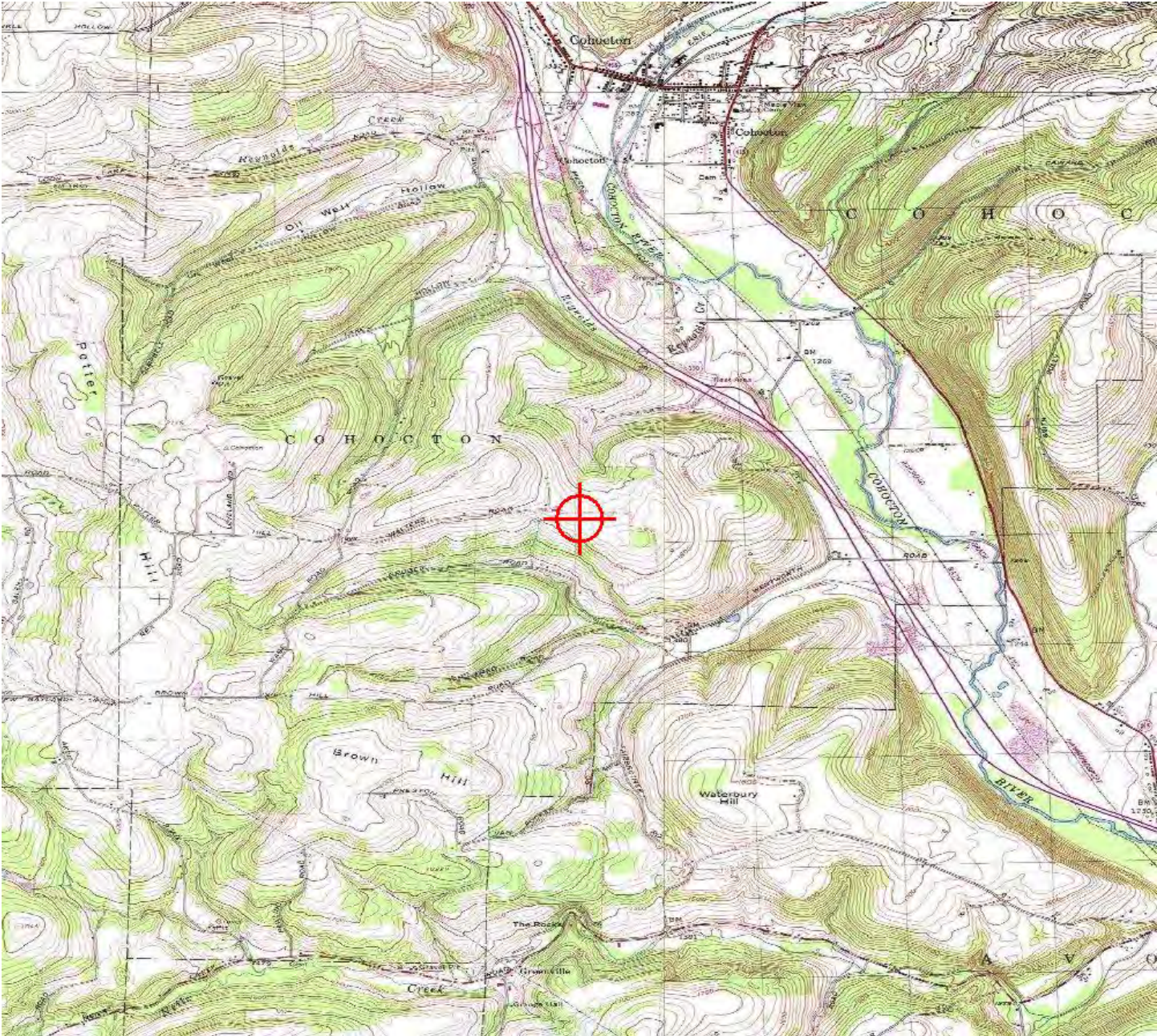
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2733-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







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 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2735-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T46
 Location: Cohocton, NY
 Latitude: 42-27-30.17N NAD 83
 Longitude: 77-33-35.43W
 Heights: 1953 feet site elevation (SE)
 493 feet above ground level (AGL)
 2446 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

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Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2735-OE.

Signature Control No: 253319905-309224539

(DNE -WT)

Brenda Mumper
Specialist

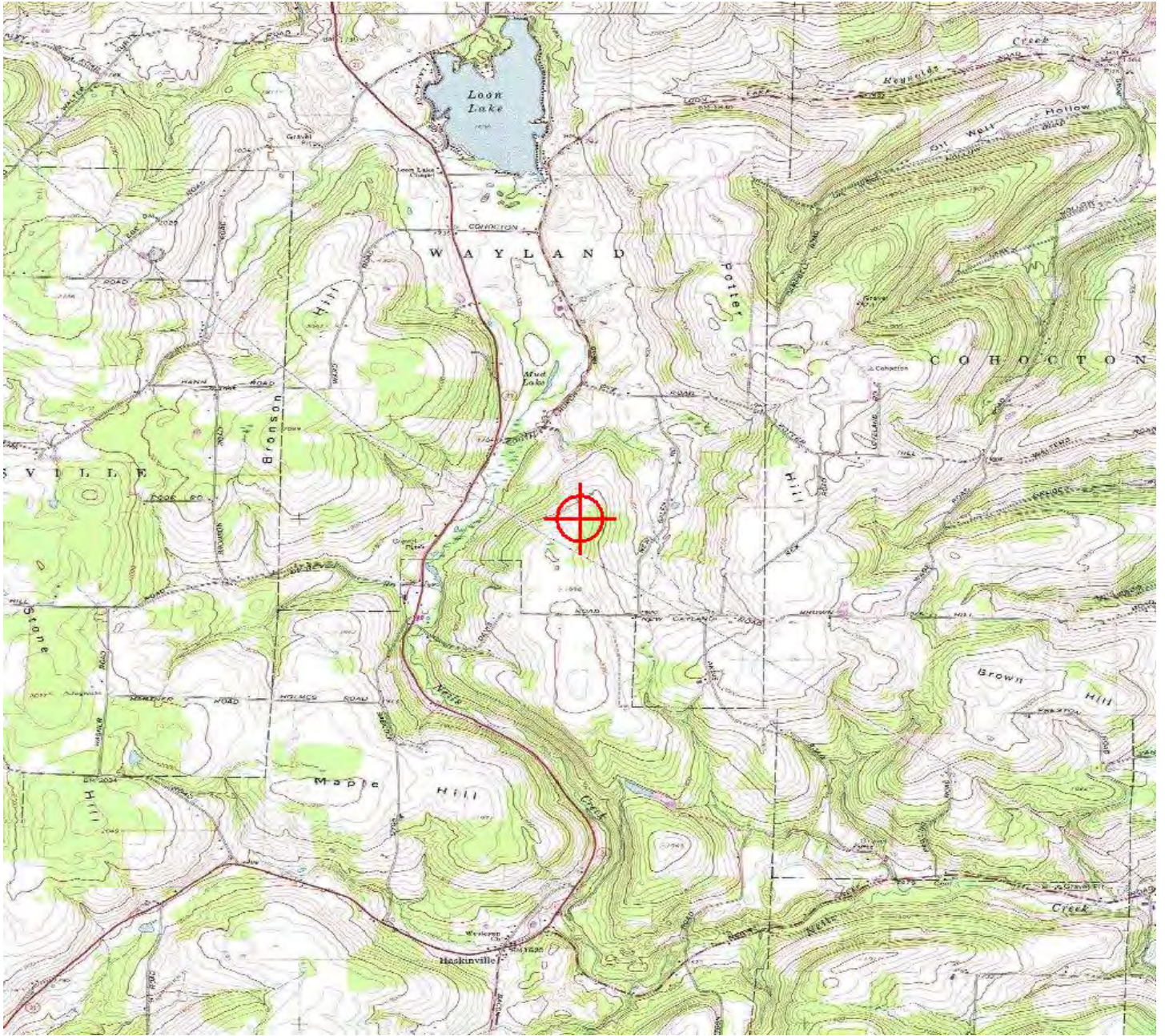
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2735-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







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Aeronautical Study No.
 2015-WTE-2737-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T48
 Location: Cohocton, NY
 Latitude: 42-24-34.25N NAD 83
 Longitude: 77-35-02.33W
 Heights: 1956 feet site elevation (SE)
 493 feet above ground level (AGL)
 2449 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
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See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2737-OE.

Signature Control No: 253319916-309224132

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2737-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

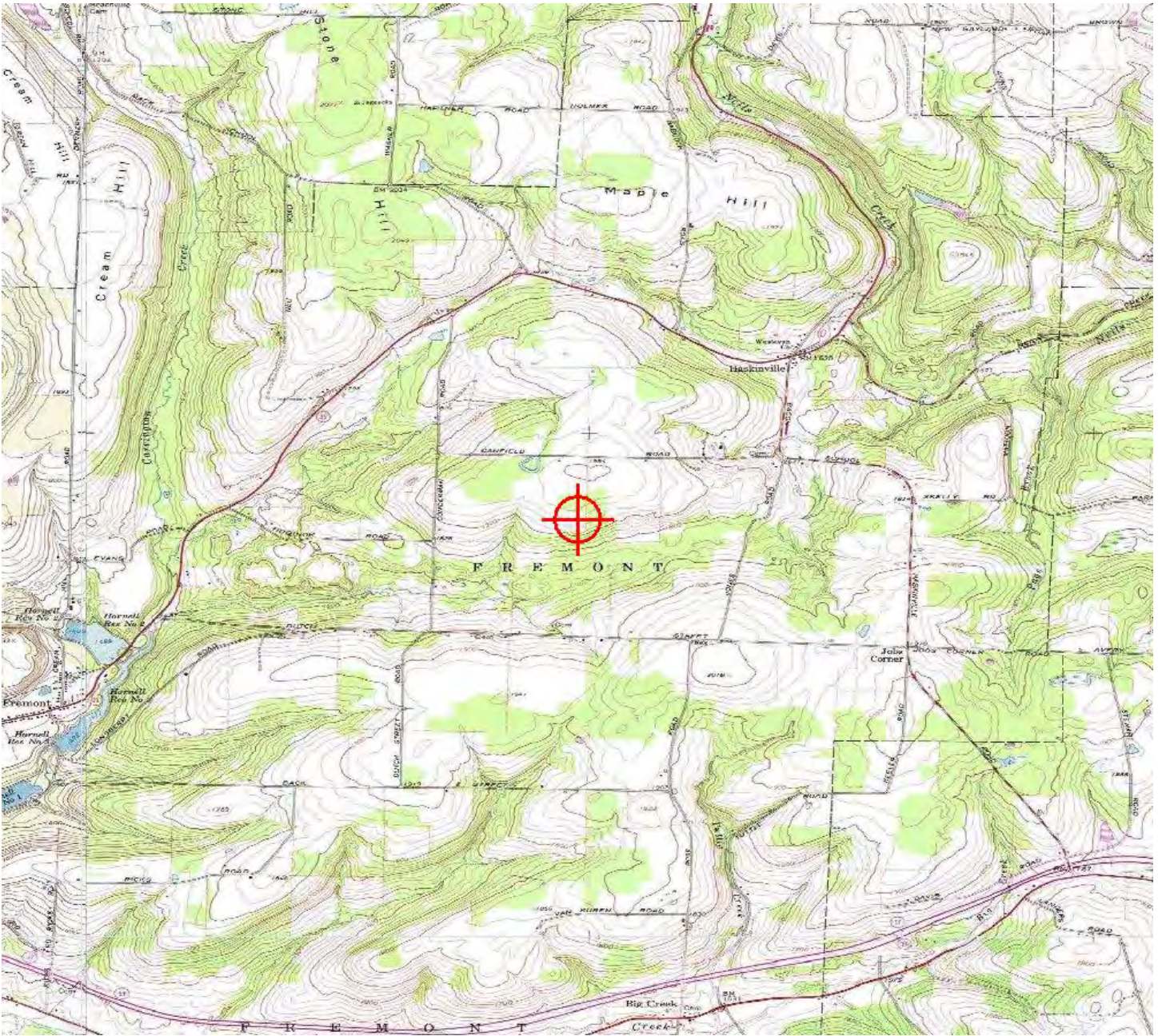
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

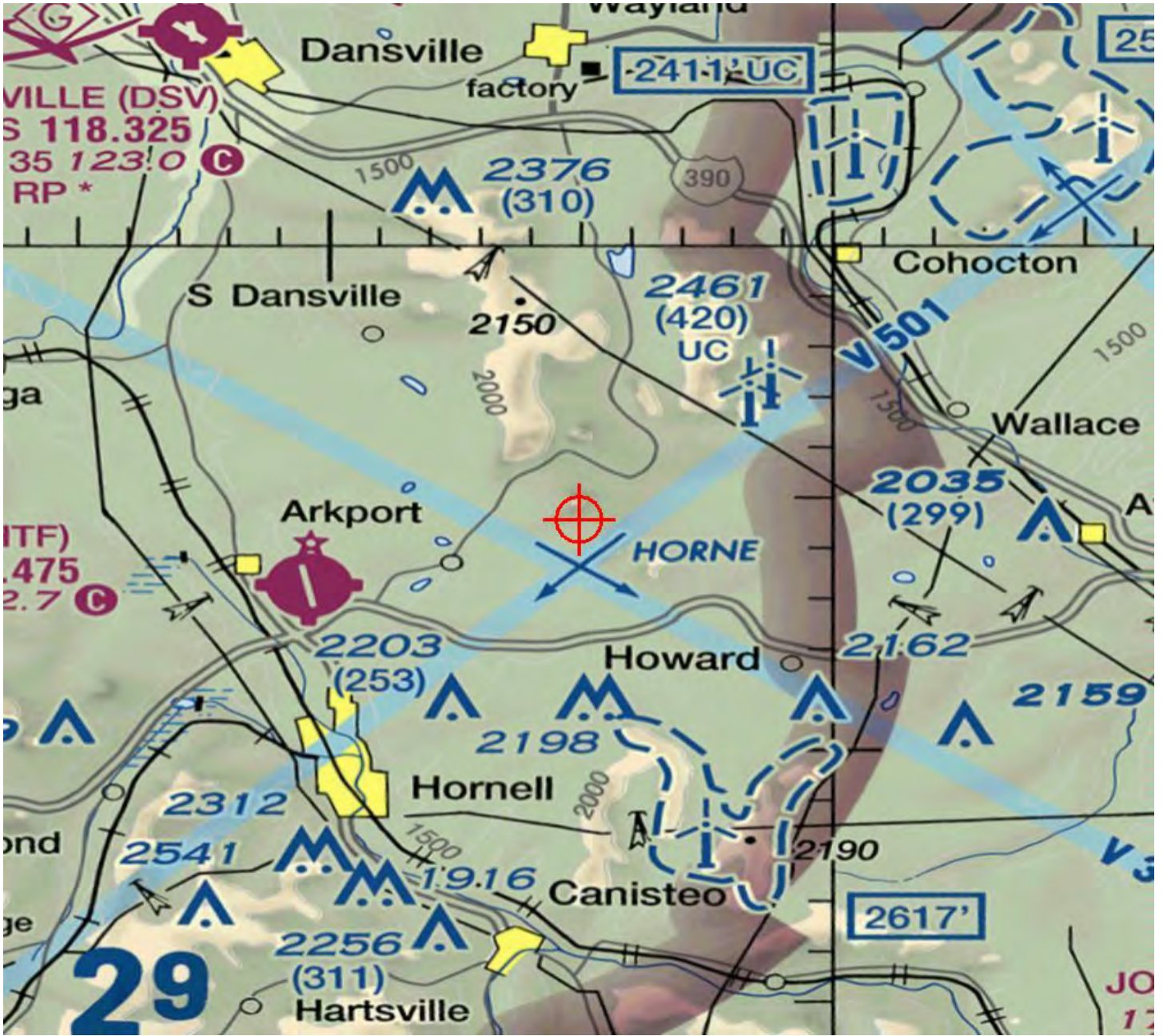
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2737-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2741-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T52
 Location: Cohocton, NY
 Latitude: 42-24-43.17N NAD 83
 Longitude: 77-34-42.18W
 Heights: 1974 feet site elevation (SE)
 493 feet above ground level (AGL)
 2467 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2741-OE.

Signature Control No: 253319927-309224130

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2741-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

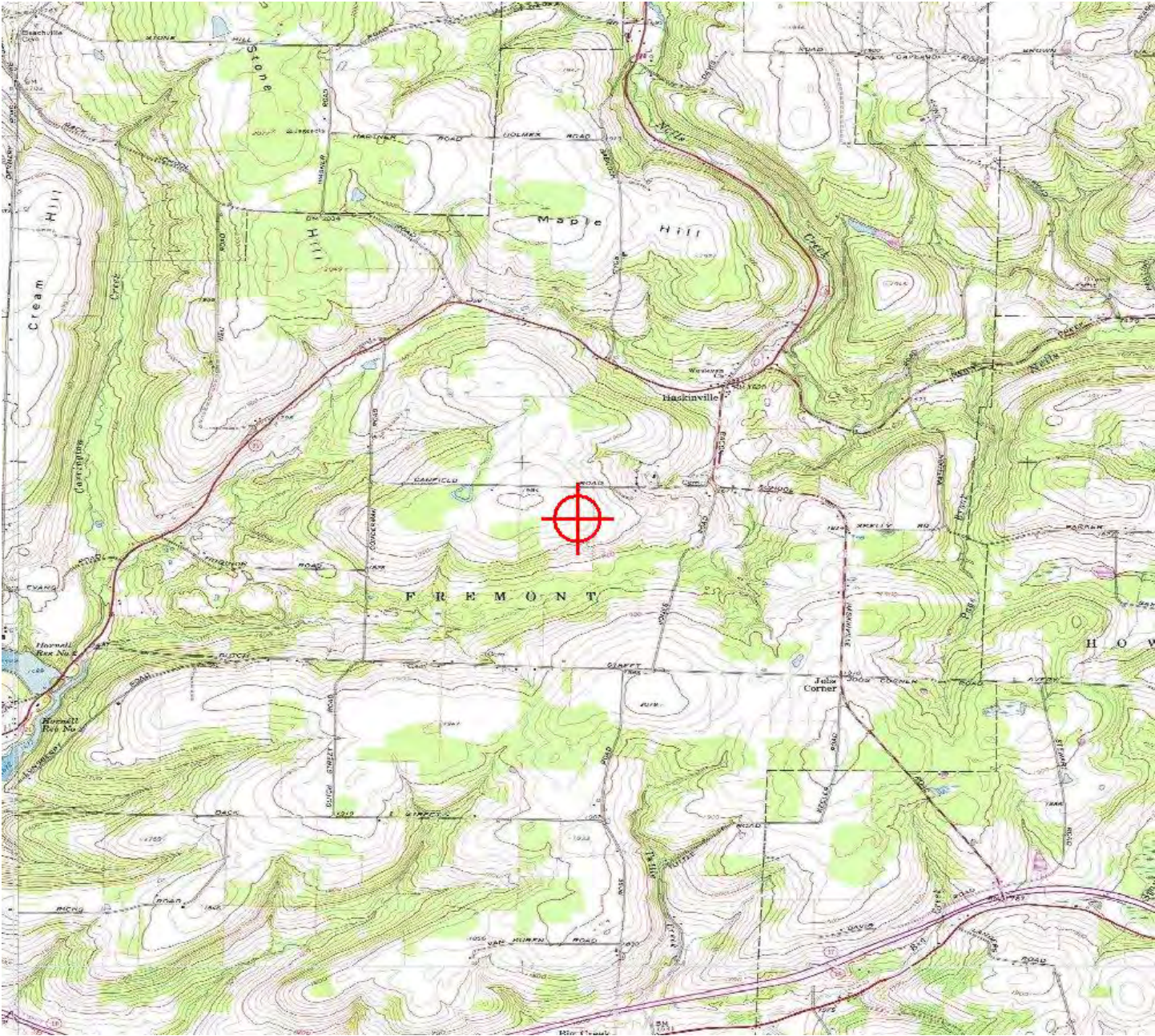
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2745-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T56
 Location: Cohocton, NY
 Latitude: 42-26-45.26N NAD 83
 Longitude: 77-33-39.82W
 Heights: 2013 feet site elevation (SE)
 493 feet above ground level (AGL)
 2506 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2745-OE.

Signature Control No: 253319934-309224556

(DNE -WT)

Brenda Mumper
Specialist

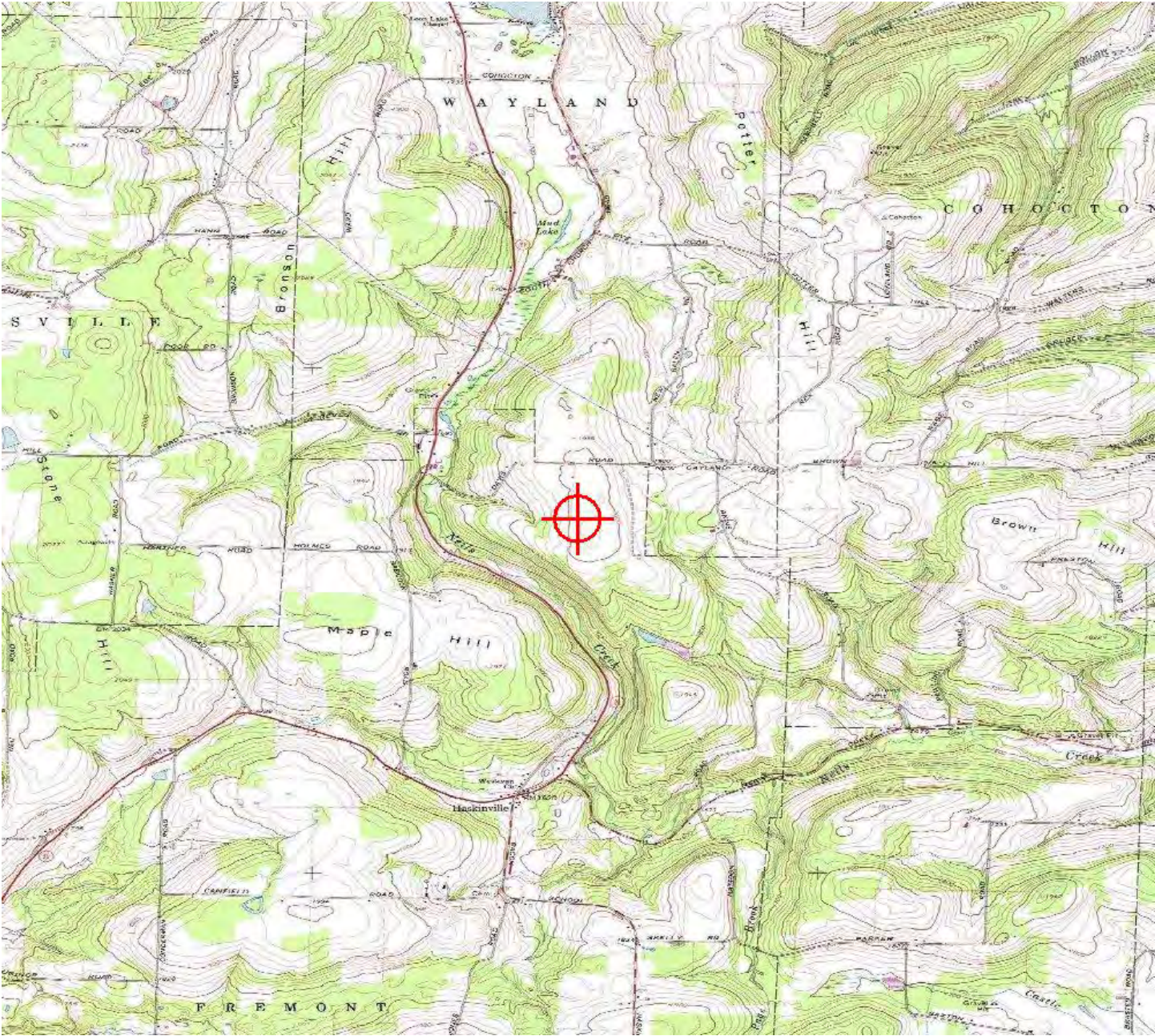
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2745-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2747-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T58
 Location: Cohocton, NY
 Latitude: 42-26-08.03N NAD 83
 Longitude: 77-35-02.72W
 Heights: 2005 feet site elevation (SE)
 493 feet above ground level (AGL)
 2498 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2747-OE.

Signature Control No: 253319936-309224133

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2747-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

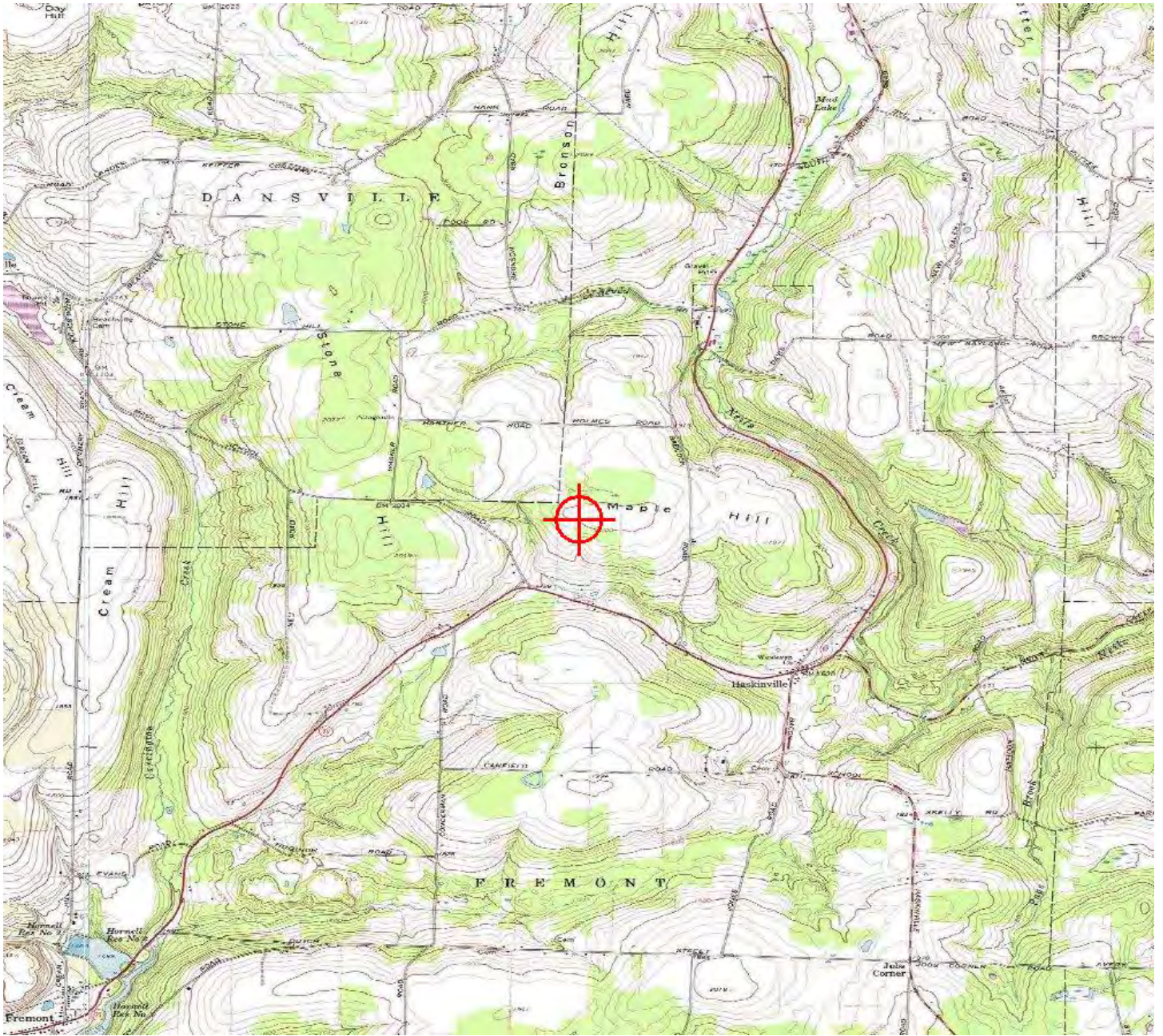
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

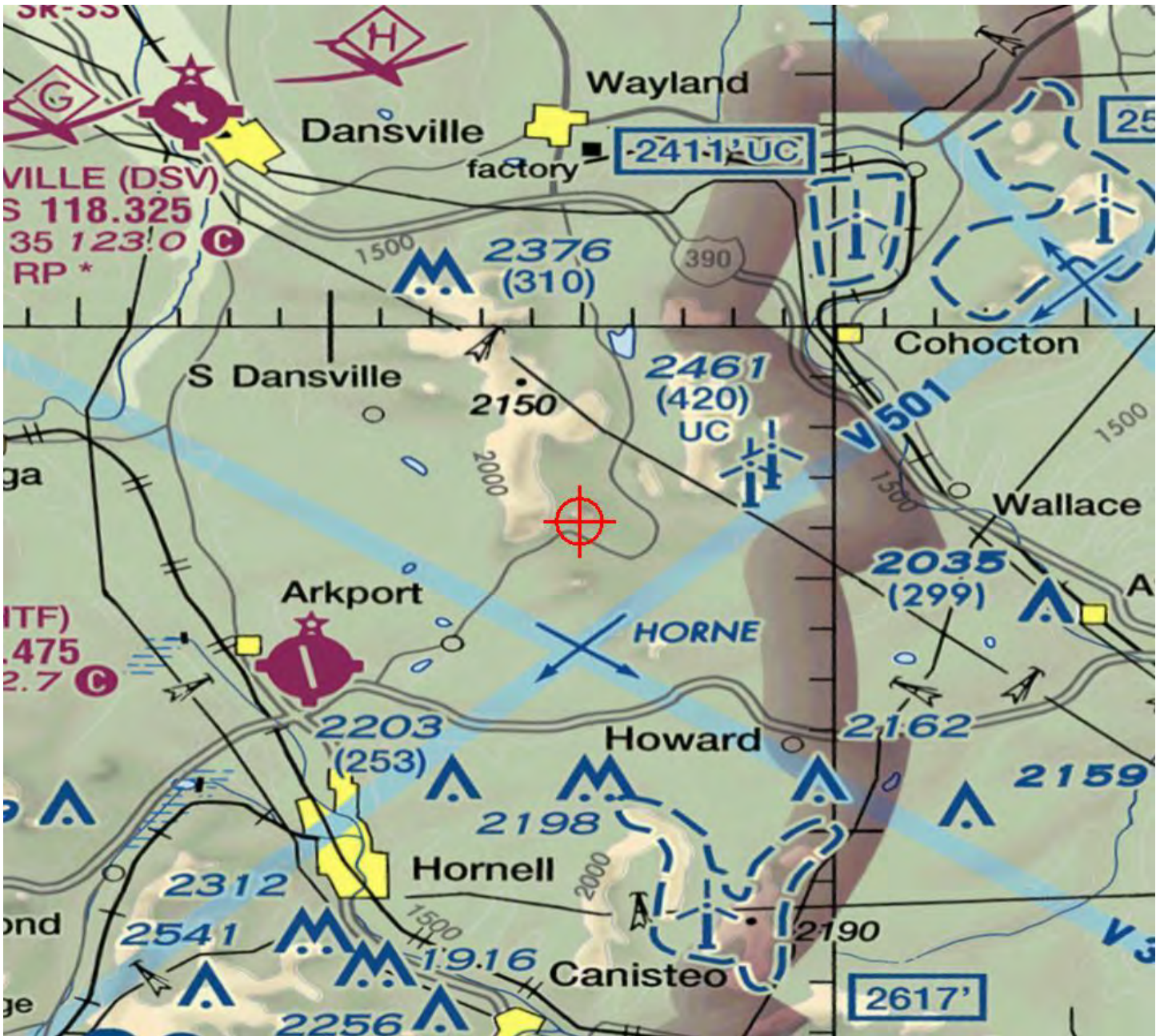
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2748-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T59
 Location: Cohocton, NY
 Latitude: 42-25-48.11N NAD 83
 Longitude: 77-34-01.52W
 Heights: 1918 feet site elevation (SE)
 493 feet above ground level (AGL)
 2411 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2748-OE.

Signature Control No: 253319938-309224128

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2748-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

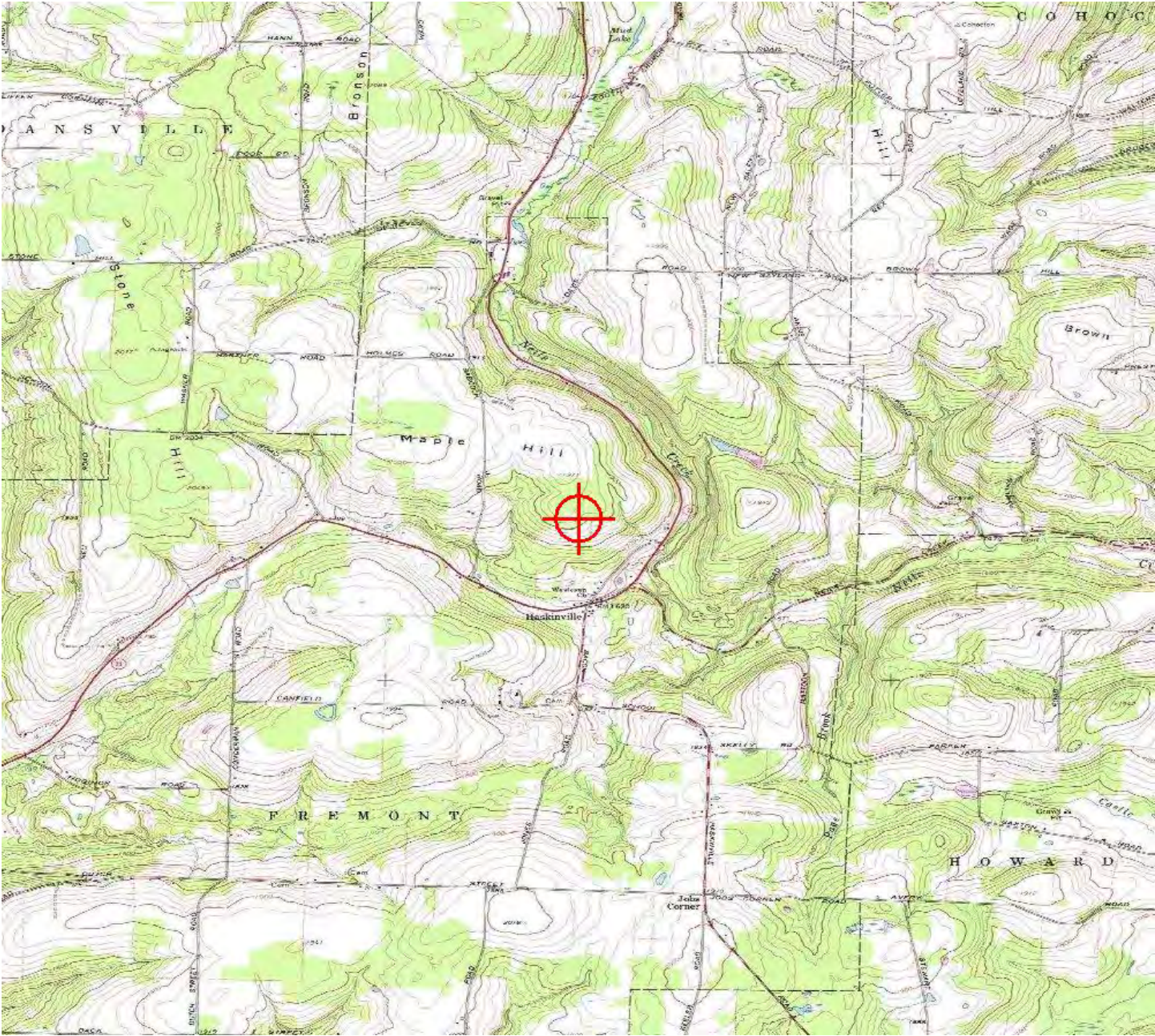
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2748-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2749-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T60
 Location: Cohocton, NY
 Latitude: 42-27-35.99N NAD 83
 Longitude: 77-32-40.81W
 Heights: 2045 feet site elevation (SE)
 493 feet above ground level (AGL)
 2538 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2749-OE.

Signature Control No: 253319939-309224563

(DNE -WT)

Brenda Mumper
Specialist

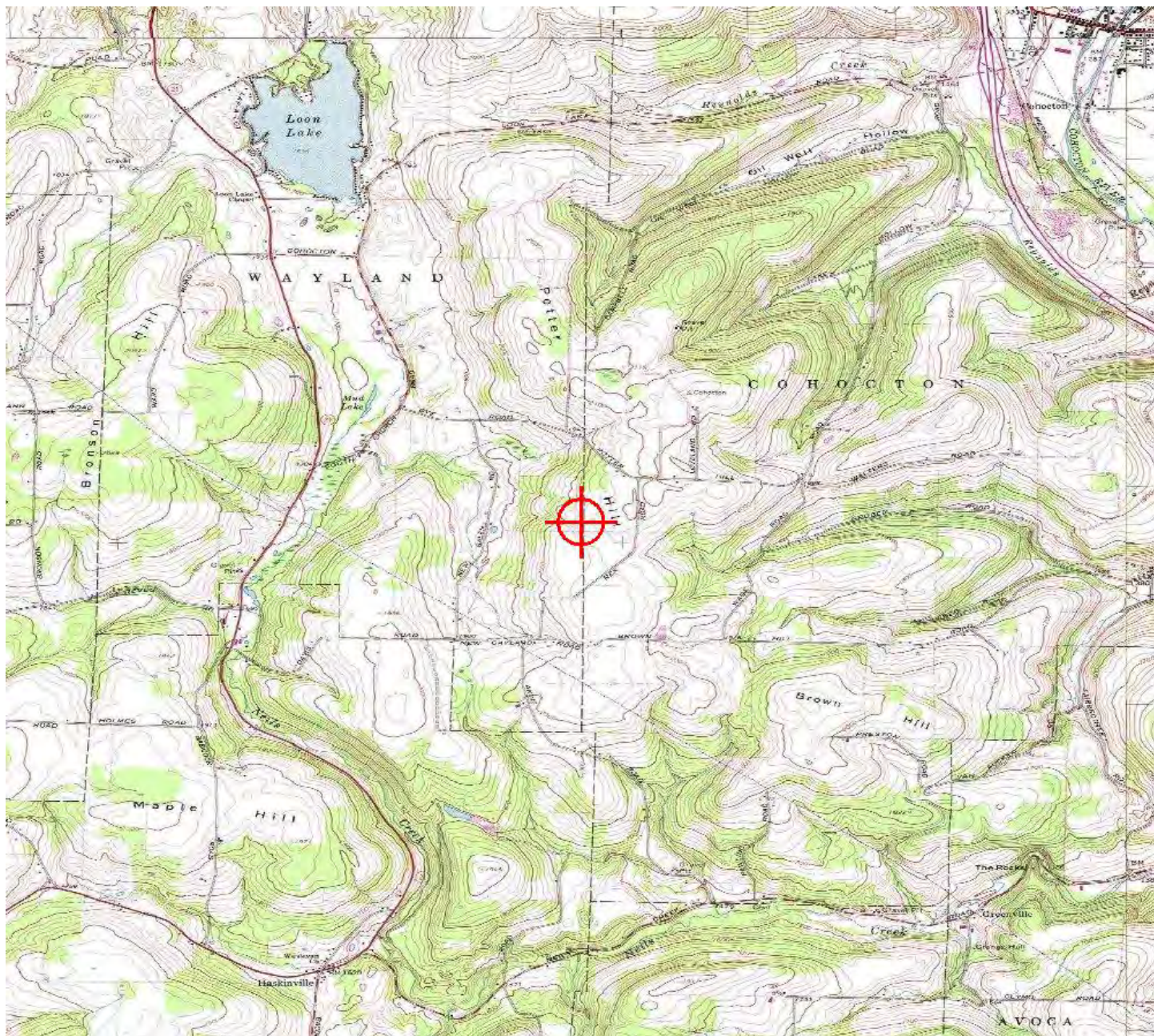
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2749-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2751-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T62
 Location: Cohocton, NY
 Latitude: 42-27-20.91N NAD 83
 Longitude: 77-31-23.59W
 Heights: 1885 feet site elevation (SE)
 493 feet above ground level (AGL)
 2378 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2751-OE.

Signature Control No: 253319960-309224568

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

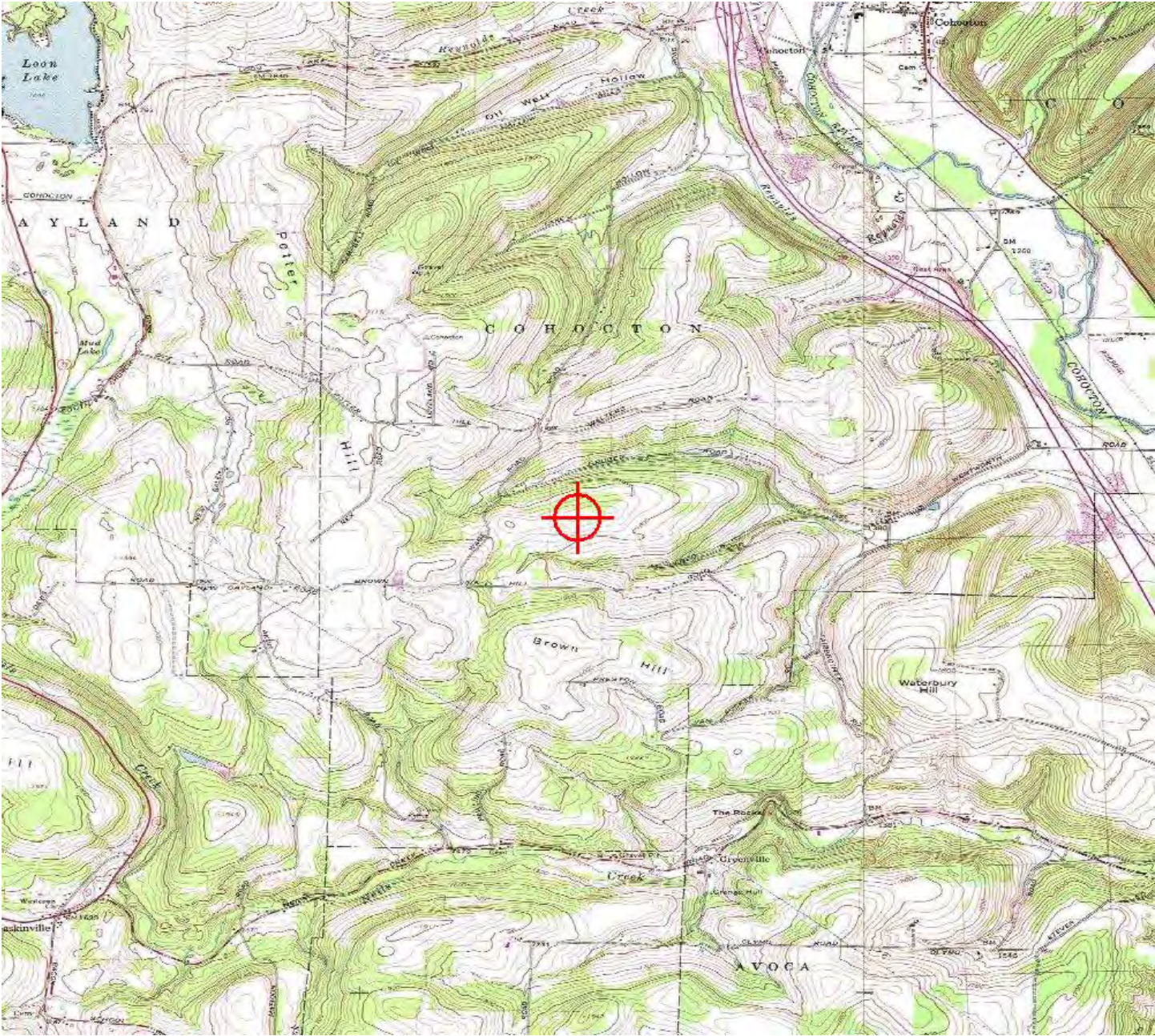
Additional information for ASN 2015-WTE-2751-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2751-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2756-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T67
 Location: Cohocton, NY
 Latitude: 42-27-25.64N NAD 83
 Longitude: 77-31-00.36W
 Heights: 1822 feet site elevation (SE)
 493 feet above ground level (AGL)
 2315 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2756-OE.

Signature Control No: 253319982-309224575

(DNE -WT)

Brenda Mumper
Specialist

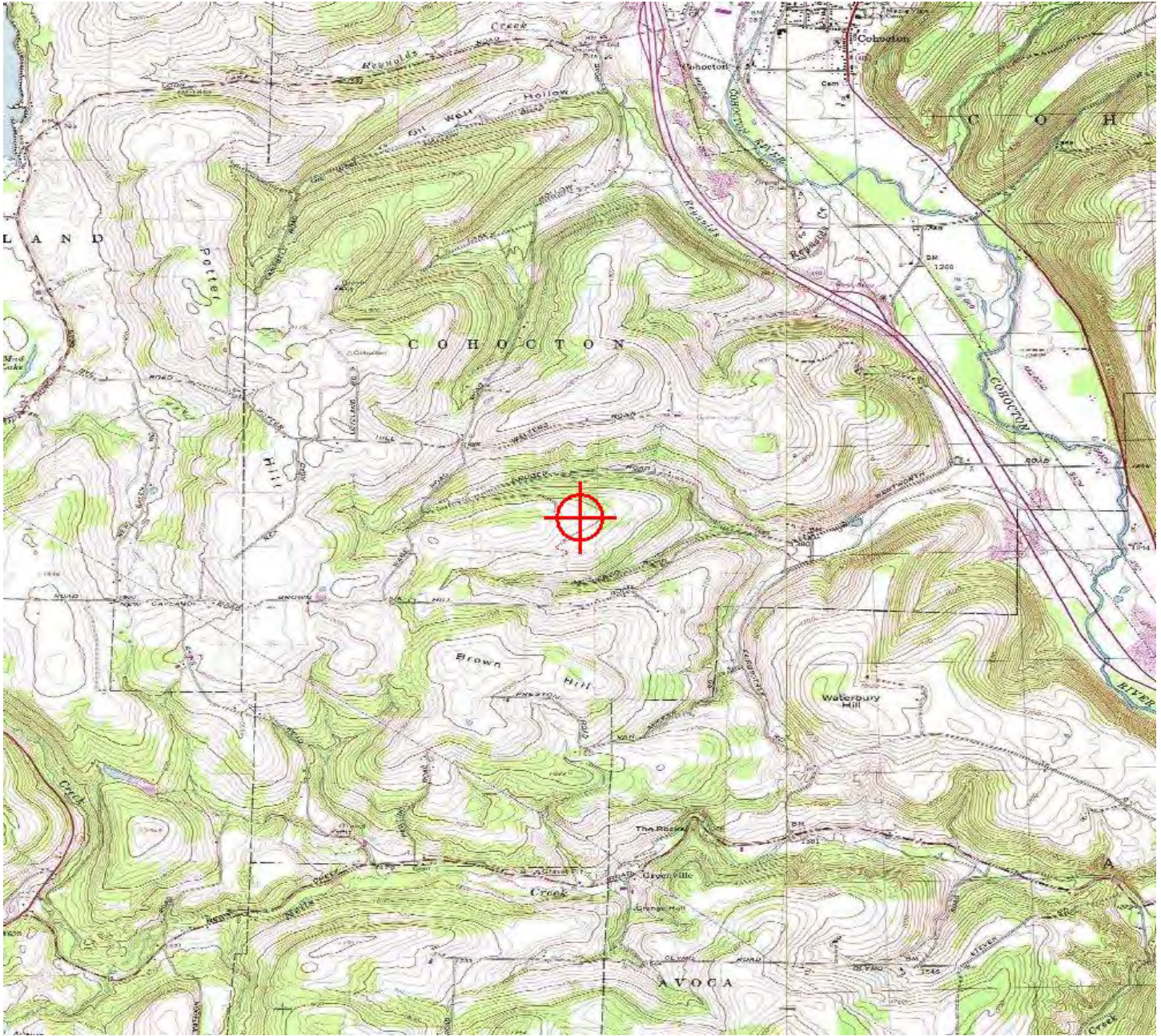
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2756-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2757-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T68
Location: Cohocton, NY
Latitude: 42-25-24.19N NAD 83
Longitude: 77-35-19.04W
Heights: 1929 feet site elevation (SE)
493 feet above ground level (AGL)
2422 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2757-OE.

Signature Control No: 253319985-309224135

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2757-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

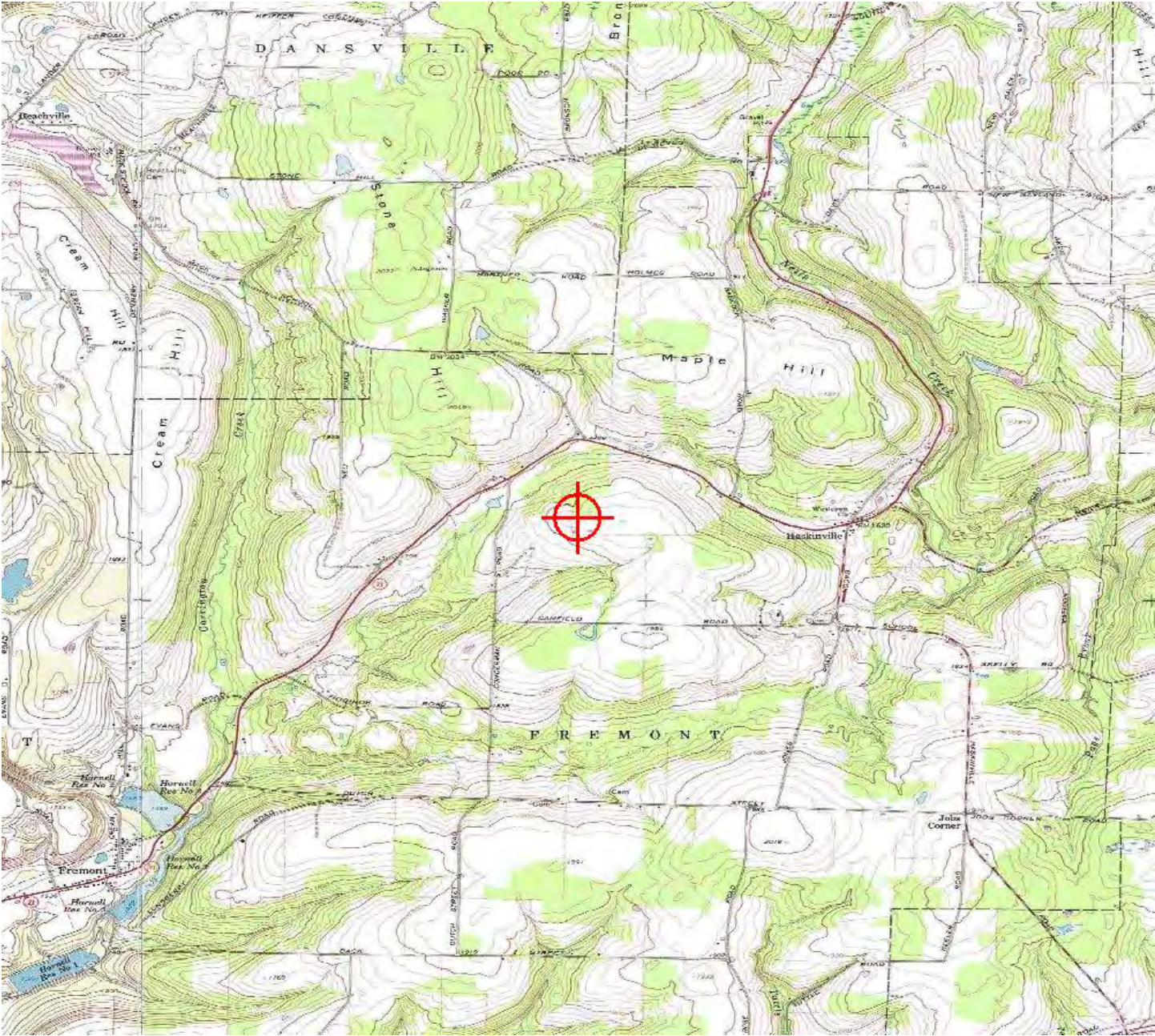
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2760-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T71
 Location: Cohocton, NY
 Latitude: 42-27-46.99N NAD 83
 Longitude: 77-32-41.91W
 Heights: 2018 feet site elevation (SE)
 493 feet above ground level (AGL)
 2511 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2760-OE.

Signature Control No: 253319992-309224588

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

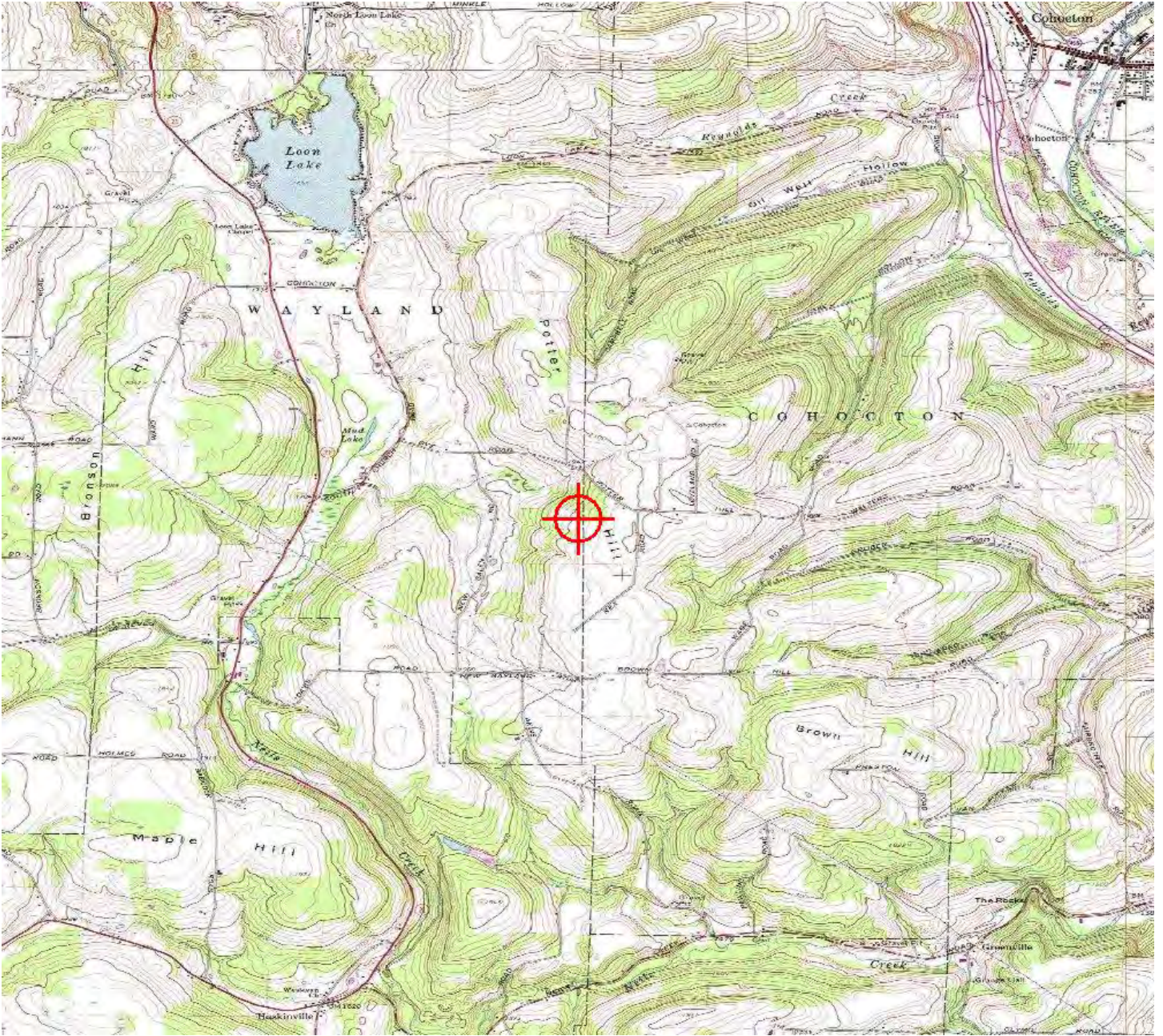
Additional information for ASN 2015-WTE-2760-OE

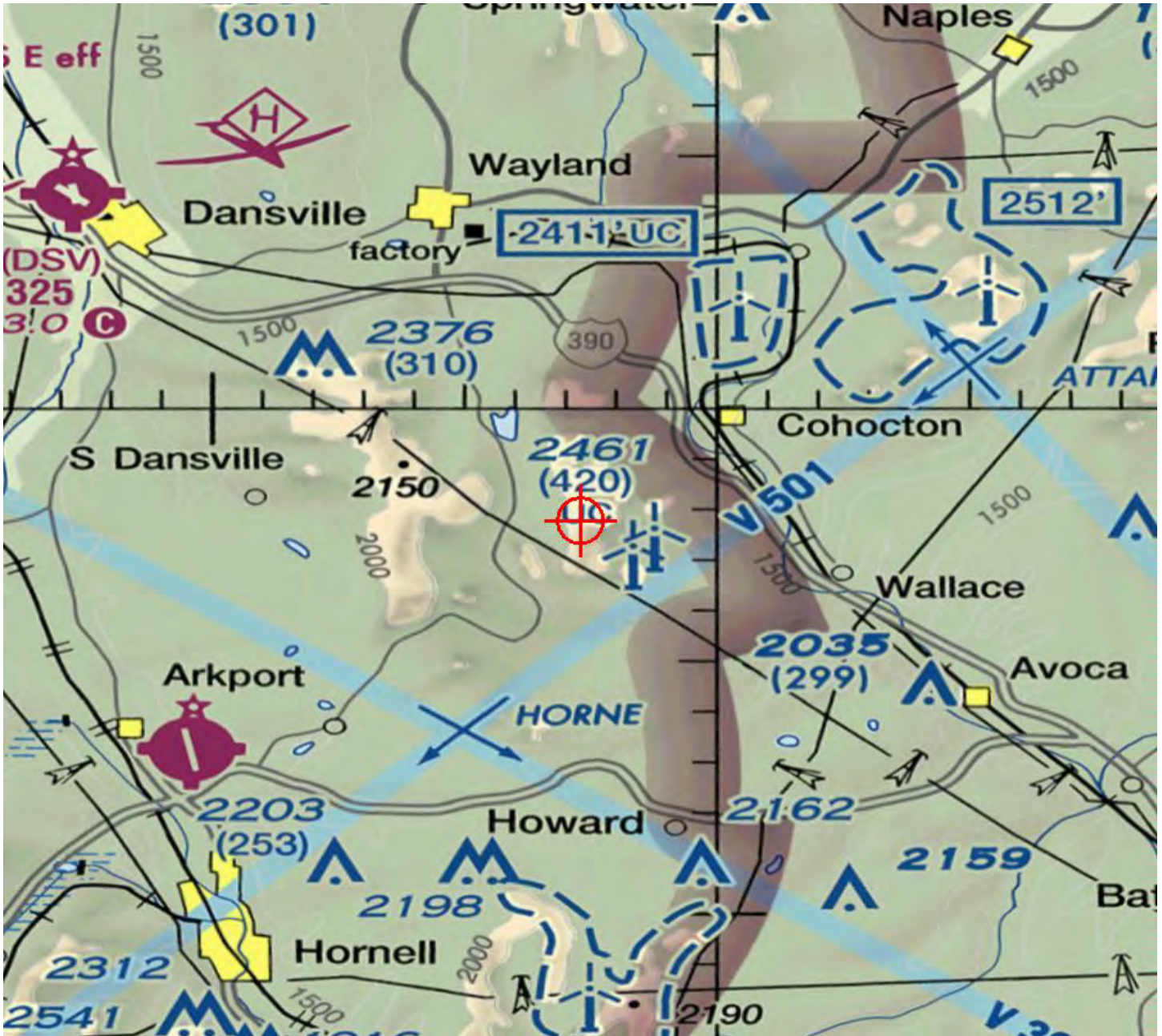
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2760-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2761-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T72
Location: Cohocton, NY
Latitude: 42-26-38.34N NAD 83
Longitude: 77-33-29.12W
Heights: 2005 feet site elevation (SE)
493 feet above ground level (AGL)
2498 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2761-OE.

Signature Control No: 253319996-309224592

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2761-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2761-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2763-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T74
 Location: Cohocton, NY
 Latitude: 42-25-09.87N NAD 83
 Longitude: 77-34-32.51W
 Heights: 1926 feet site elevation (SE)
 493 feet above ground level (AGL)
 2419 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2763-OE.

Signature Control No: 253320000-309224143

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2763-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

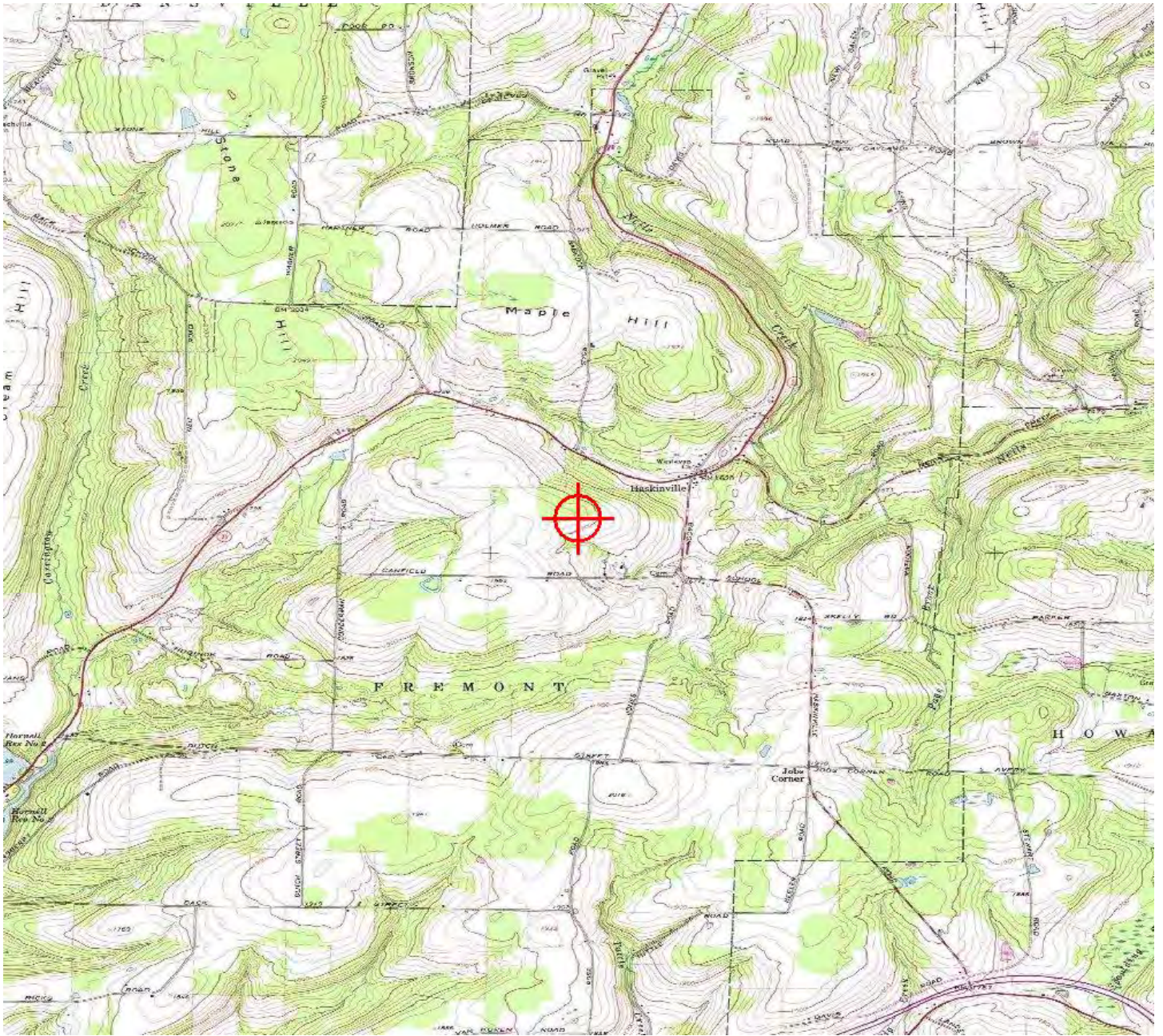
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2764-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T75
Location: Cohocton, NY
Latitude: 42-25-17.16N NAD 83
Longitude: 77-34-46.98W
Heights: 1941 feet site elevation (SE)
493 feet above ground level (AGL)
2434 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2764-OE.

Signature Control No: 253320002-309224141

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2764-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

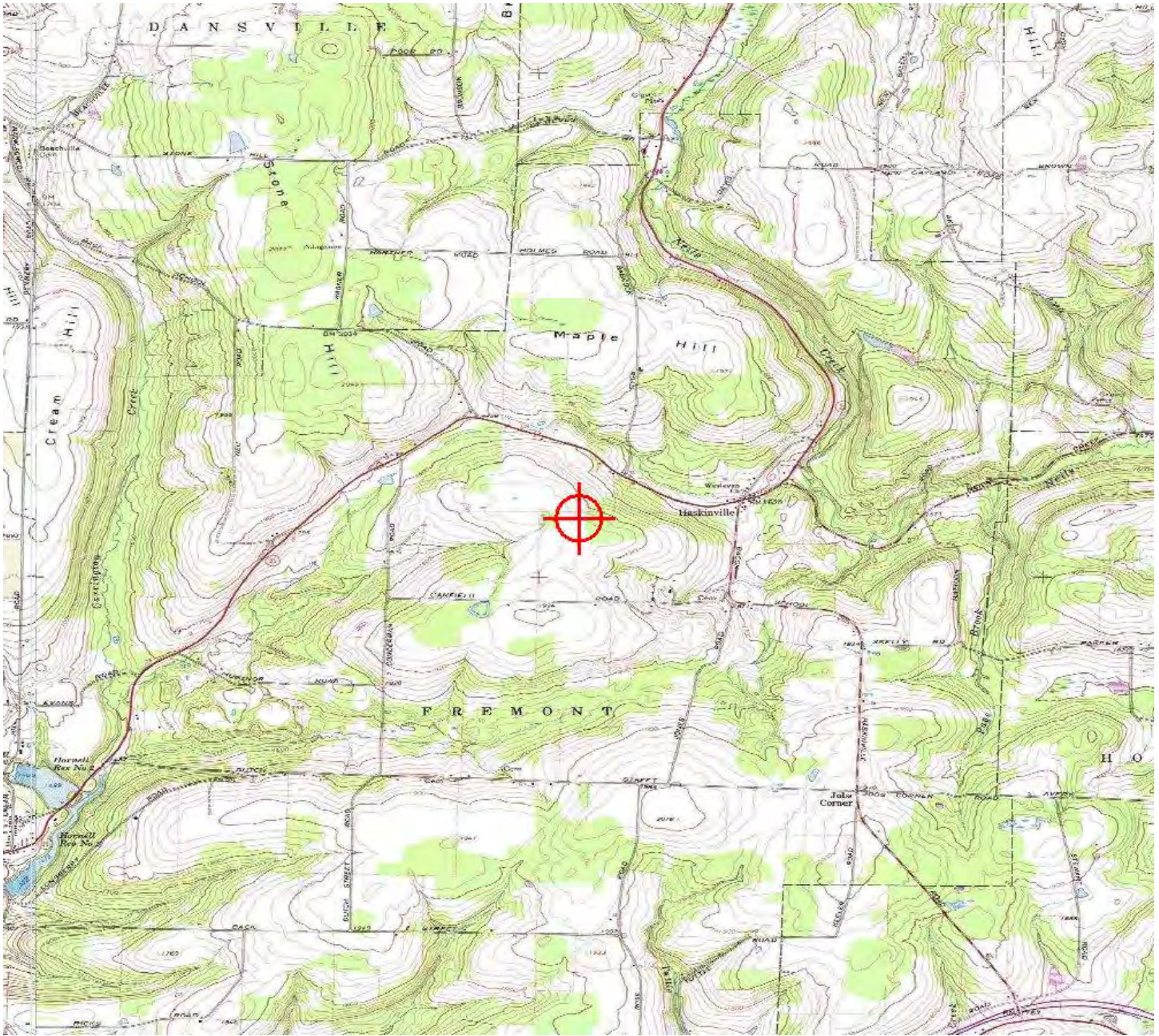
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

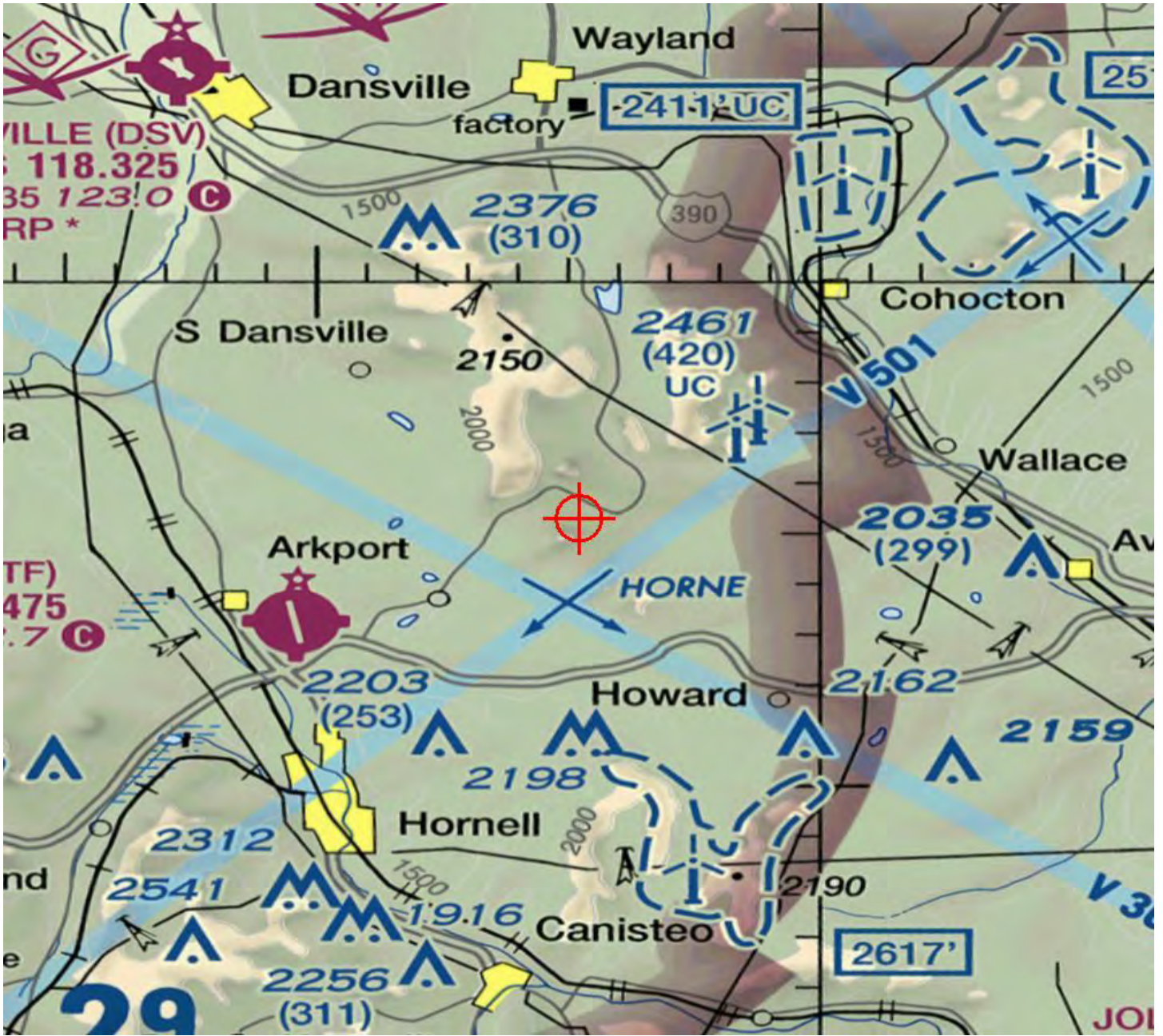
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2764-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2766-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T77
 Location: Cohocton, NY
 Latitude: 42-26-07.41N NAD 83
 Longitude: 77-34-38.37W
 Heights: 1991 feet site elevation (SE)
 493 feet above ground level (AGL)
 2484 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2766-OE.

Signature Control No: 253320004-309224131

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2766-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

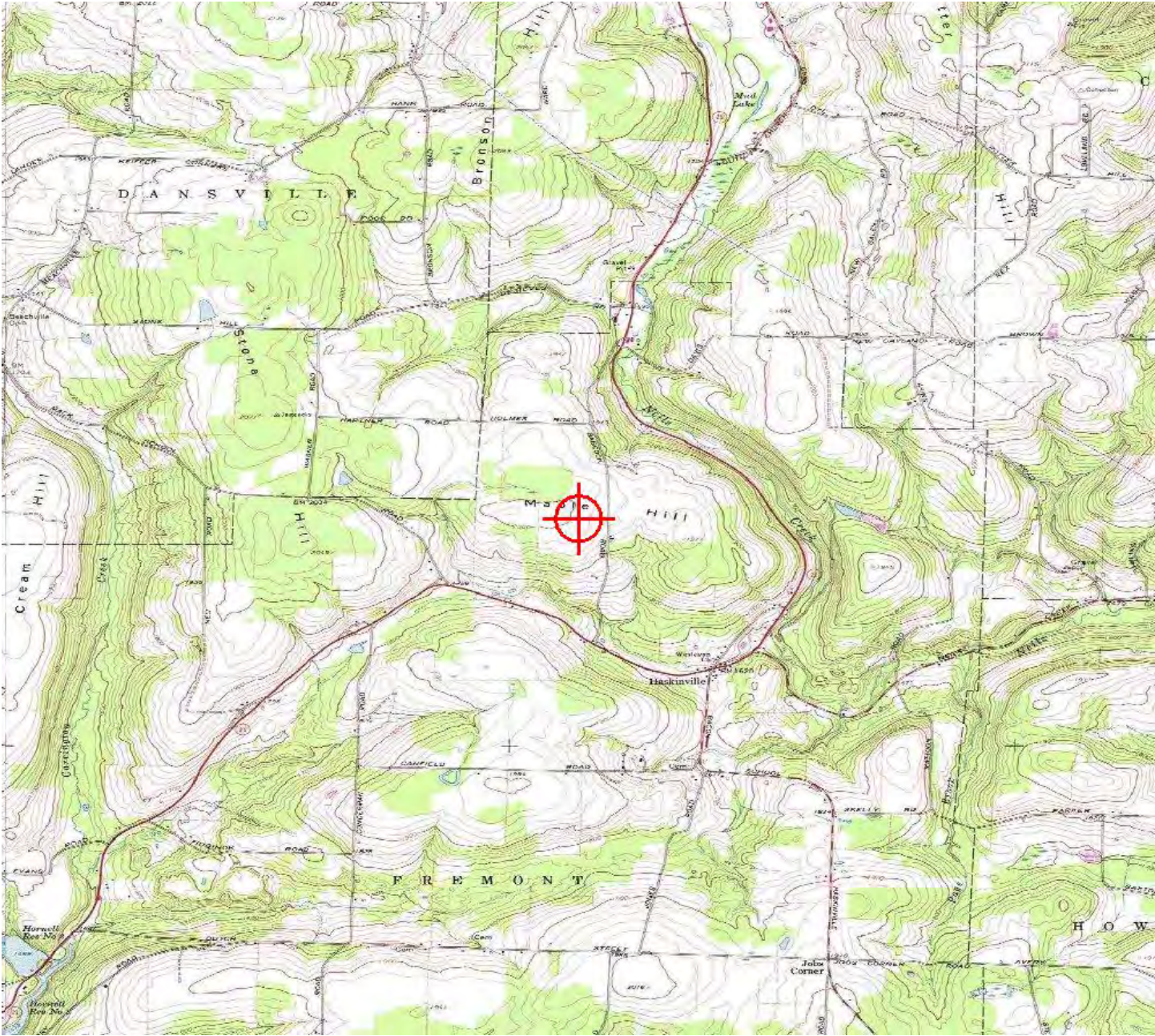
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2767-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T78
Location: Cohocton, NY
Latitude: 42-25-15.41N NAD 83
Longitude: 77-35-11.68W
Heights: 1917 feet site elevation (SE)
493 feet above ground level (AGL)
2410 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2767-OE.

Signature Control No: 253320007-309224136

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2767-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

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2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

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Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

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2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

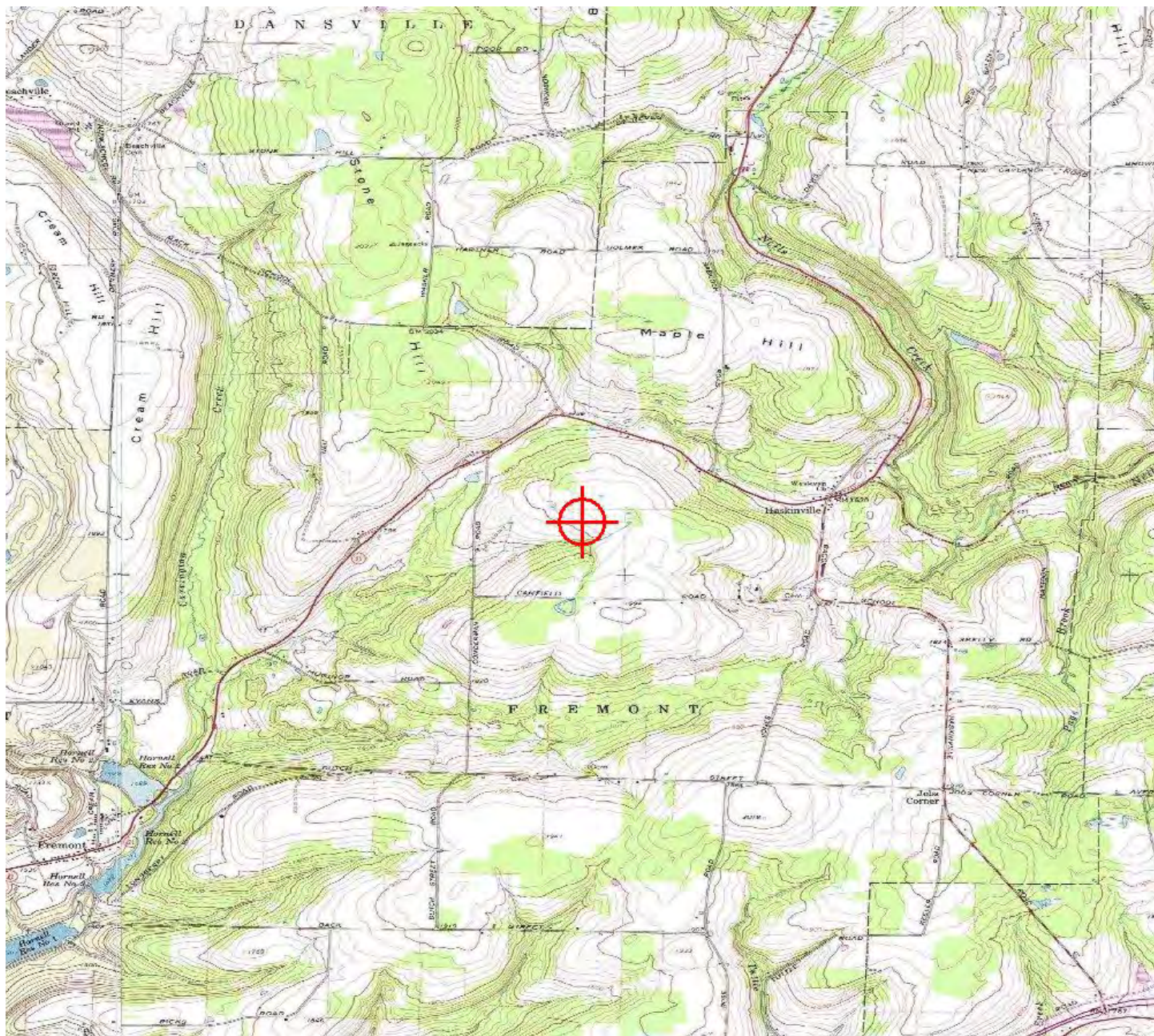
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2768-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T79
Location: Cohocton, NY
Latitude: 42-26-21.57N NAD 83
Longitude: 77-35-28.80W
Heights: 2012 feet site elevation (SE)
493 feet above ground level (AGL)
2505 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2768-OE.

Signature Control No: 253320009-309224137

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2768-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

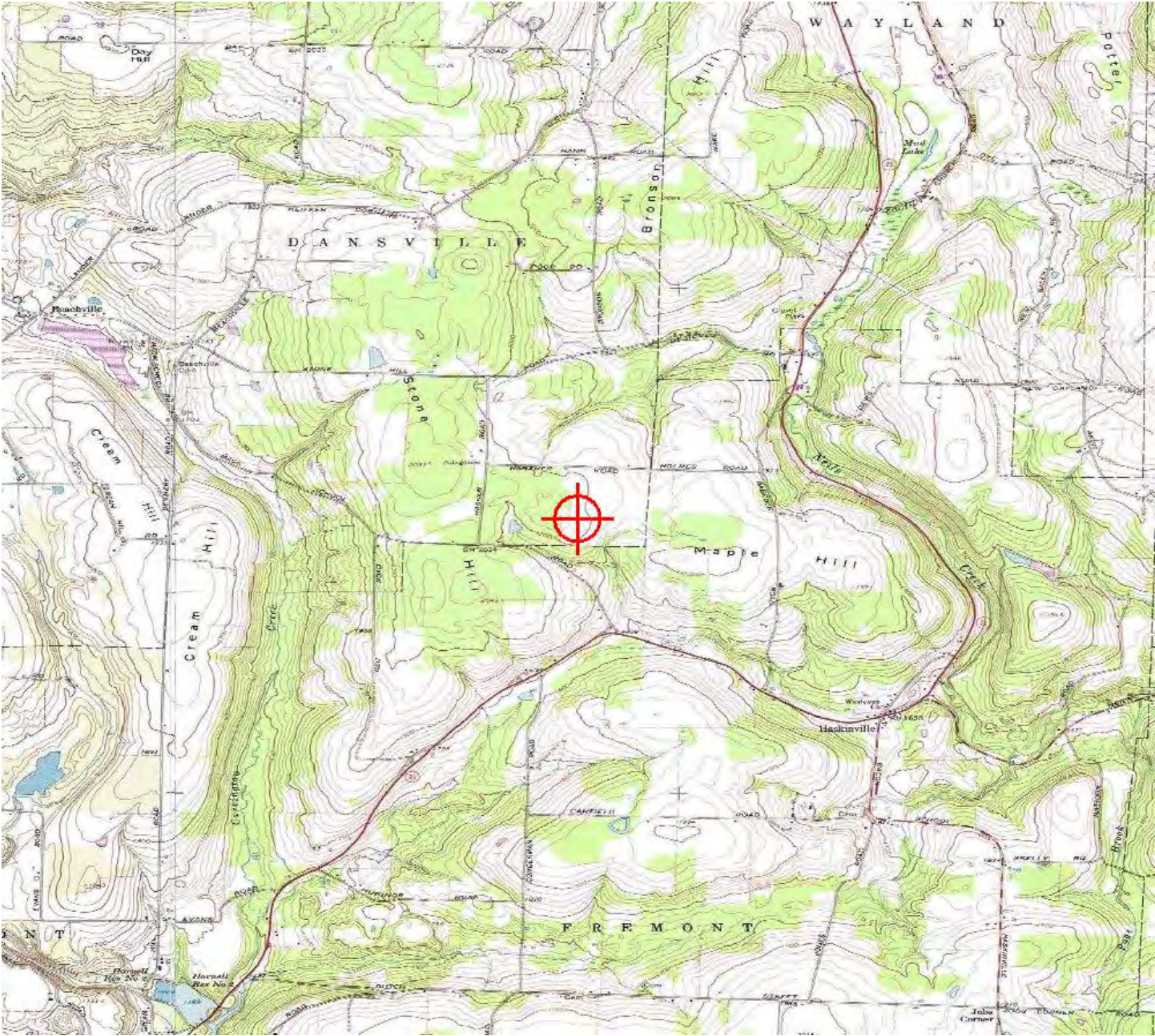
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2769-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T80
 Location: Cohocton, NY
 Latitude: 42-25-58.58N NAD 83
 Longitude: 77-34-02.82W
 Heights: 1955 feet site elevation (SE)
 493 feet above ground level (AGL)
 2448 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2769-OE.

Signature Control No: 253320010-309224602

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2769-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2770-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T81
Location: Cohocton, NY
Latitude: 42-26-30.65N NAD 83
Longitude: 77-35-36.00W
Heights: 2015 feet site elevation (SE)
493 feet above ground level (AGL)
2508 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2770-OE.

Signature Control No: 253320016-309224146

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2770-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
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2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

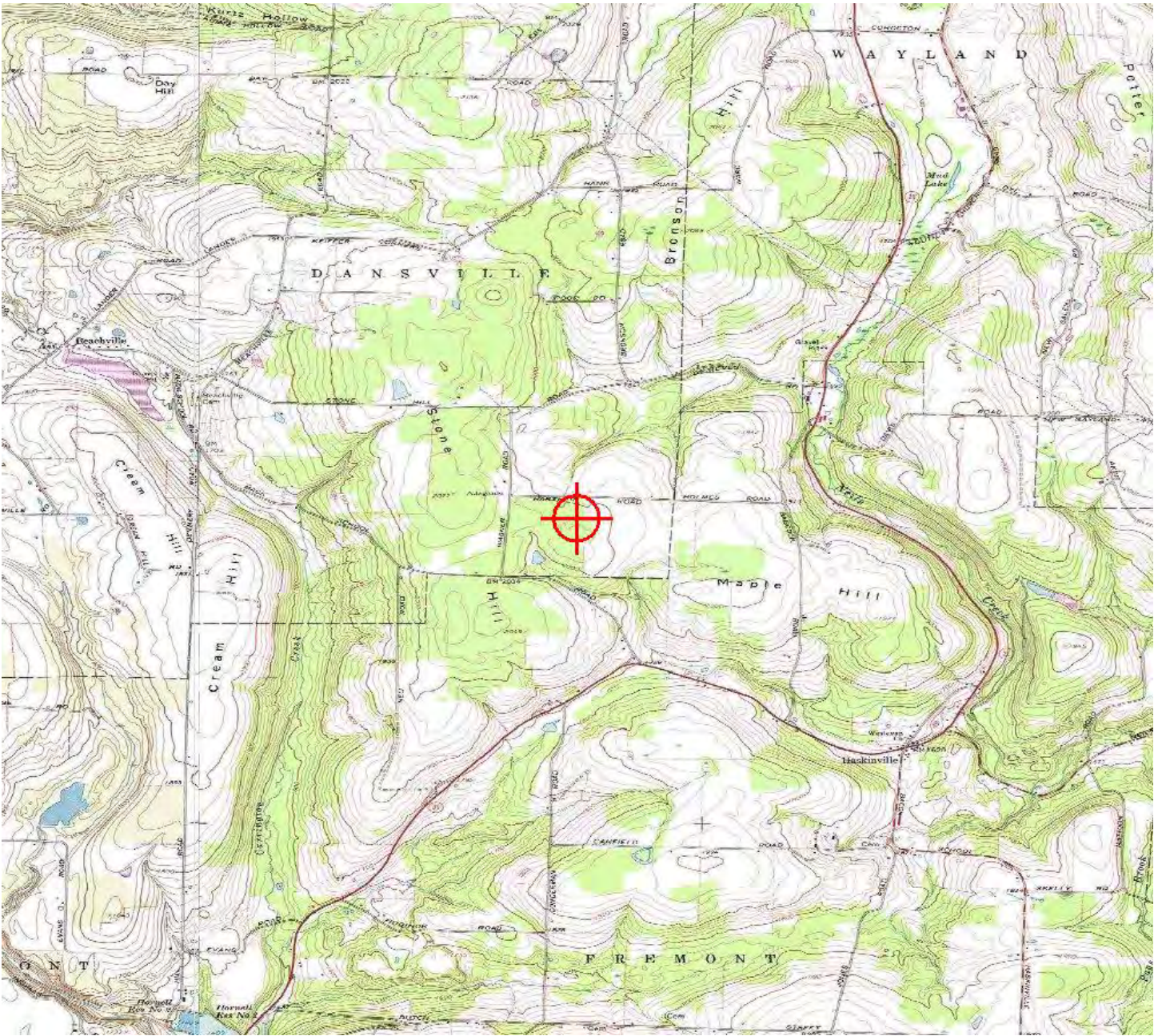
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

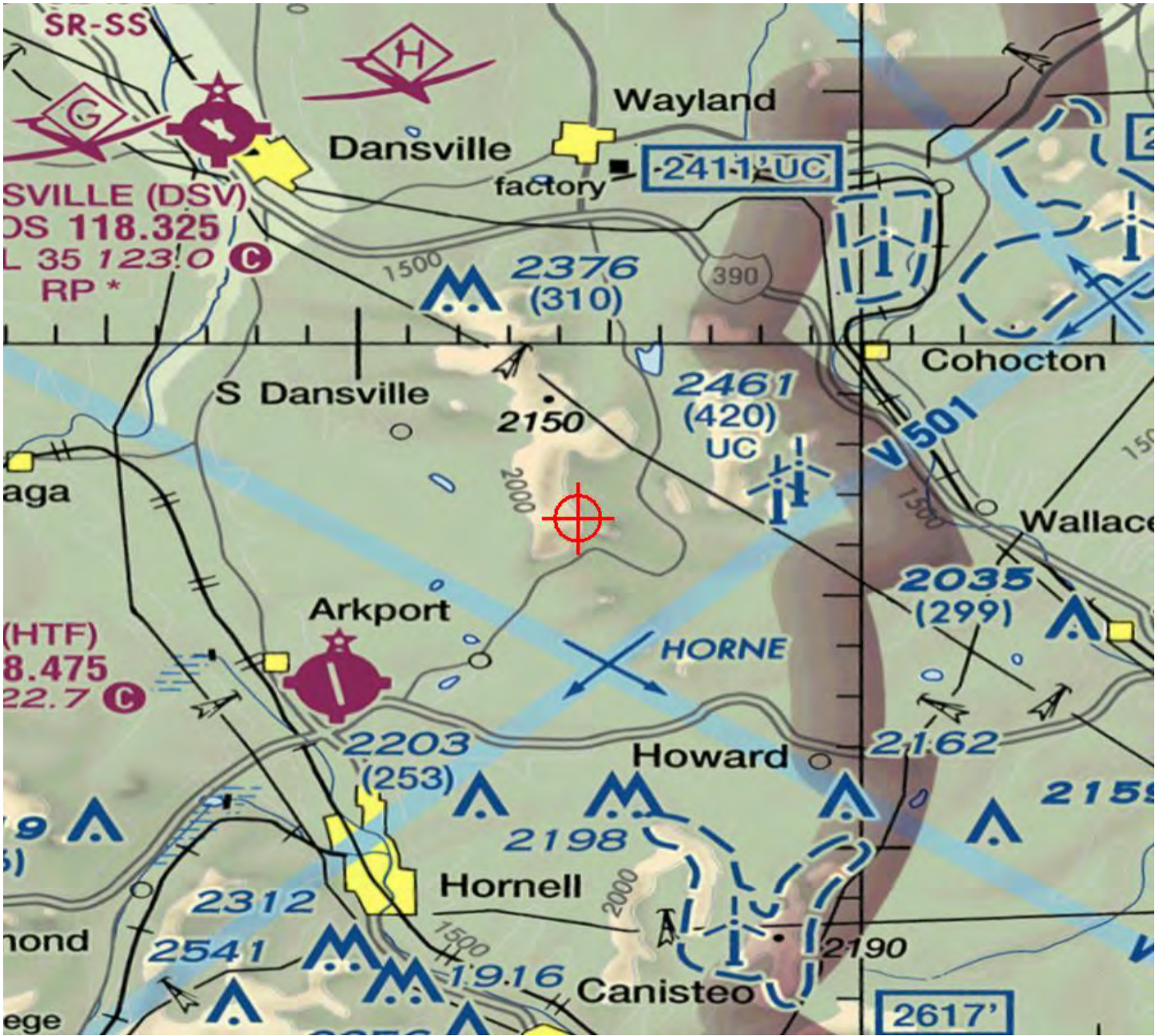
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2771-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T82
 Location: Cohocton, NY
 Latitude: 42-26-58.47N NAD 83
 Longitude: 77-34-51.36W
 Heights: 1943 feet site elevation (SE)
 493 feet above ground level (AGL)
 2436 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2771-OE.

Signature Control No: 253320019-309224605

(DNE -WT)

Brenda Mumper
Specialist

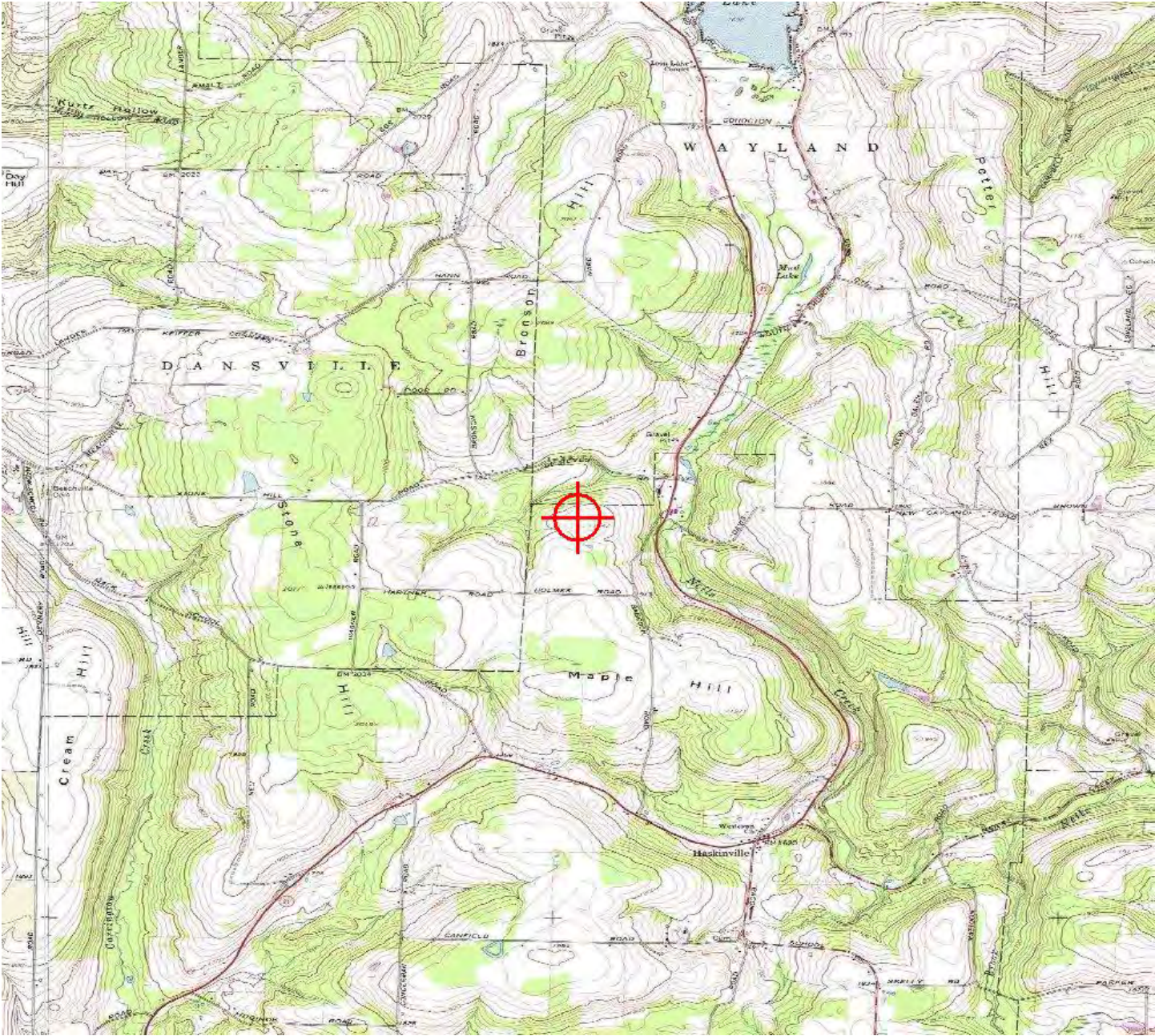
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2771-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2772-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T83
 Location: Cohocton, NY
 Latitude: 42-26-48.35N NAD 83
 Longitude: 77-34-50.03W
 Heights: 1941 feet site elevation (SE)
 493 feet above ground level (AGL)
 2434 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2772-OE.

Signature Control No: 253320020-309224608

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

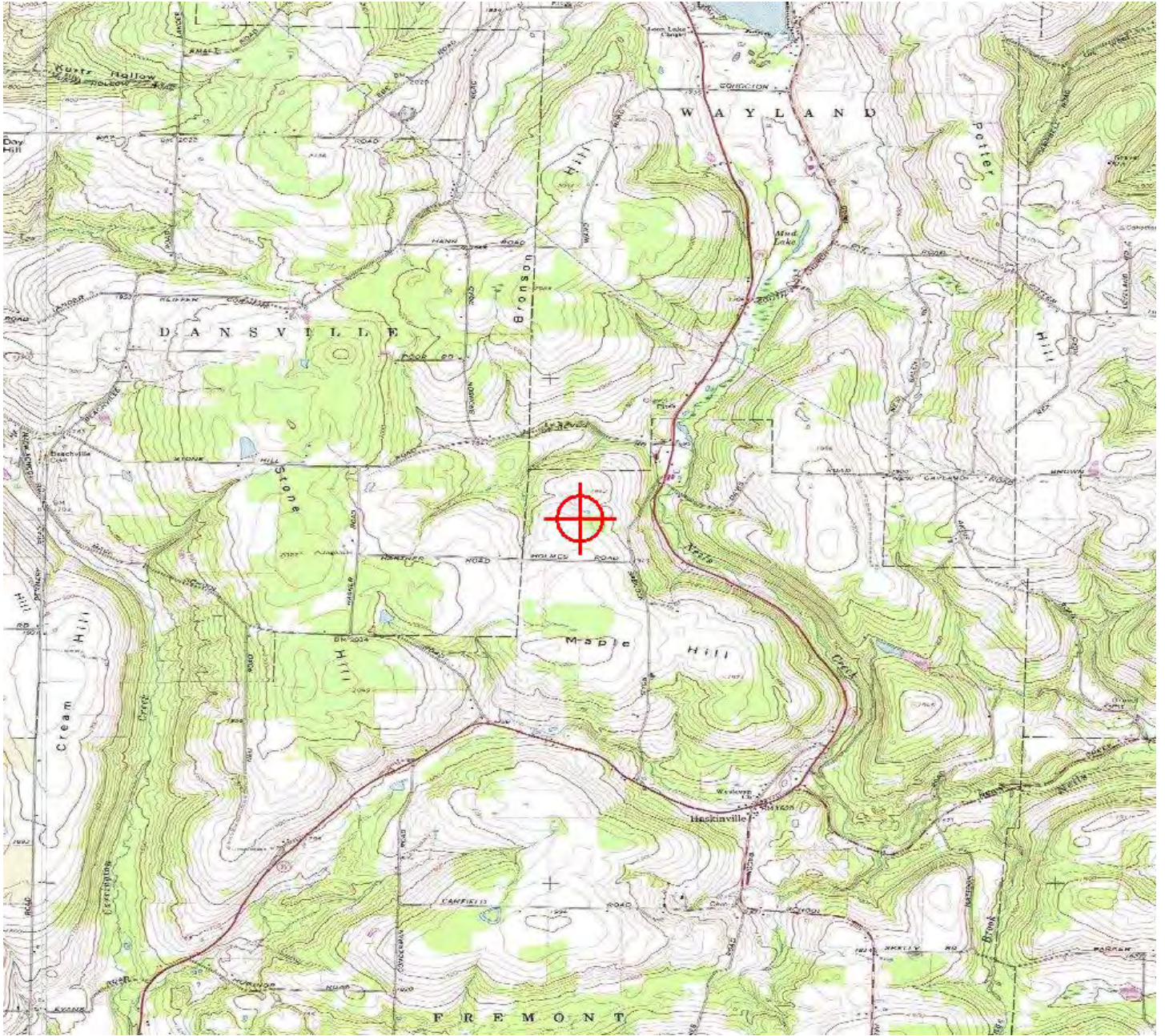
Additional information for ASN 2015-WTE-2772-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2772-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2773-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T84
 Location: Cohocton, NY
 Latitude: 42-27-41.86N NAD 83
 Longitude: 77-33-31.66W
 Heights: 1868 feet site elevation (SE)
 493 feet above ground level (AGL)
 2361 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2773-OE.

Signature Control No: 253320024-309224611

(DNE -WT)

Brenda Mumper
Specialist

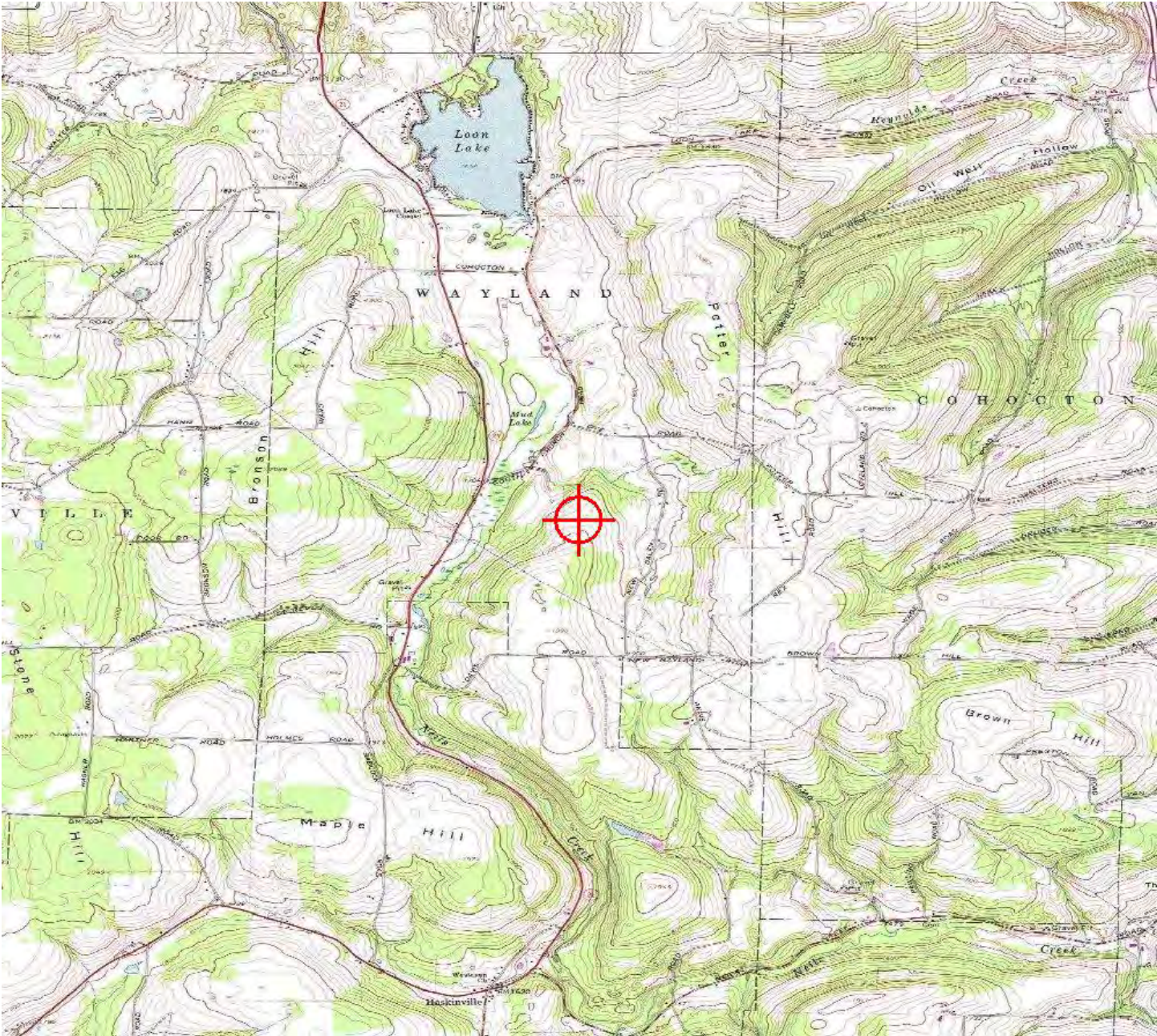
Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2015-WTE-2773-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2774-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T85
 Location: Cohocton, NY
 Latitude: 42-26-44.95N NAD 83
 Longitude: 77-35-18.56W
 Heights: 1962 feet site elevation (SE)
 493 feet above ground level (AGL)
 2455 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2774-OE.

Signature Control No: 253320025-309224139

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2774-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

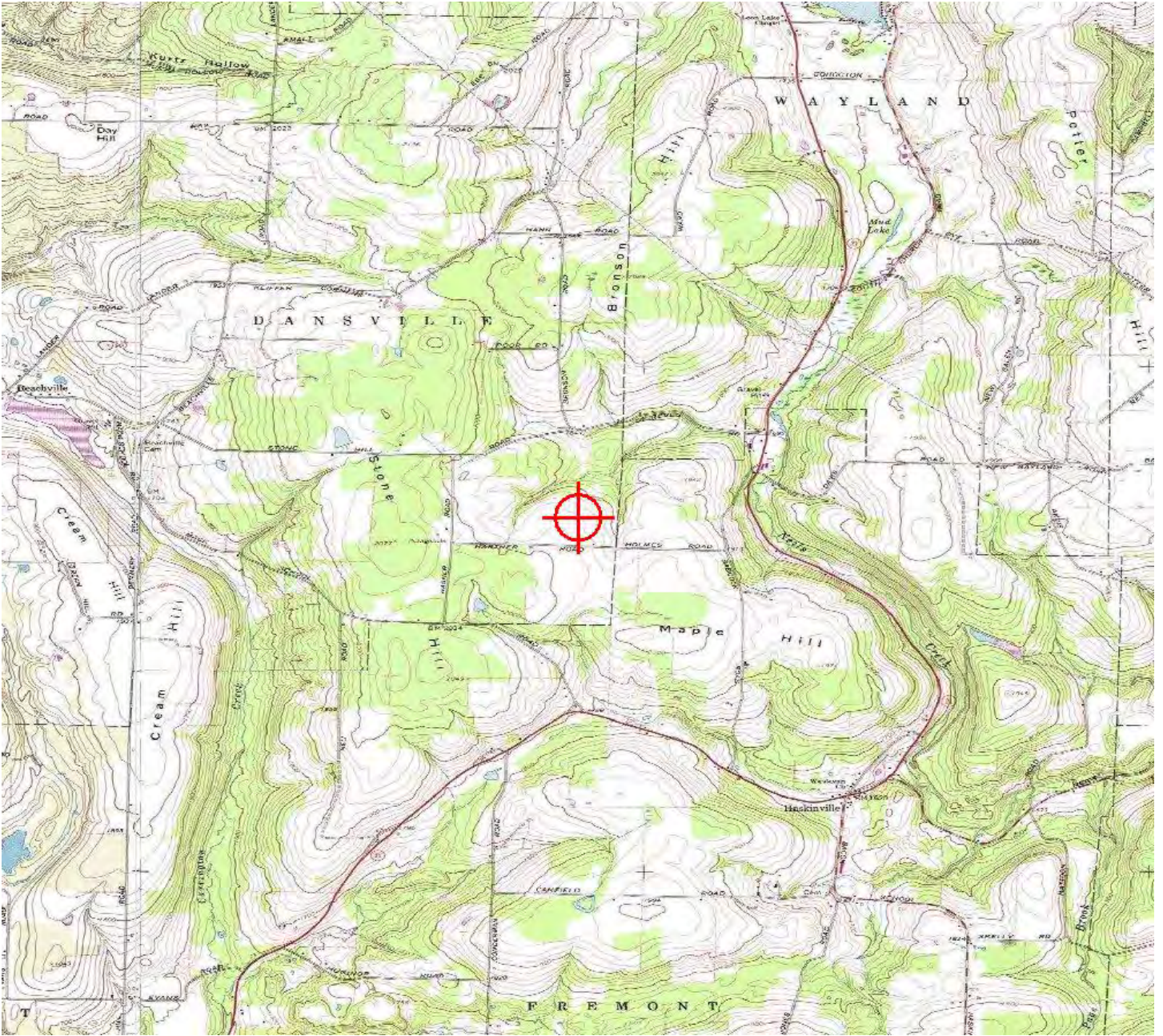
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2775-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T86
 Location: Cohocton, NY
 Latitude: 42-26-25.24N NAD 83
 Longitude: 77-34-48.68W
 Heights: 1984 feet site elevation (SE)
 493 feet above ground level (AGL)
 2477 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2775-OE.

Signature Control No: 253320026-309224145

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2775-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
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2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
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2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
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2015-WTE-2799-OE / 51 ft.
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2015-WTE-2802-OE / 159 ft.
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2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
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2015-WTE-2746-OE / 57 ft.
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2015-WTE-2753-OE / 78 ft.
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2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

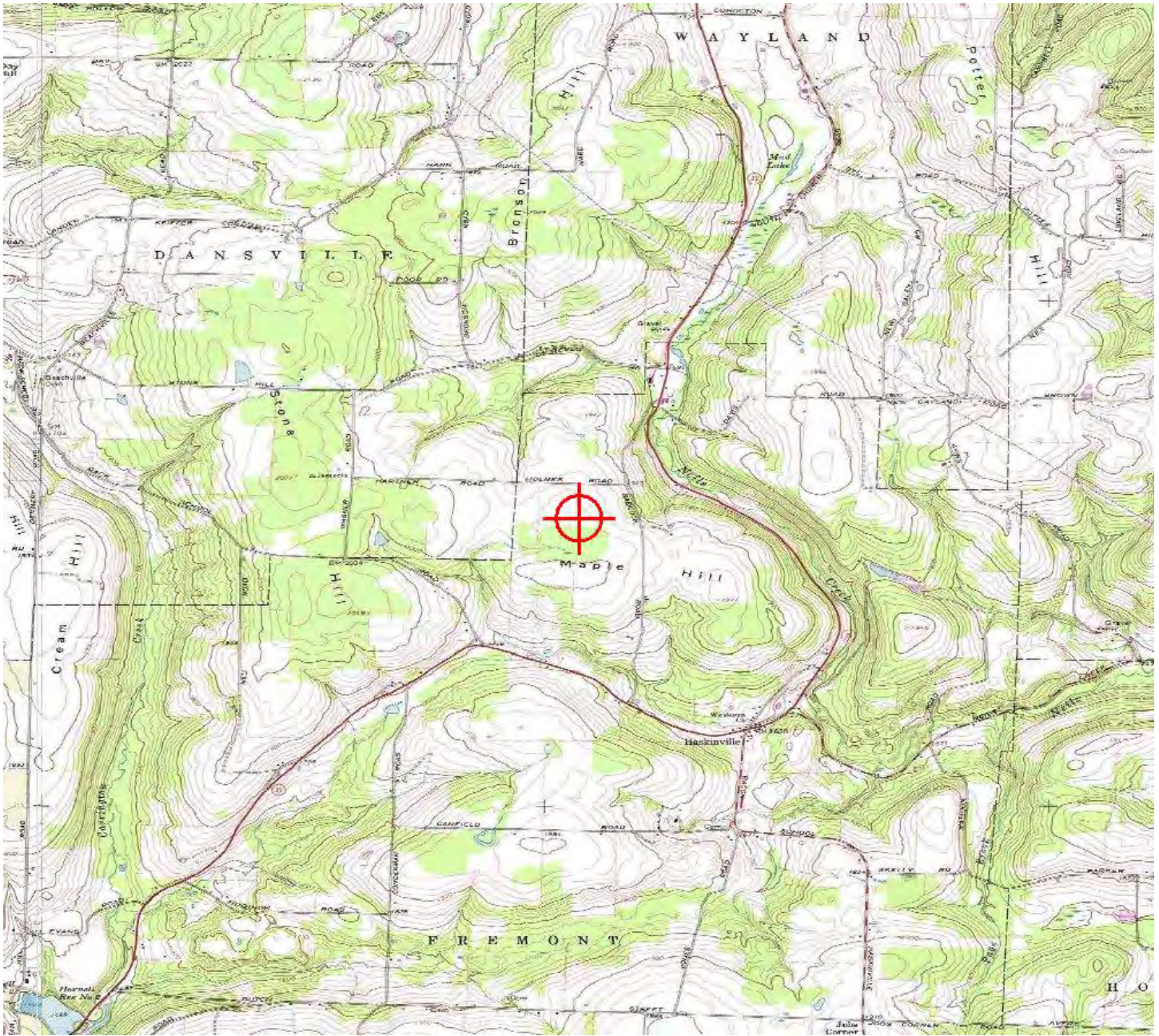
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2776-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T87
 Location: Cohocton, NY
 Latitude: 42-26-08.33N NAD 83
 Longitude: 77-34-08.91W
 Heights: 1960 feet site elevation (SE)
 493 feet above ground level (AGL)
 2453 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION

OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2776-OE.

Signature Control No: 253320027-309224614

(DNE -WT)

Brenda Mumper
Specialist

Attachment(s)
Additional Information
Map(s)

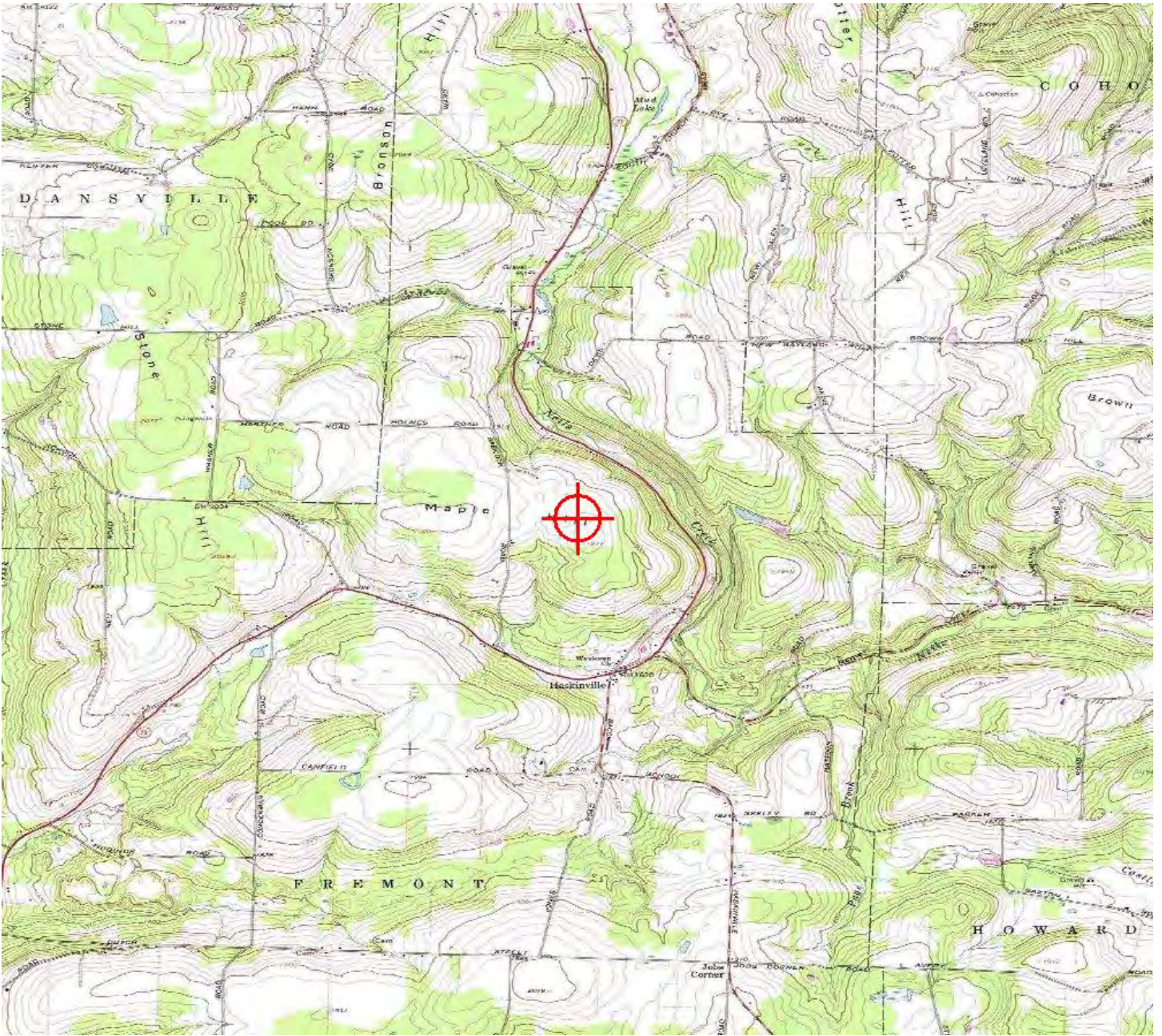
Additional information for ASN 2015-WTE-2776-OE

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2776-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2777-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T88
Location: Cohocton, NY
Latitude: 42-26-16.91N NAD 83
Longitude: 77-34-42.69W
Heights: 1990 feet site elevation (SE)
493 feet above ground level (AGL)
2483 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2777-OE.

Signature Control No: 253320030-309224144

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2777-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

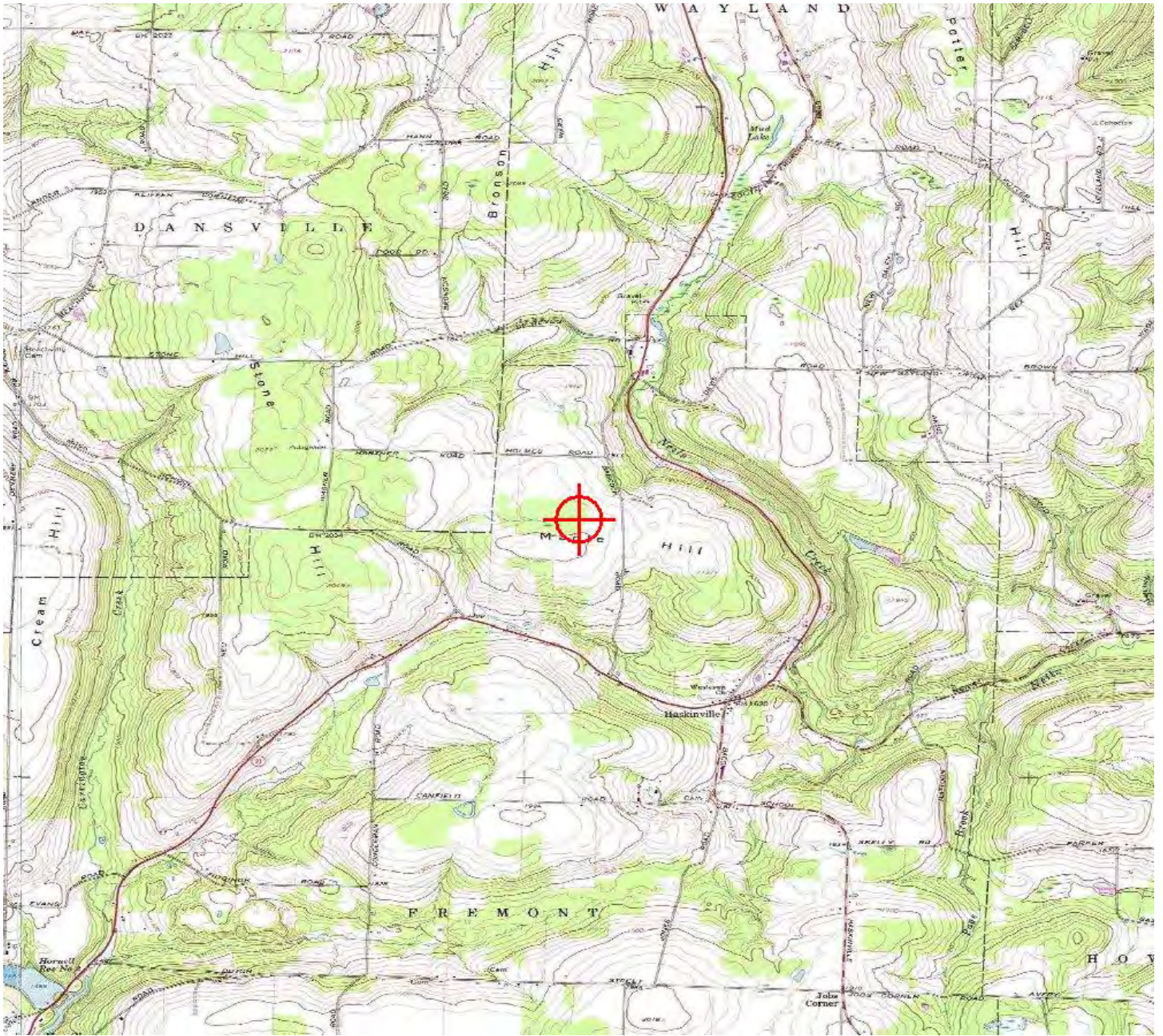
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

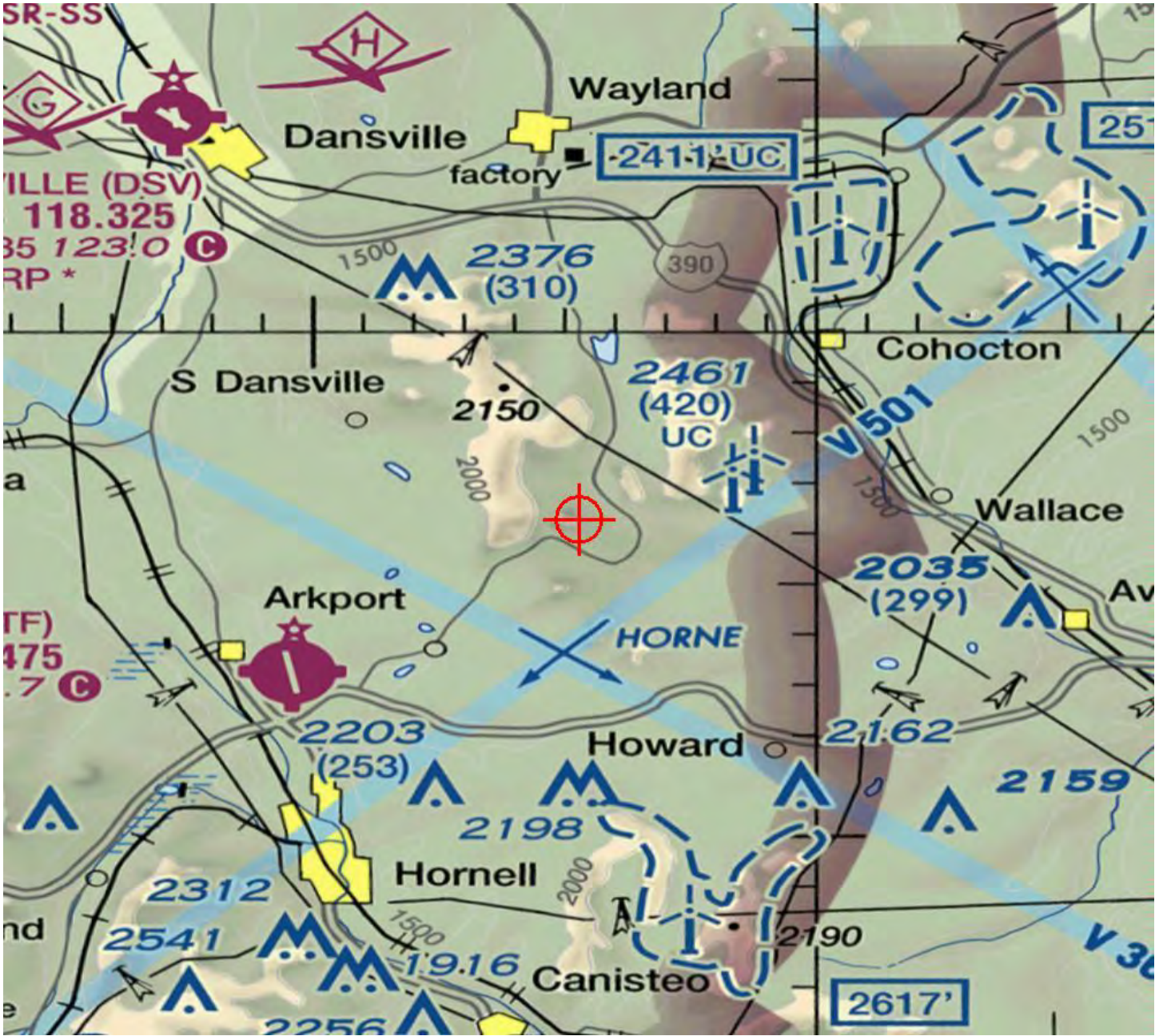
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2779-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T90
Location: Cohocton, NY
Latitude: 42-23-47.32N NAD 83
Longitude: 77-35-37.70W
Heights: 1927 feet site elevation (SE)
493 feet above ground level (AGL)
2420 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2779-OE.

Signature Control No: 253320032-309224142

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2779-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

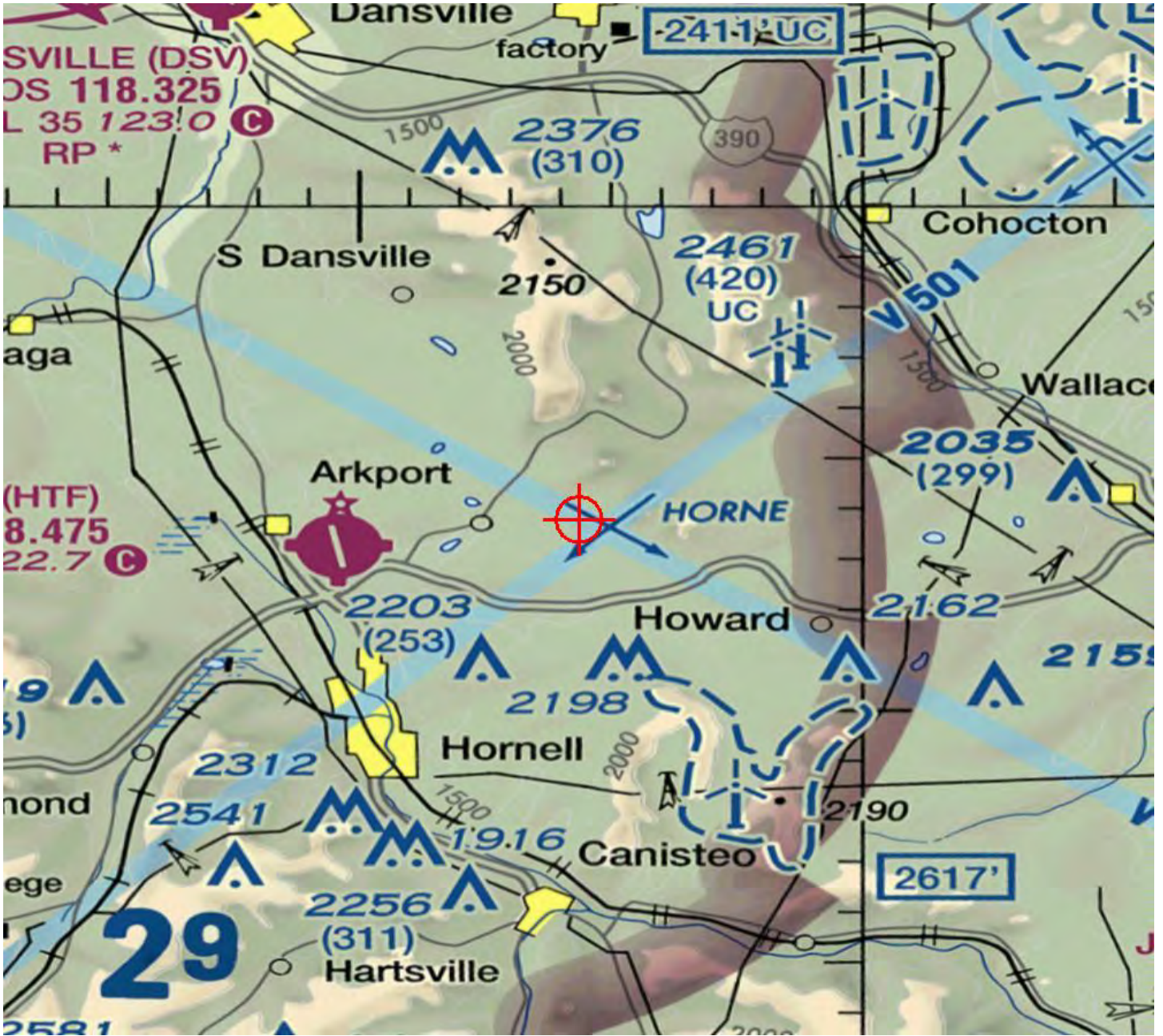
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2779-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2783-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T94
Location: Cohocton, NY
Latitude: 42-23-36.13N NAD 83
Longitude: 77-35-32.17W
Heights: 1931 feet site elevation (SE)
493 feet above ground level (AGL)
2424 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2783-OE.

Signature Control No: 253320066-309224161

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2783-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
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2015-WTE-2779-OE / 192 ft.
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2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
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2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
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2015-WTE-2800-OE / 82 ft.
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2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

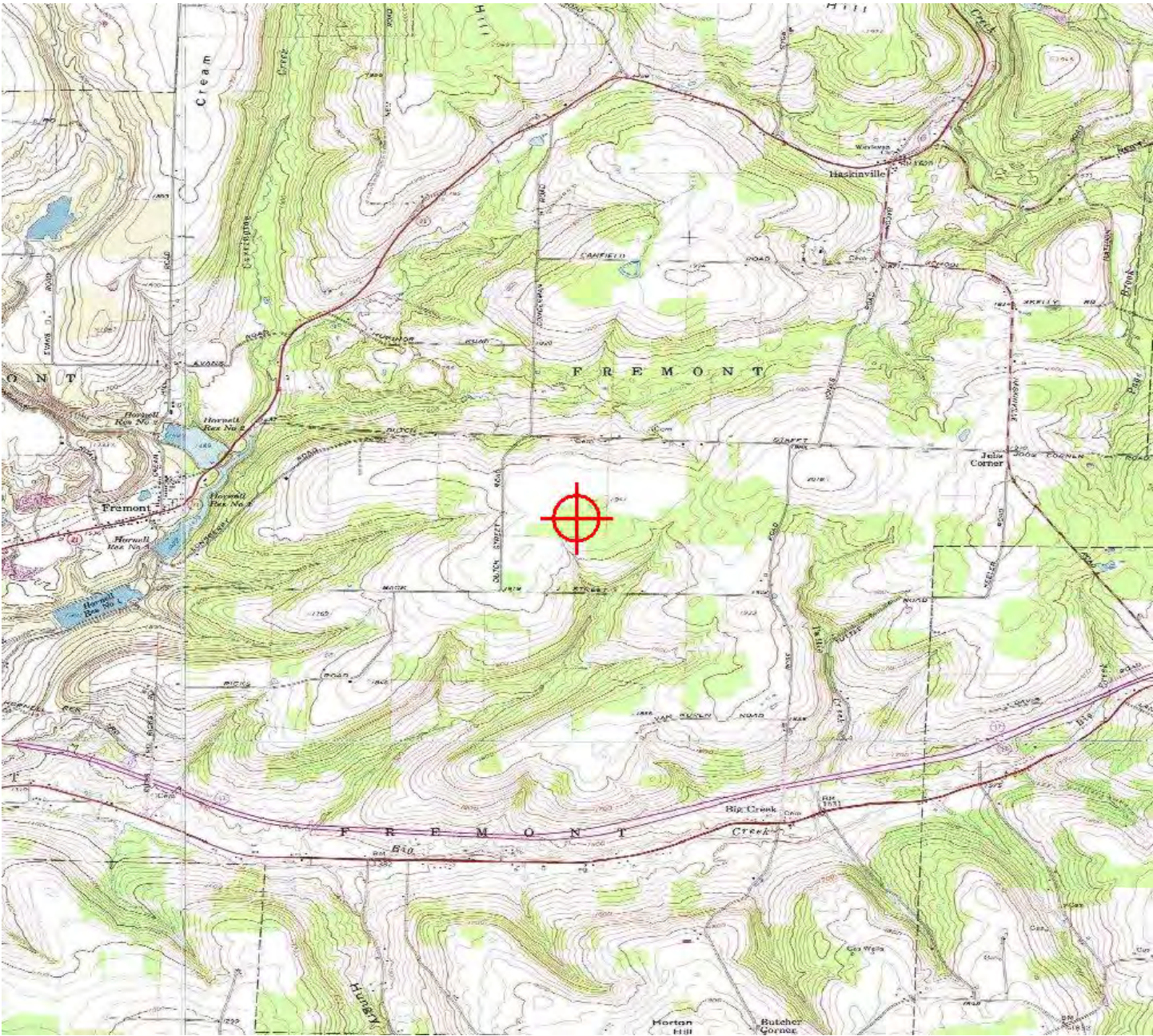
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

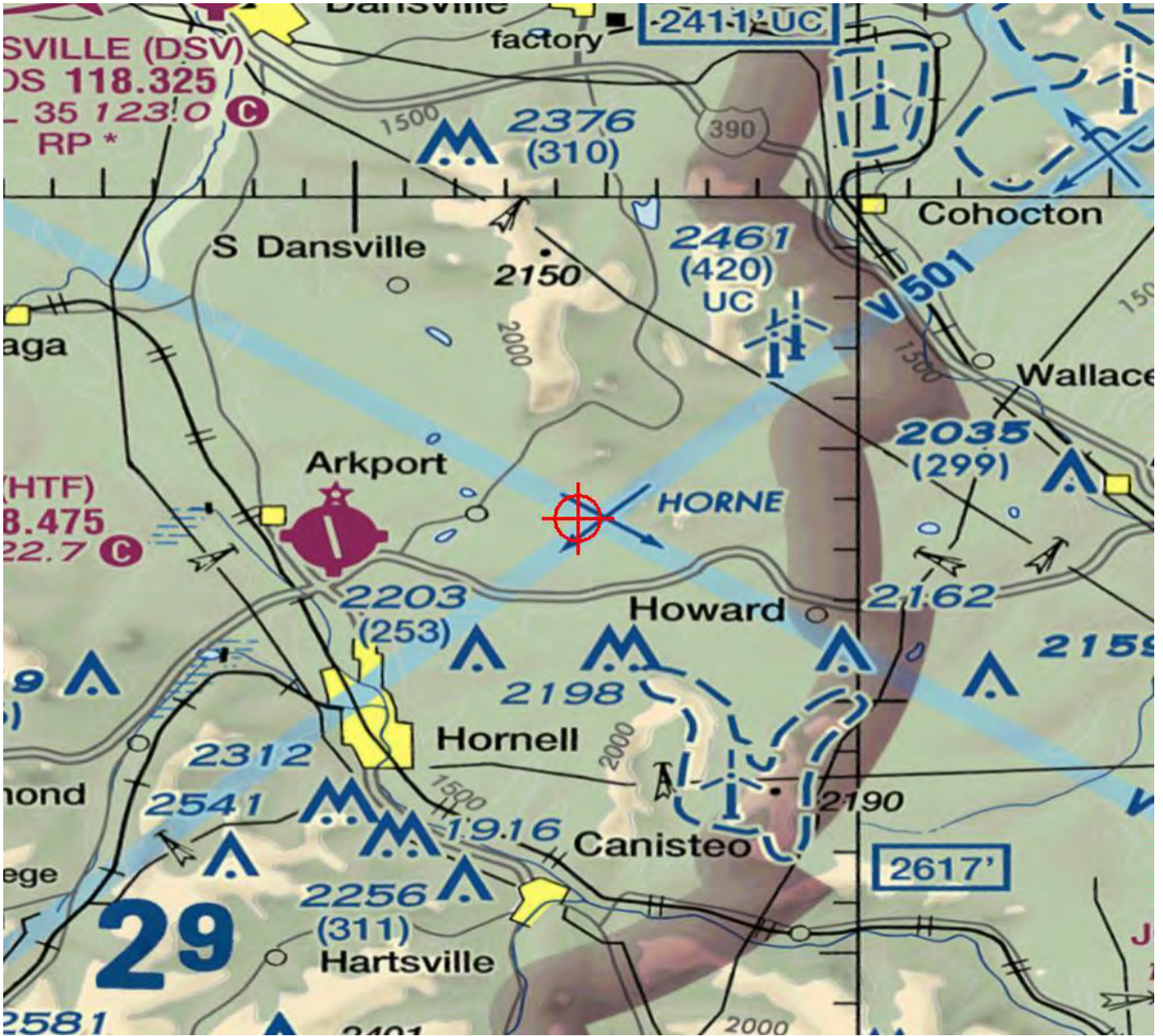
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2783-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2784-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T95
 Location: Cohocton, NY
 Latitude: 42-22-47.46N NAD 83
 Longitude: 77-35-08.18W
 Heights: 1856 feet site elevation (SE)
 493 feet above ground level (AGL)
 2349 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2784-OE.

Signature Control No: 253320072-309224164

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2784-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

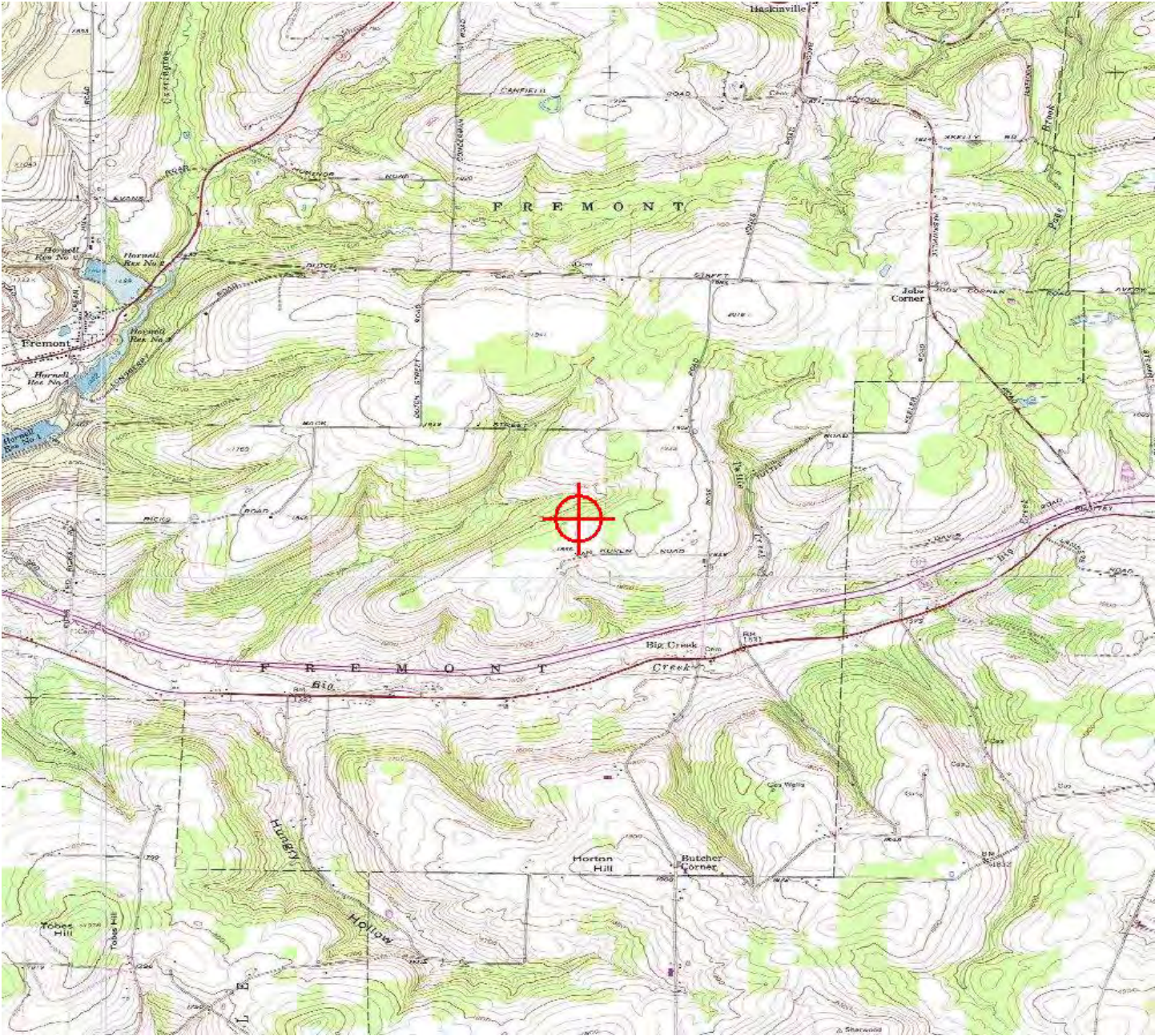
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

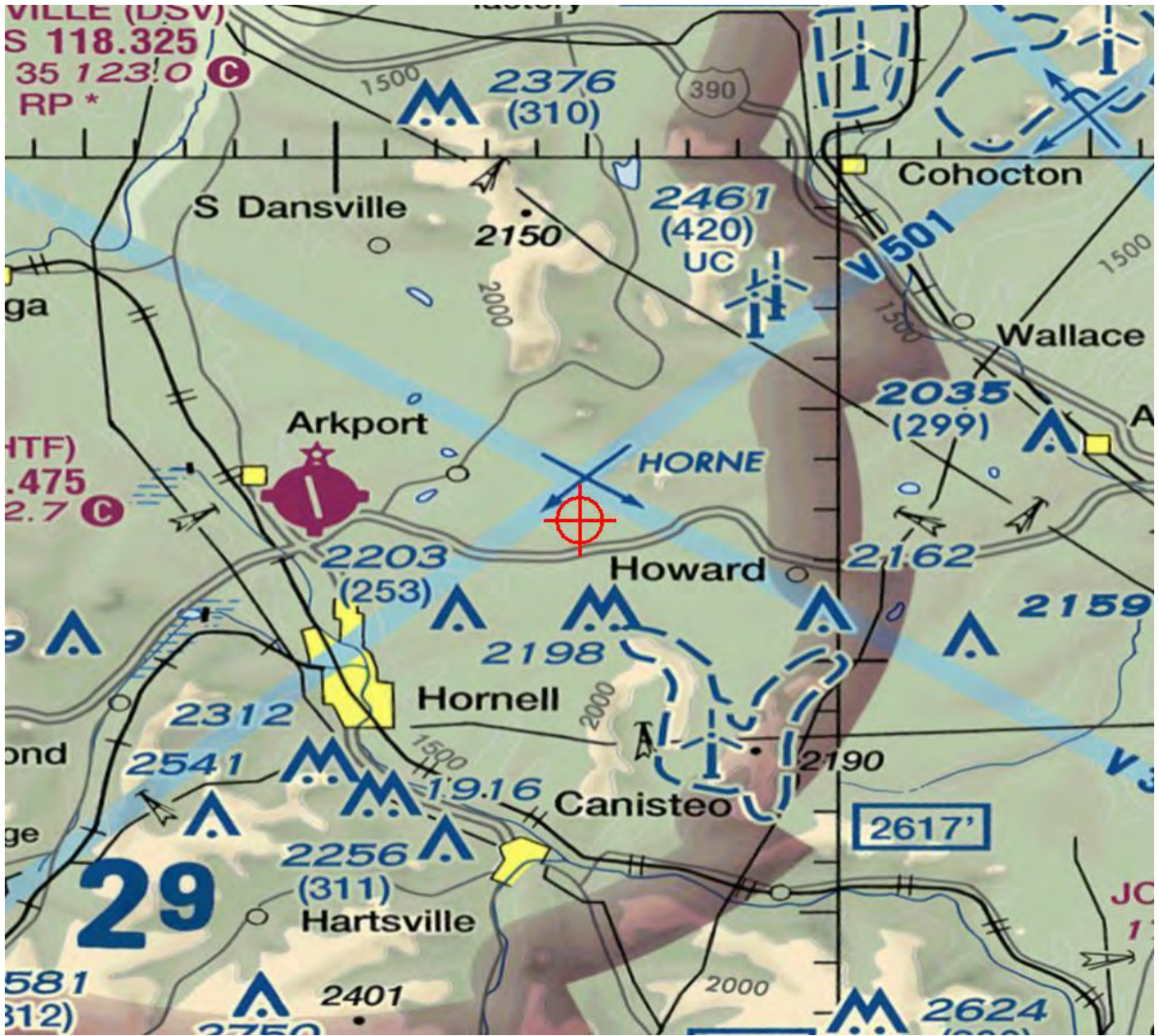
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2784-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2785-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T96
 Location: Cohocton, NY
 Latitude: 42-22-47.50N NAD 83
 Longitude: 77-34-41.99W
 Heights: 1905 feet site elevation (SE)
 493 feet above ground level (AGL)
 2398 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2785-OE.

Signature Control No: 253320073-309224169

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2785-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

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2015-WTE-2739-OE / up to 31 ft.
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2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
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2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
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2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

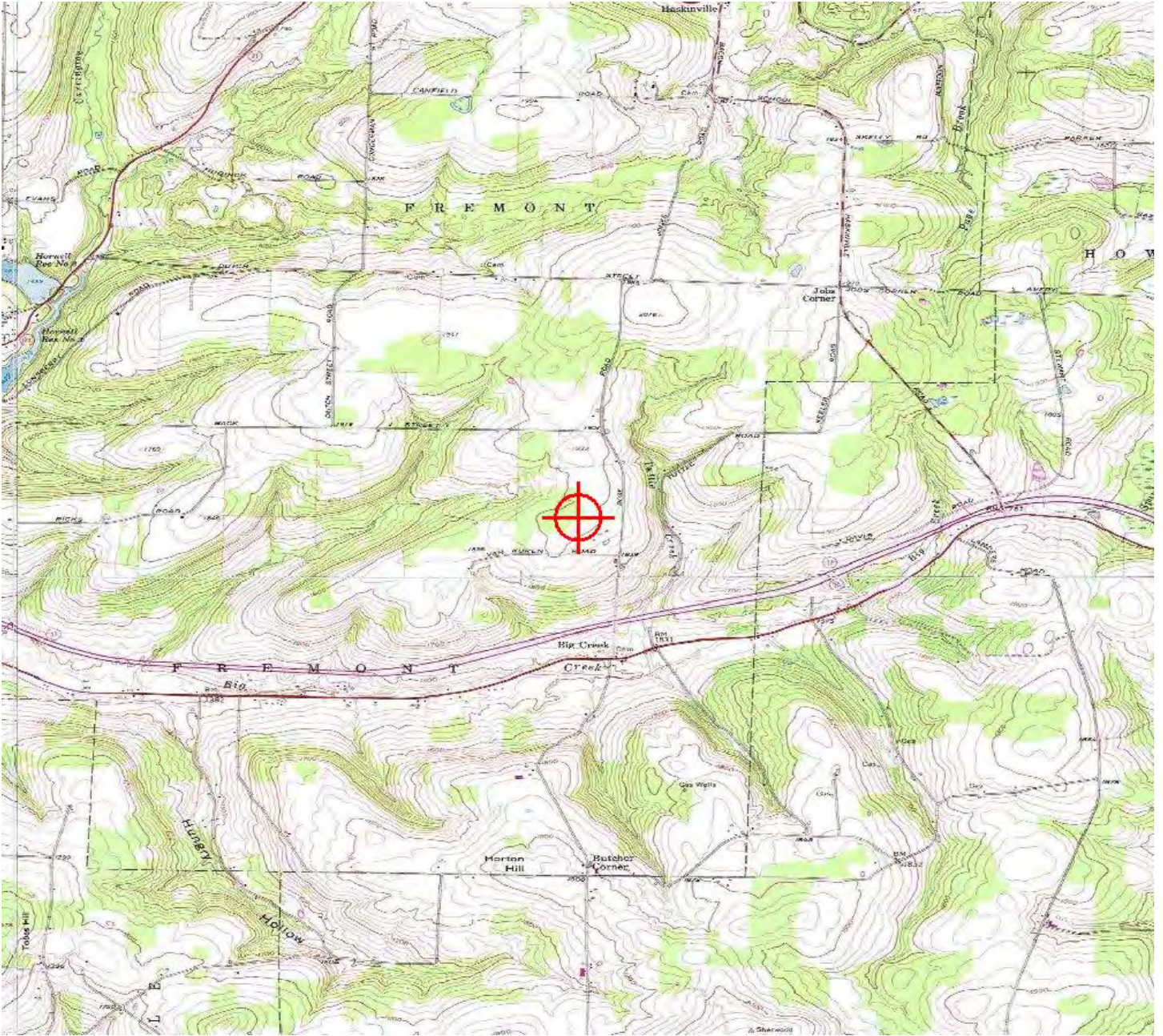
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

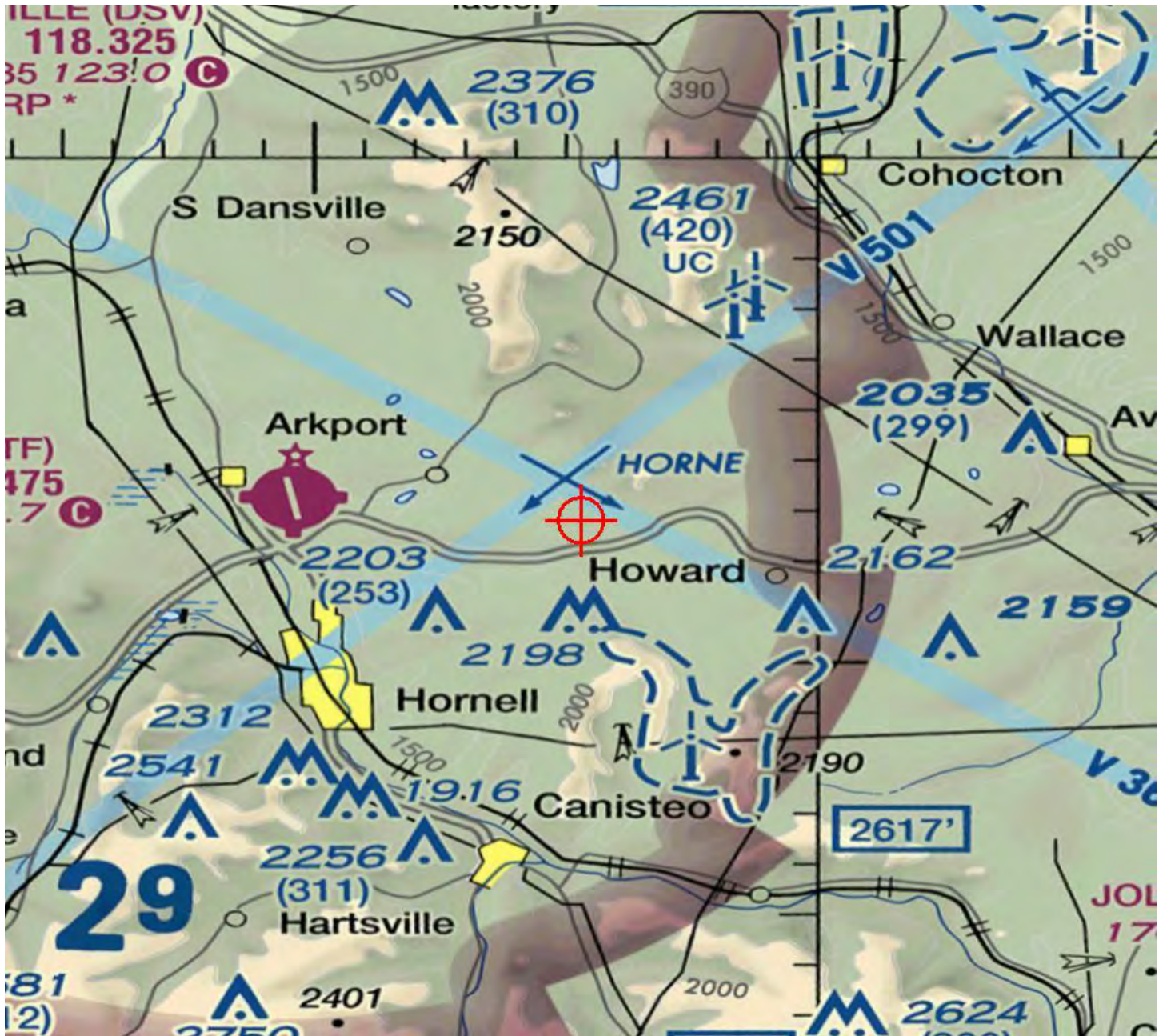
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2788-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T99
 Location: Cohocton, NY
 Latitude: 42-23-26.76N NAD 83
 Longitude: 77-35-25.01W
 Heights: 1916 feet site elevation (SE)
 493 feet above ground level (AGL)
 2409 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2788-OE.

Signature Control No: 253320076-309224177

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2788-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

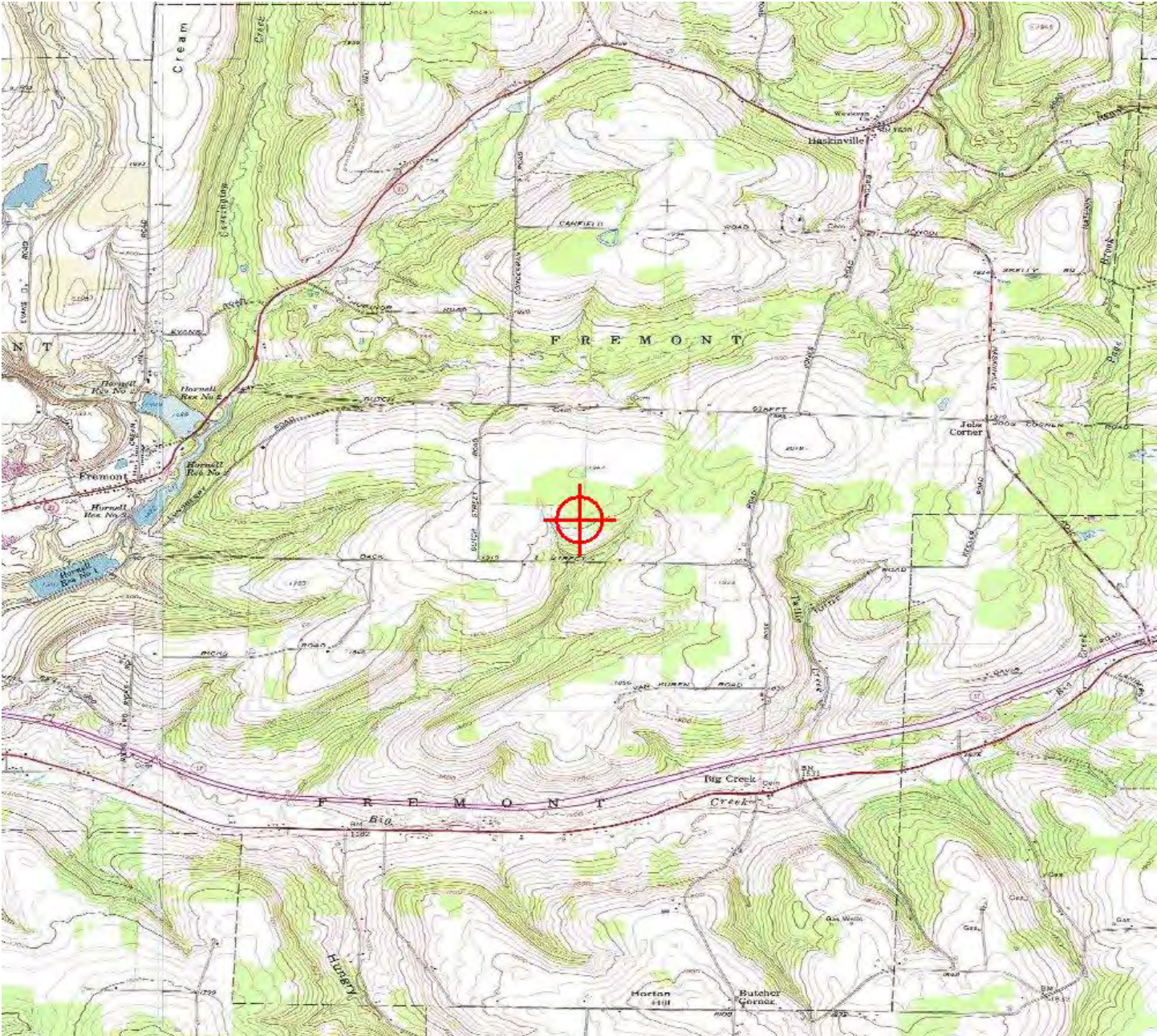
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

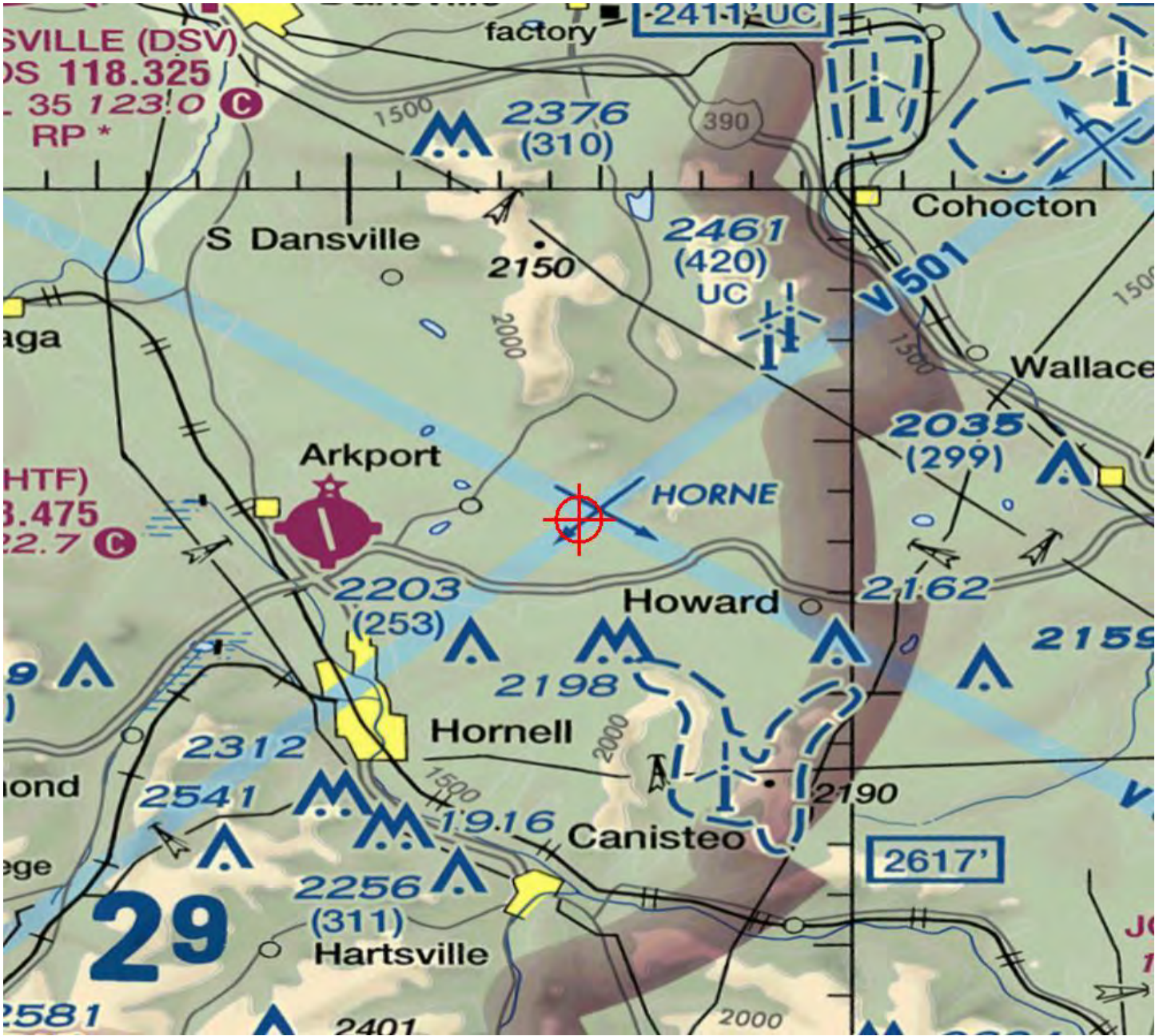
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2789-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T100
Location: Cohocton, NY
Latitude: 42-22-56.77N NAD 83
Longitude: 77-34-48.05W
Heights: 1887 feet site elevation (SE)
493 feet above ground level (AGL)
2380 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2789-OE.

Signature Control No: 253320078-309224181

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2789-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

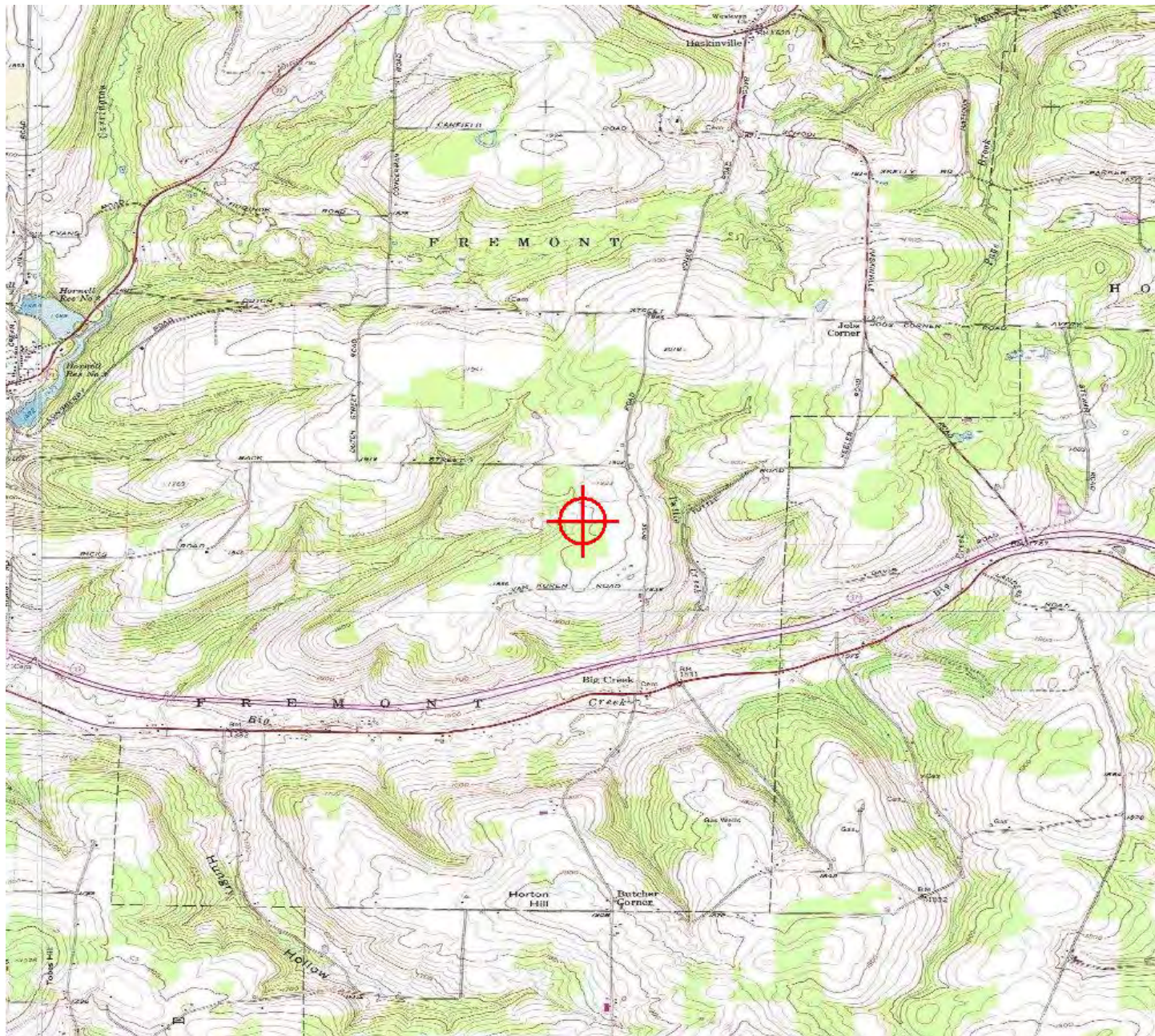
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2789-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2791-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T102
 Location: Cohocton, NY
 Latitude: 42-24-04.80N NAD 83
 Longitude: 77-34-27.18W
 Heights: 1975 feet site elevation (SE)
 493 feet above ground level (AGL)
 2468 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2791-OE.

Signature Control No: 253320082-309224185

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2791-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

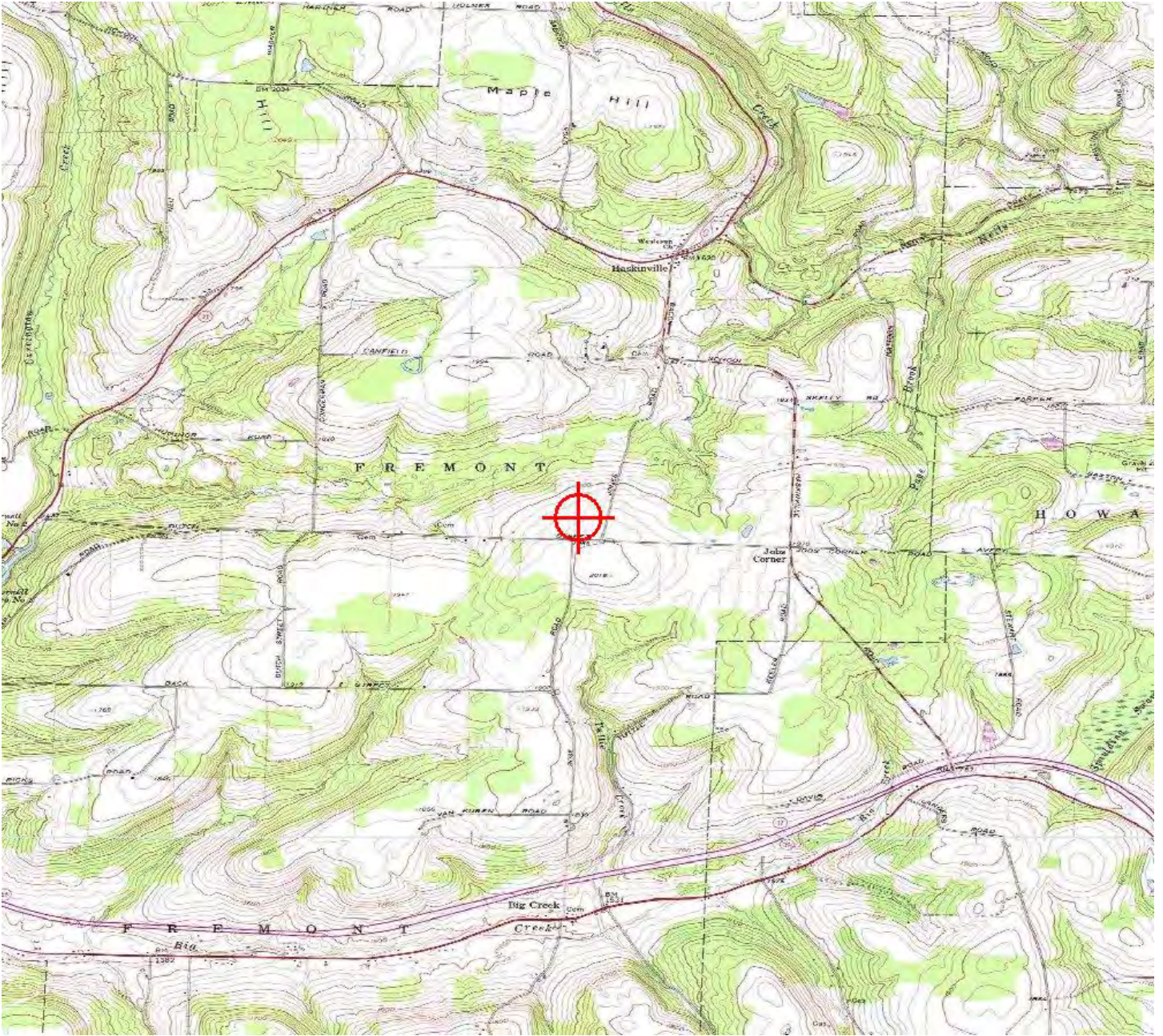
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

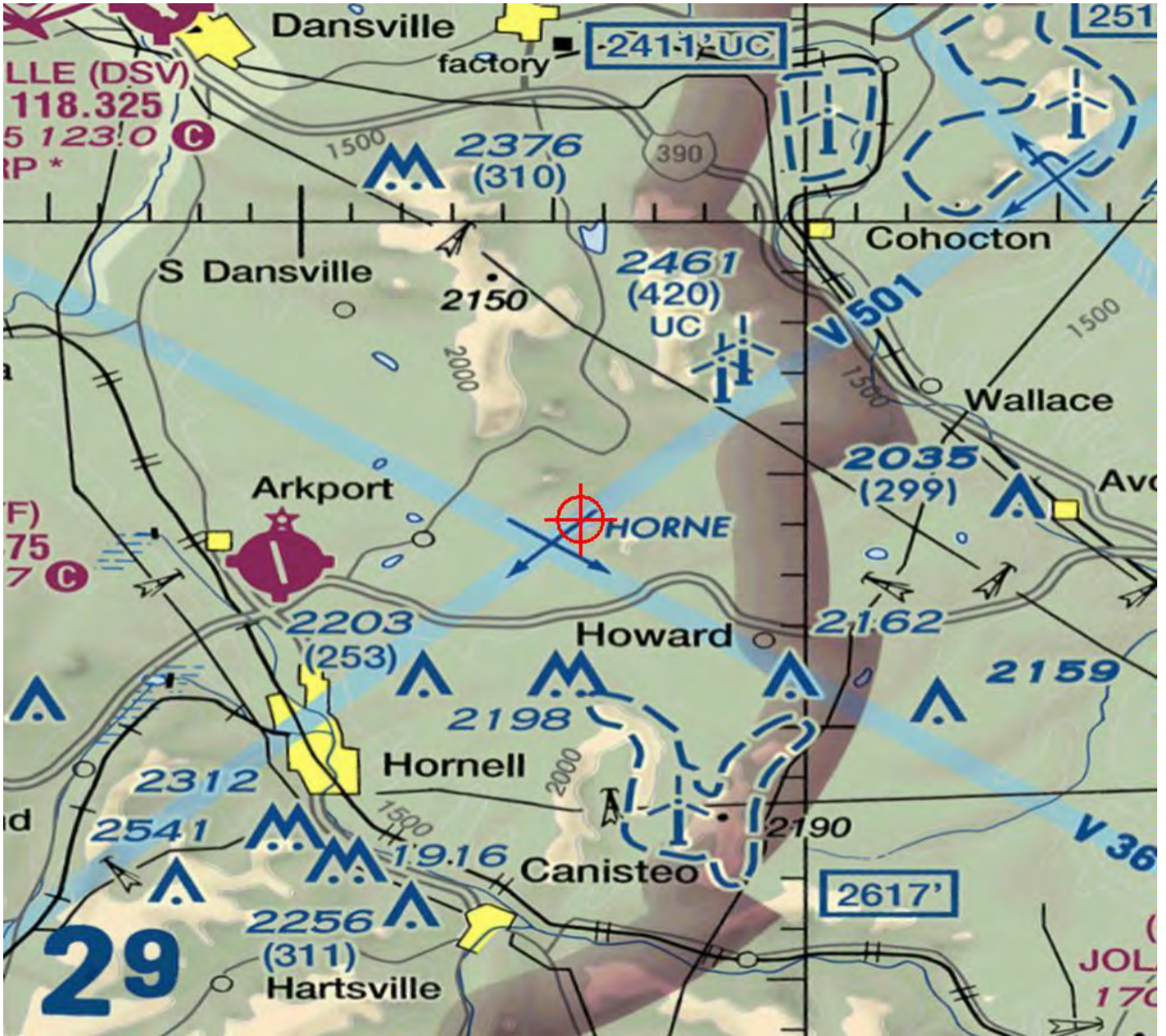
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2791-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2793-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T104
Location: Cohocton, NY
Latitude: 42-23-52.18N NAD 83
Longitude: 77-34-44.94W
Heights: 1960 feet site elevation (SE)
493 feet above ground level (AGL)
2453 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2793-OE.

Signature Control No: 253320084-309224191

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2793-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

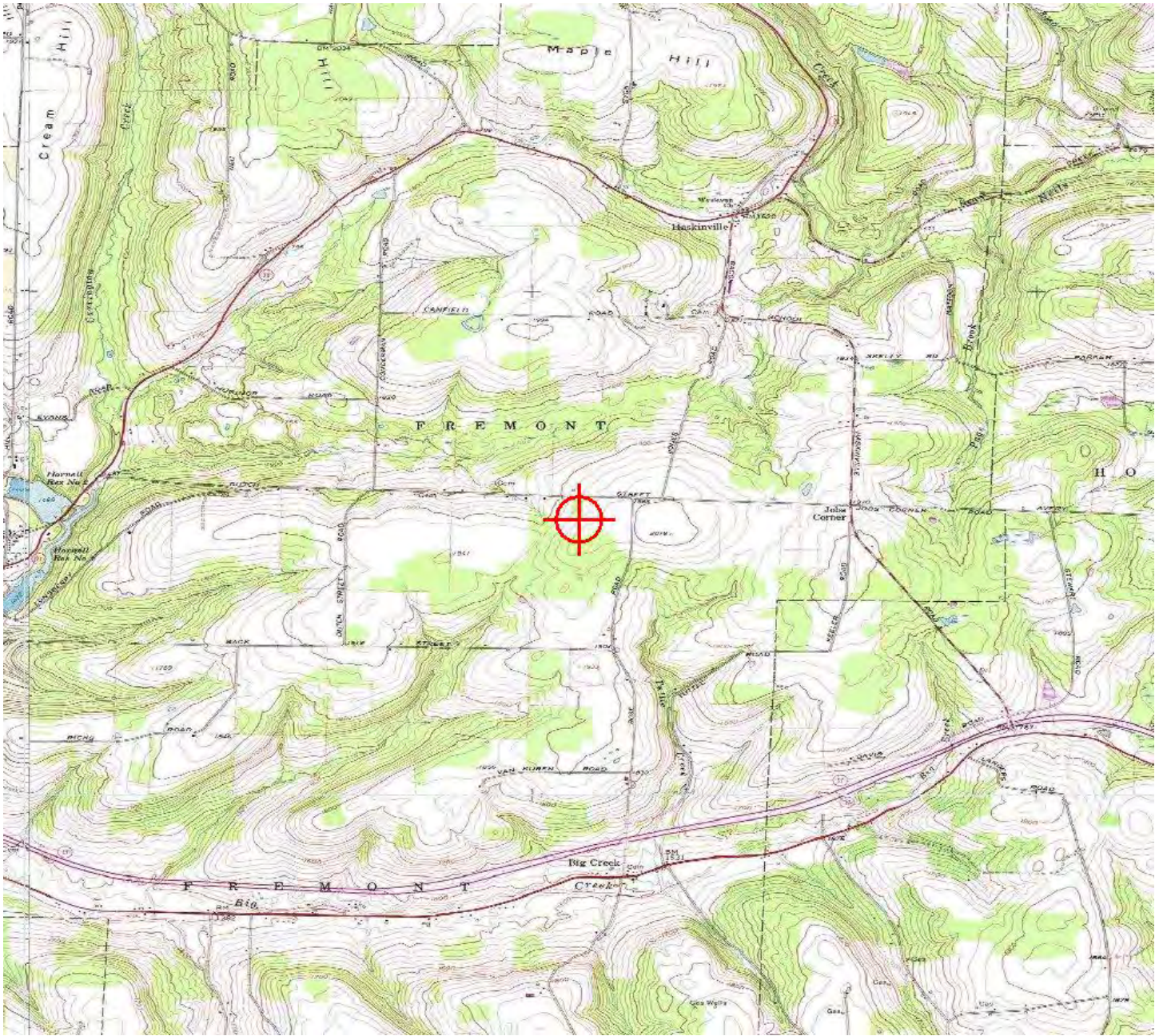
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2793-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2794-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T105
Location: Cohocton, NY
Latitude: 42-23-51.46N NAD 83
Longitude: 77-34-19.15W
Heights: 2008 feet site elevation (SE)
493 feet above ground level (AGL)
2501 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2794-OE.

Signature Control No: 253320087-309224198

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2794-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

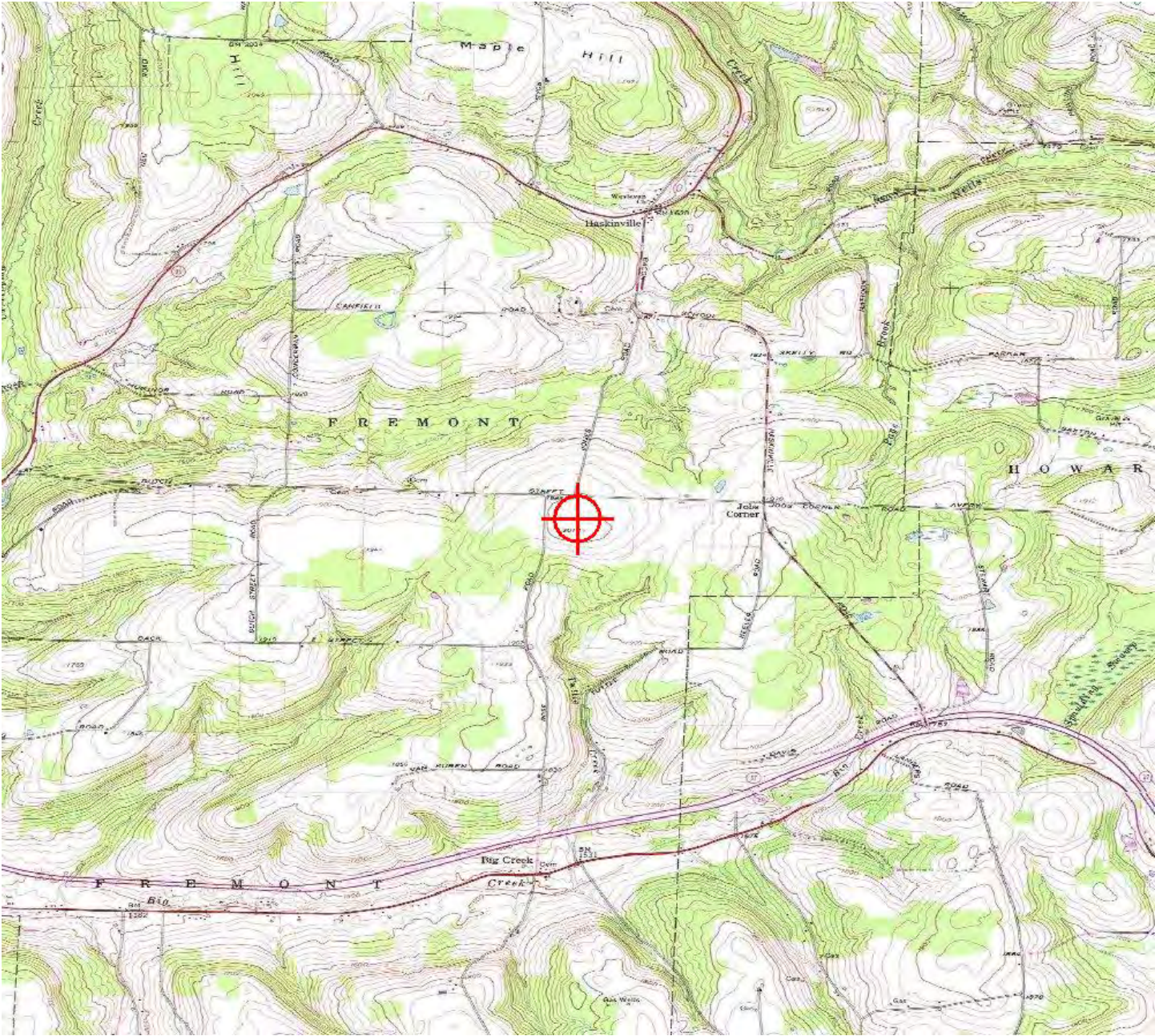
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2794-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2796-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T107
 Location: Cohocton, NY
 Latitude: 42-23-30.23N NAD 83
 Longitude: 77-34-50.43W
 Heights: 1958 feet site elevation (SE)
 493 feet above ground level (AGL)
 2451 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2796-OE.

Signature Control No: 253320089-309224208

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2796-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

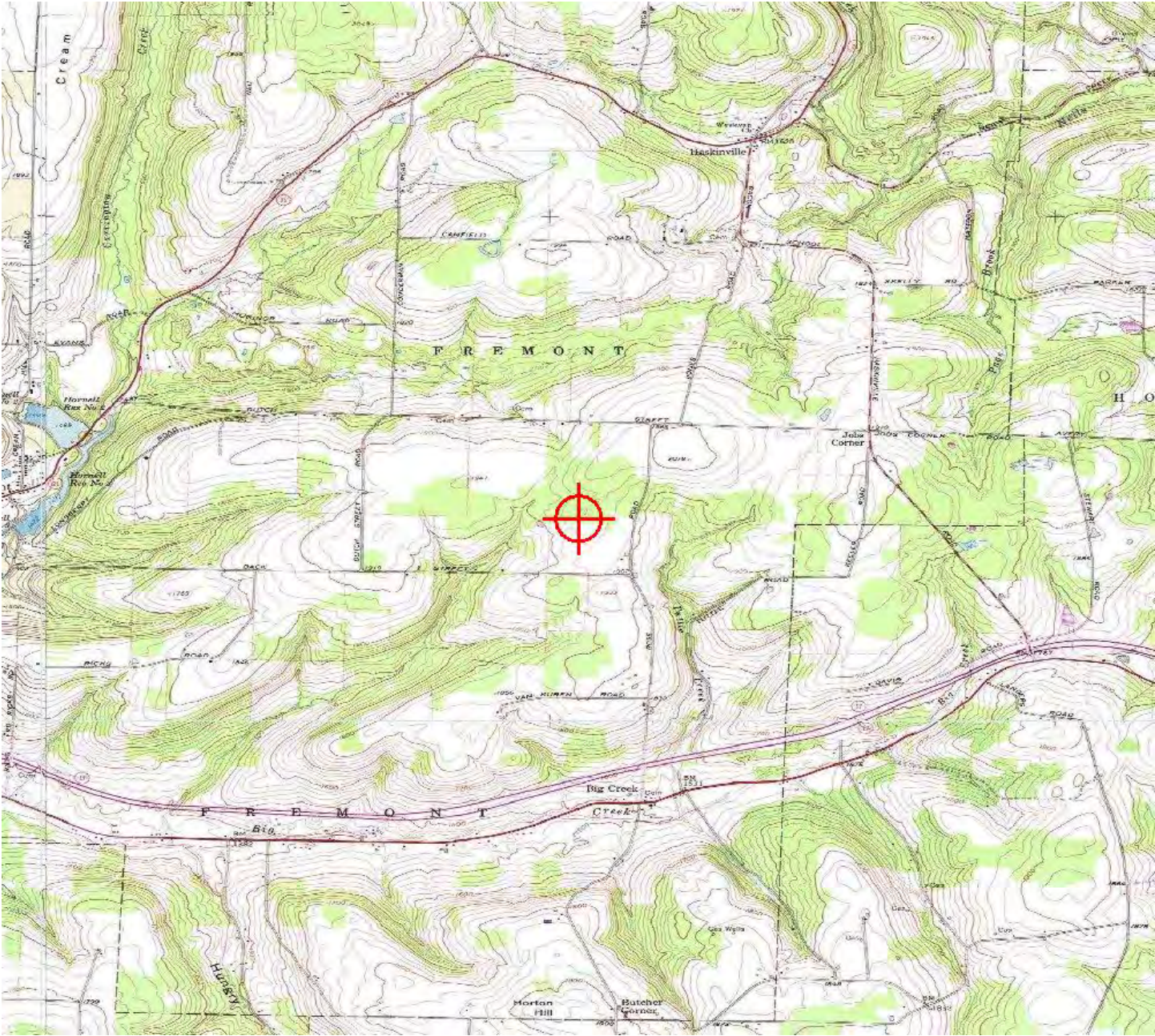
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2796-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2799-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T110
 Location: Cohocton, NY
 Latitude: 42-23-33.97N NAD 83
 Longitude: 77-33-39.42W
 Heights: 1980 feet site elevation (SE)
 493 feet above ground level (AGL)
 2473 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2799-OE.

Signature Control No: 253320096-309224218

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2799-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

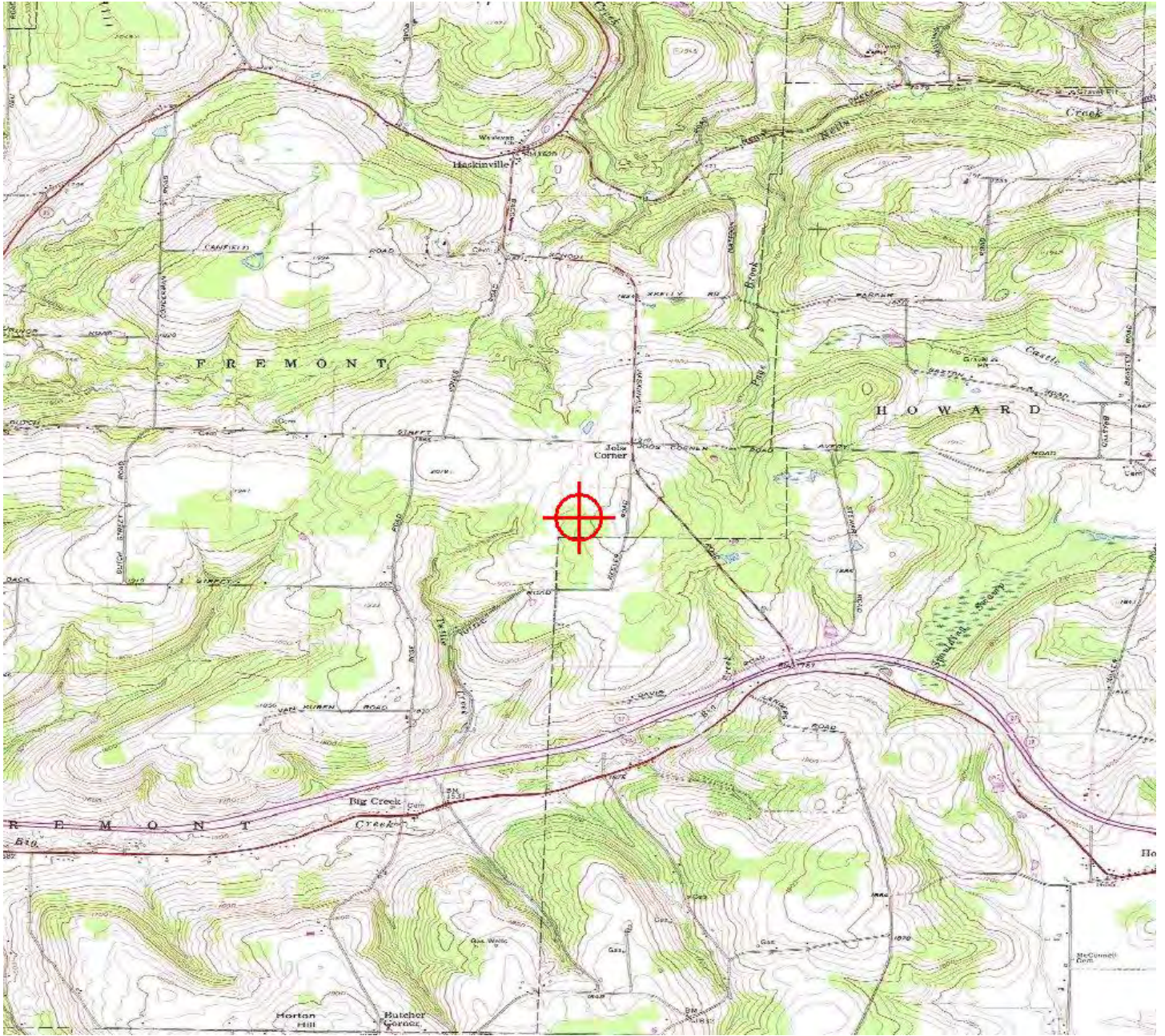
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2801-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T112
 Location: Cohocton, NY
 Latitude: 42-23-42.33N NAD 83
 Longitude: 77-34-38.77W
 Heights: 1971 feet site elevation (SE)
 493 feet above ground level (AGL)
 2464 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2801-OE.

Signature Control No: 253320098-309224224

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2801-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

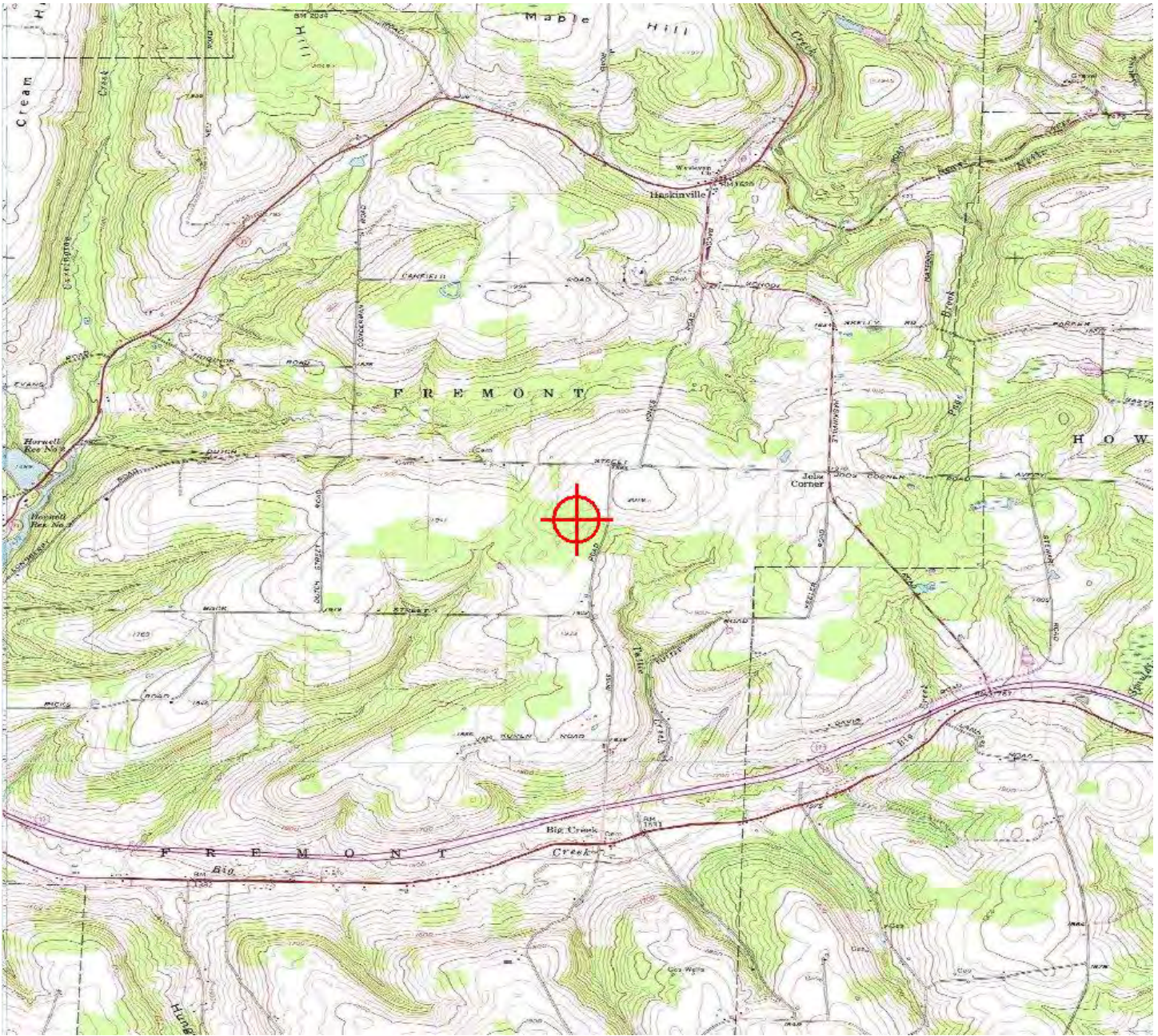
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2802-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T113
Location: Cohocton, NY
Latitude: 42-23-40.00N NAD 83
Longitude: 77-35-08.72W
Heights: 1926 feet site elevation (SE)
493 feet above ground level (AGL)
2419 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2802-OE.

Signature Control No: 253320106-309224227

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2802-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

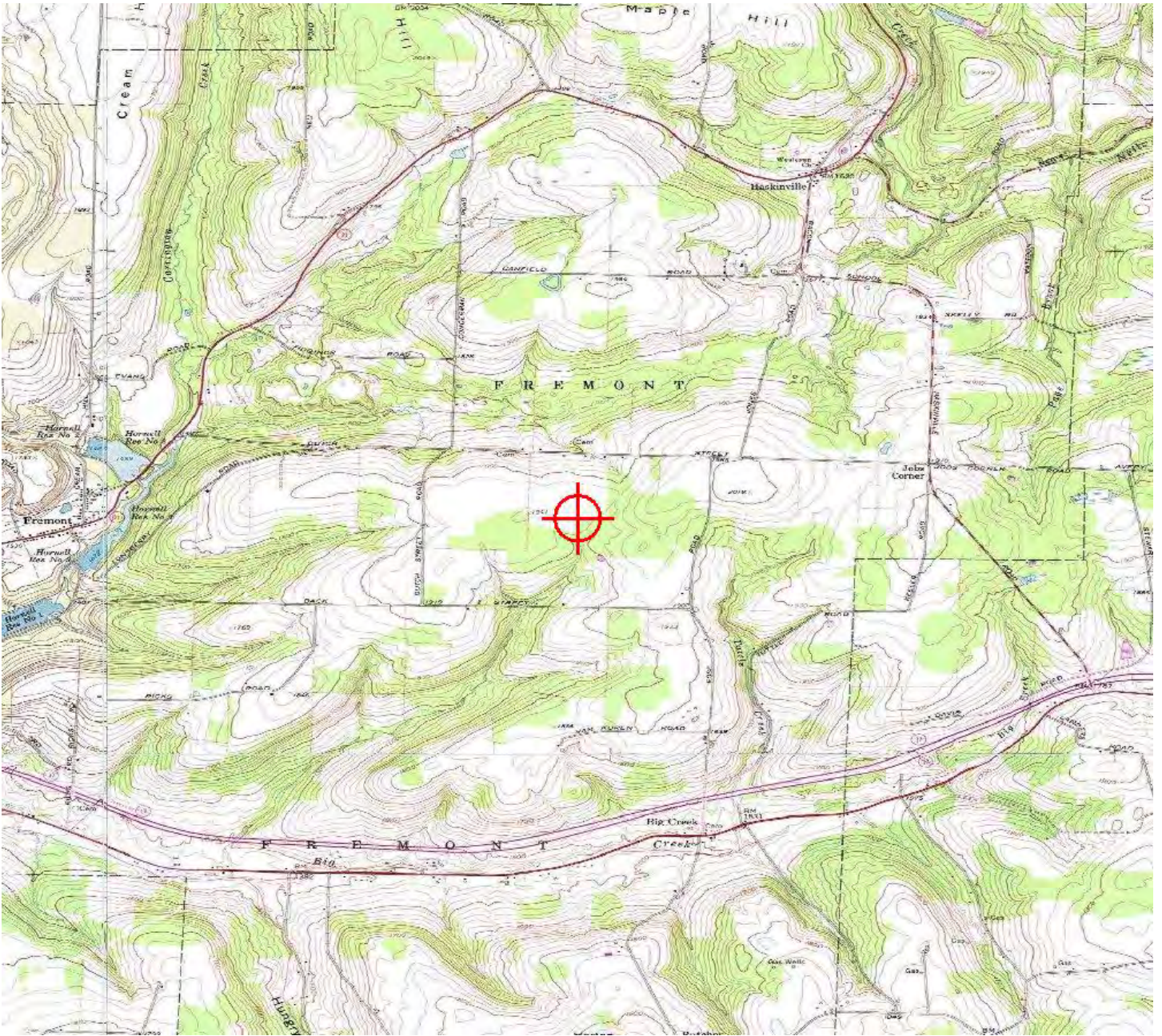
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

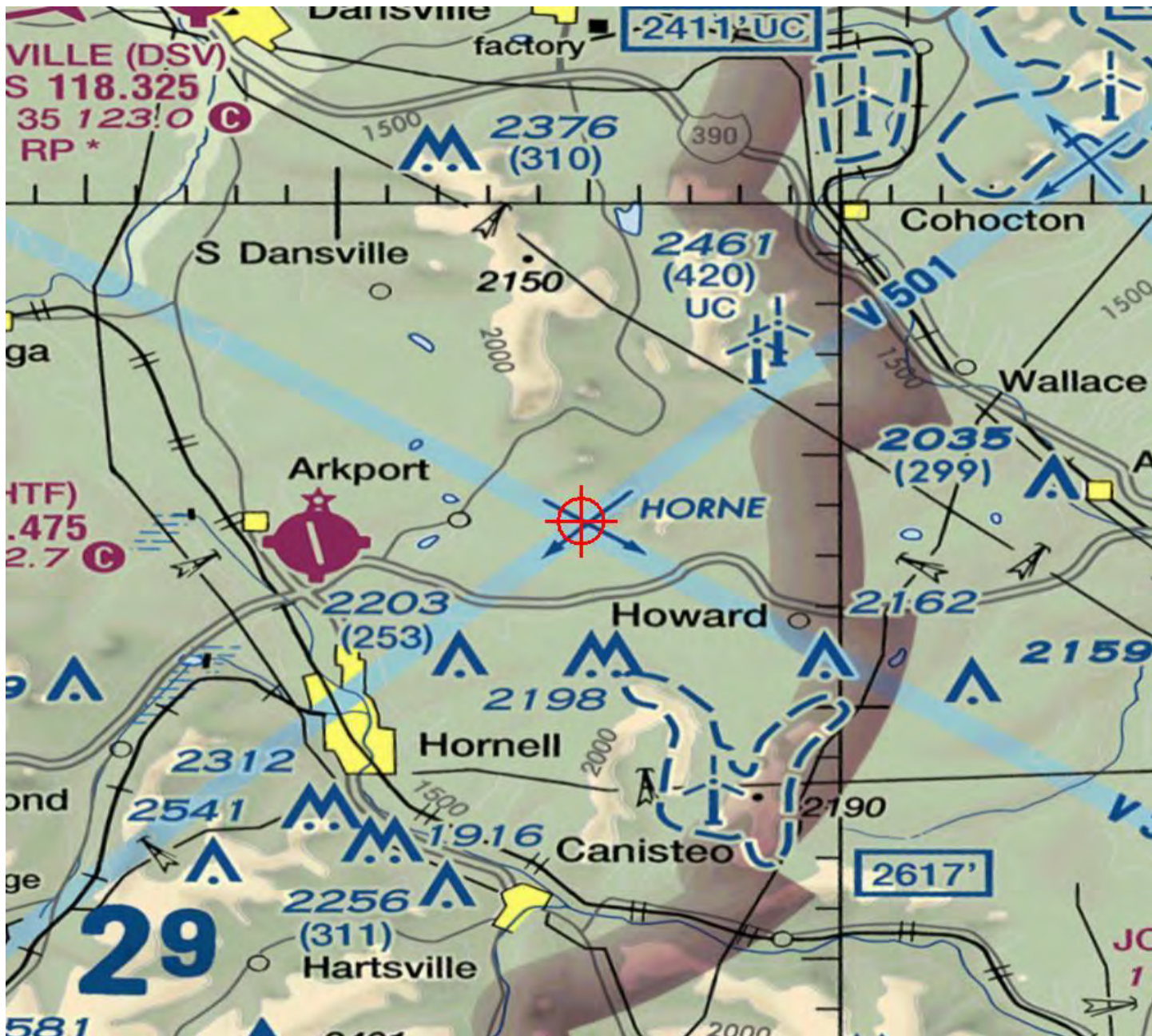
The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2802-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2804-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T115
Location: Cohocton, NY
Latitude: 42-24-04.00N NAD 83
Longitude: 77-34-03.39W
Heights: 1941 feet site elevation (SE)
493 feet above ground level (AGL)
2434 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2804-OE.

Signature Control No: 253320108-309224232

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2804-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

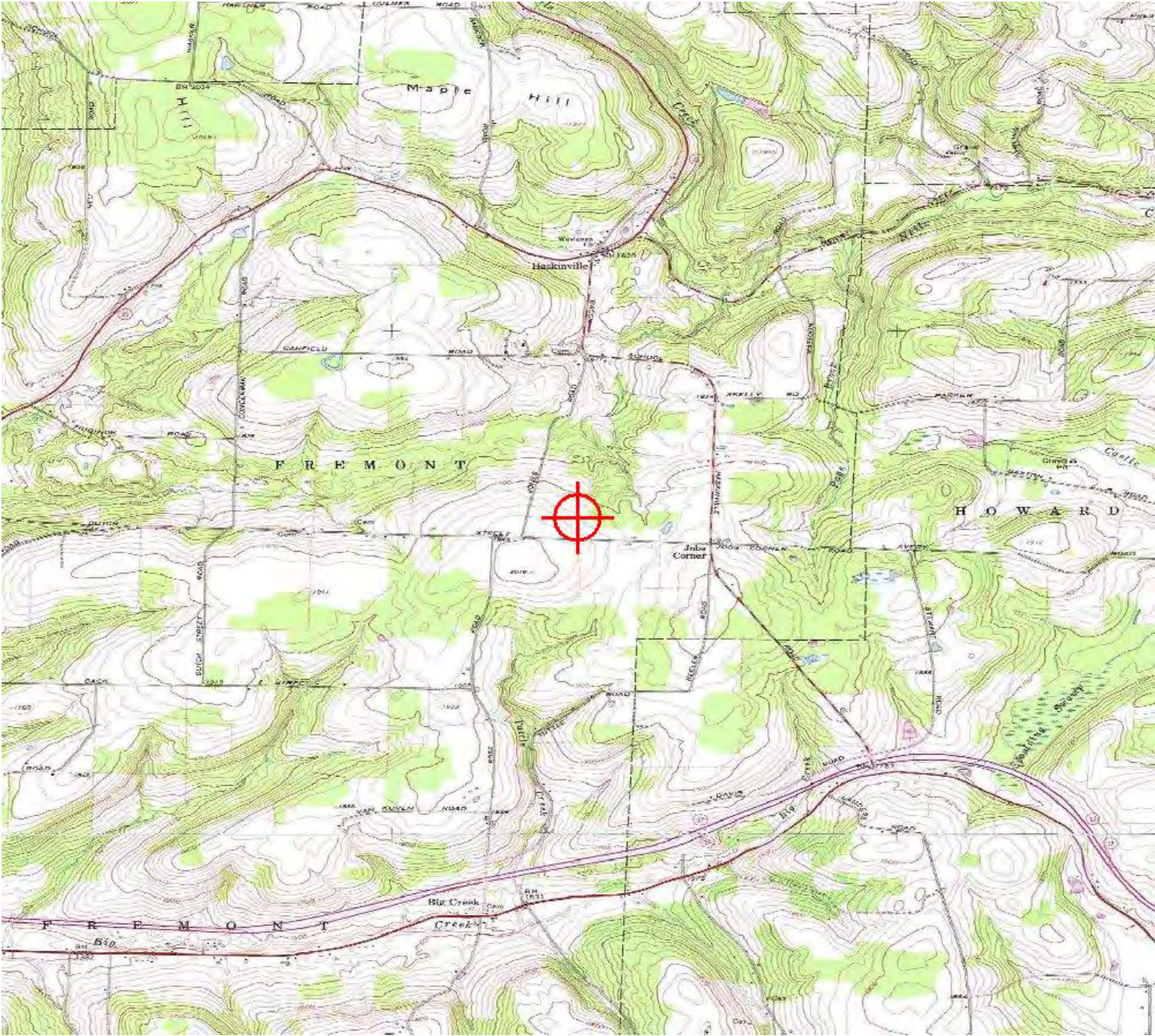
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2804-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2805-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T116
Location: Cohocton, NY
Latitude: 42-23-37.51N NAD 83
Longitude: 77-34-08.08W
Heights: 1927 feet site elevation (SE)
493 feet above ground level (AGL)
2420 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2805-OE.

Signature Control No: 253320112-309224241

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2805-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

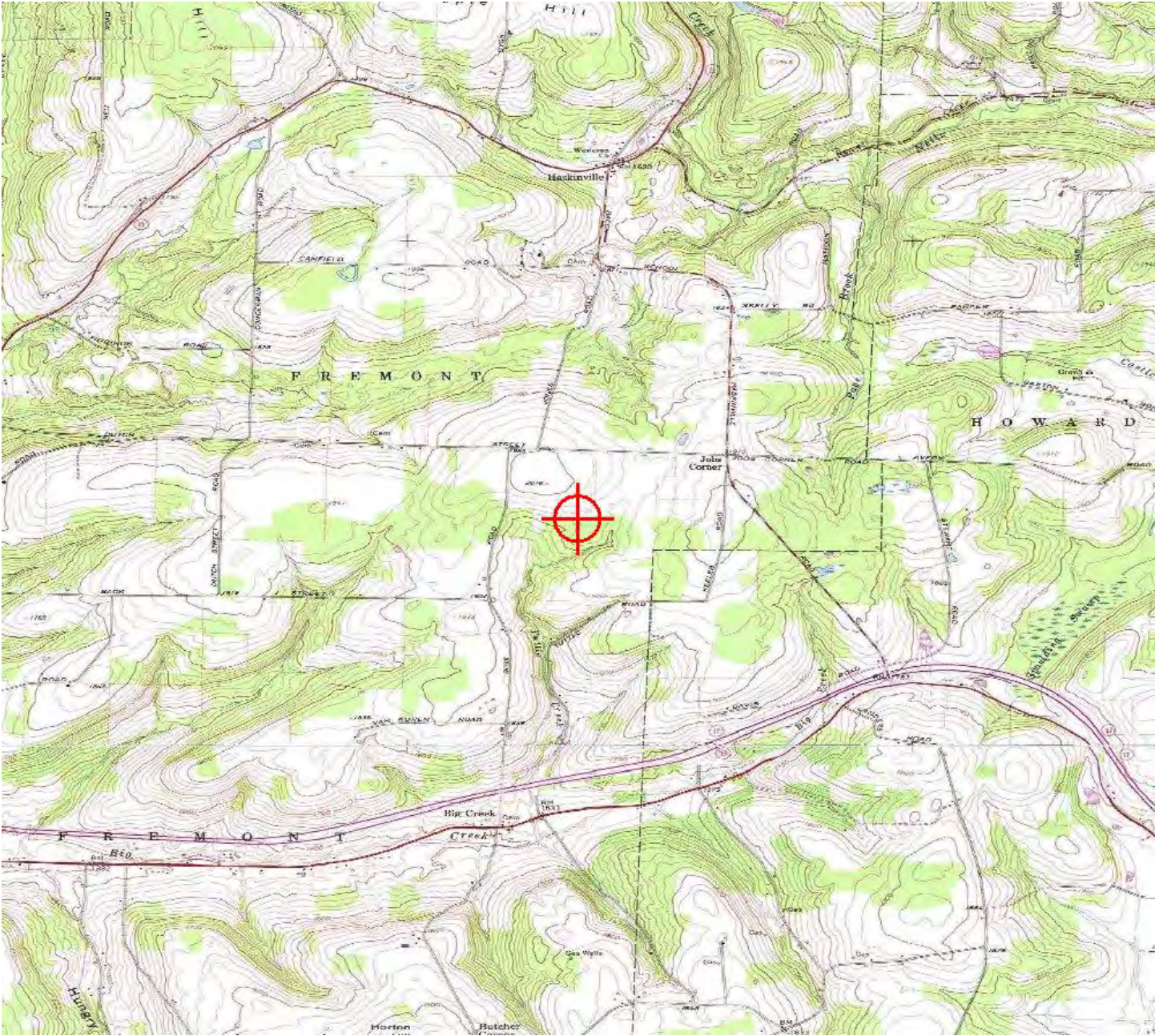
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2805-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2809-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T120
 Location: Cohocton, NY
 Latitude: 42-23-20.81N NAD 83
 Longitude: 77-36-05.52W
 Heights: 1921 feet site elevation (SE)
 493 feet above ground level (AGL)
 2414 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2809-OE.

Signature Control No: 253320120-309224249

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2809-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

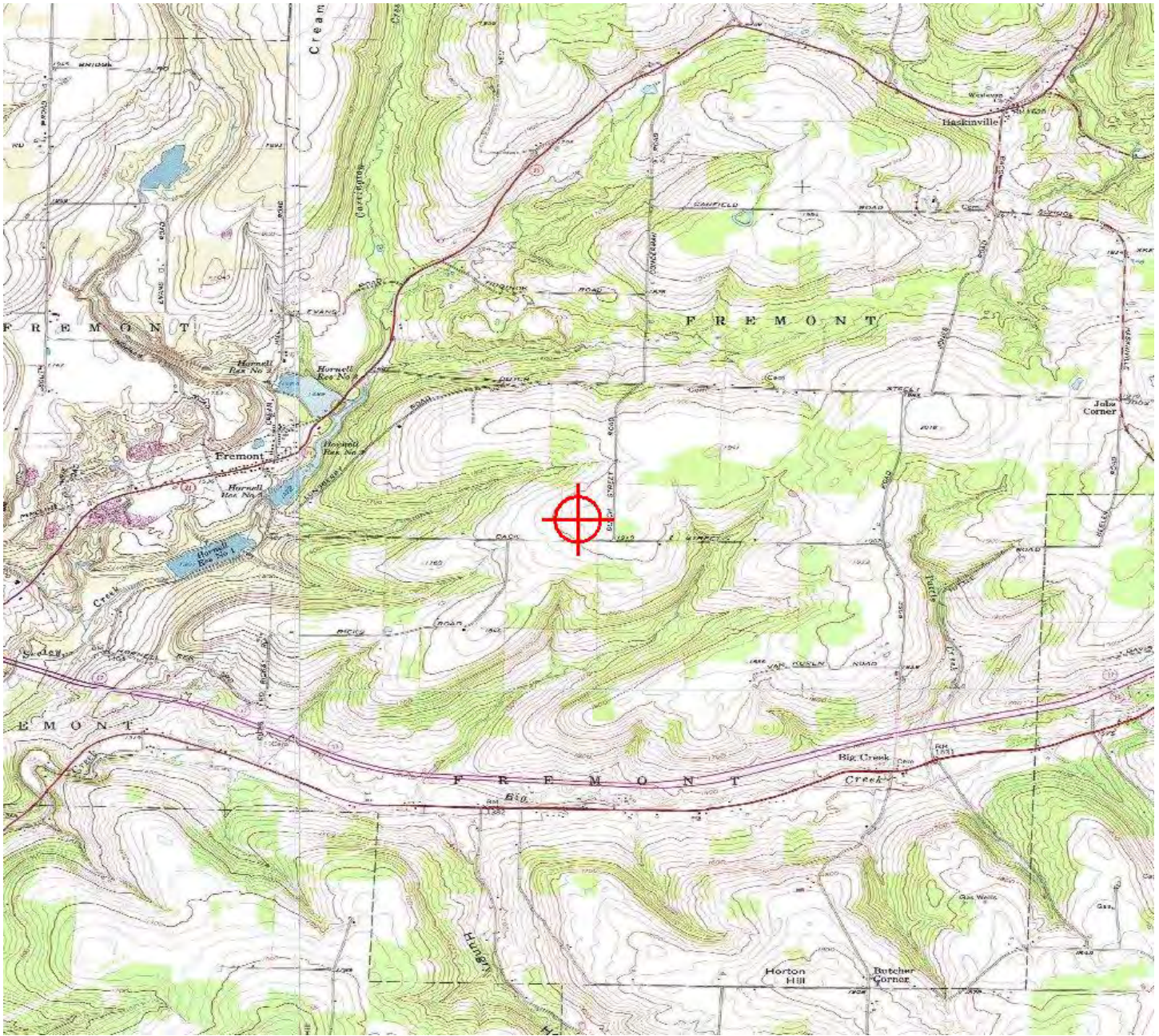
Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

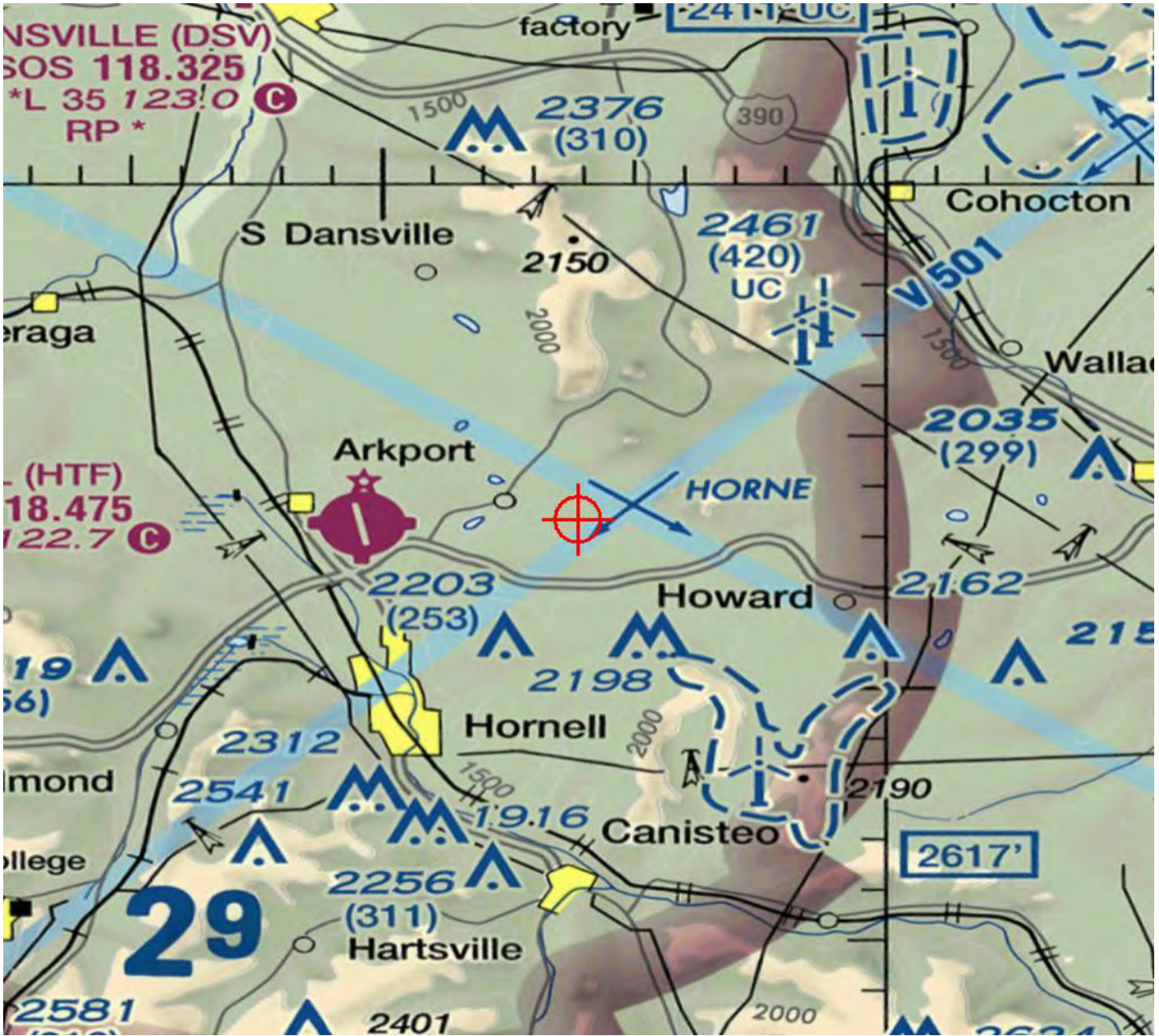
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2015-WTE-2810-OE

Issued Date: 11/03/2016

Bob Ward
 Barron Winds
 1251 Waterfront Place
 3rd Floor
 Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T121
 Location: Cohocton, NY
 Latitude: 42-23-07.49N NAD 83
 Longitude: 77-35-52.64W
 Heights: 1886 feet site elevation (SE)
 493 feet above ground level (AGL)
 2379 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2810-OE.

Signature Control No: 253320121-309224252

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2810-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

The proposed turbines would exceed 14 CFR Part 77 obstruction standards as described below.

Section 77.17(a)(2): A height Above Ground Level (AGL) or airport elevation, whichever is higher, exceeding a height that is 200 ft. AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest Runway (RWY) more than 3,200 ft. in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. The following proposals exceed this obstruction standard by the amounts noted as applied to HTF.

ASN / Penetration in ft.

2015-WTE-2714-OE / 133 ft.
2015-WTE-2715-OE / 58 ft.
2015-WTE-2718-OE / 135 ft.
2015-WTE-2726-OE / 182 ft.
2015-WTE-2730-OE / 158 ft.
2015-WTE-2734-OE / 82 ft.
2015-WTE-2737-OE / 127 ft.
2015-WTE-2739-OE / up to 31 ft.
2015-WTE-2741-OE / 99 ft.
2015-WTE-2742-OE / 74 ft.
2015-WTE-2743-OE / 87 ft.
2015-WTE-2746-OE / 16 ft.
2015-WTE-2747-OE / 53 ft.
2015-WTE-2748-OE / 7 ft.
2015-WTE-2755-OE / 31 ft.
2015-WTE-2757-OE / 110 ft.
2015-WTE-2763-OE / 70 ft.
2015-WTE-2764-OE / 81 ft.
2015-WTE-2766-OE / 29 ft.
2015-WTE-2767-OE / 109 ft.
2015-WTE-2768-OE / 64 ft.
2015-WTE-2770-OE / 61 ft.
2015-WTE-2774-OE / 29 ft.
2015-WTE-2775-OE / 22 ft.
2015-WTE-2777-OE / 24 ft.
2015-WTE-2779-OE / 192 ft.
2015-WTE-2783-OE / 188 ft.
2015-WTE-2784-OE / 164 ft.
2015-WTE-2785-OE / 132 ft.

2015-WTE-2786-OE / 43 ft.
2015-WTE-2788-OE / 182 ft.
2015-WTE-2789-OE / up to 140 ft.
2015-WTE-2791-OE / 100 ft.
2015-WTE-2792-OE / 48 ft.
2015-WTE-2793-OE / 126 ft.
2015-WTE-2794-OE / 95 ft.
2015-WTE-2795-OE / 21 ft.
2015-WTE-2796-OE / 139 ft.
2015-WTE-2797-OE / 14 ft.
2015-WTE-2799-OE / 51 ft.
2015-WTE-2800-OE / 82 ft.
2015-WTE-2801-OE / 122 ft.
2015-WTE-2802-OE / 159 ft.
2015-WTE-2804-OE / 72 ft.
2015-WTE-2805-OE / 85 ft.
2015-WTE-2808-OE / 234 ft.
2015-WTE-2809-OE / 233 ft.
2015-WTE-2810-OE / 219 ft.
2015-WTE-2811-OE / 207 ft.

The following proposals would be located within the lateral boundaries of the Category D Visual Flight Rules (VFR) traffic pattern airspace for Runway 18/36 at HTF. Category D aircraft are those aircraft with approach speeds of 141 to 165 knots. The proposals would exceed as noted as applied to a visual approach runway:

ASN / Penetration in ft.

2015-WTE-2808-OE / 233 ft.
2015-WTE-2809-OE / 232 ft.
2015-WTE-2810-OE / 218 ft.
2015-WTE-2811-OE / 207 ft.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

1. Instrument Flight Rules (IFR) Departures

The following proposals would penetrate the Dansville Municipal Airport (DSV), Dansville, New York Diverse A departure area. This requires a change to the takeoff minimums and (obstacle) departure procedures. The change would be an increase to the altitude aircraft are required to climb to prior to proceeding on course. The change would be:

Standard (weather minimums) with a minimum climb rate of 430 ft. per NM until reaching 2,900 ft. AMSL; this is an increase from 2,700 ft. AMSL.

ASN / Penetrates Diverse A departure area by (ft.)

2015-WTE-2709-OE / 115 ft.
2015-WTE-2715-OE / 49 ft.

2015-WTE-2722-OE / 107 ft.
2015-WTE-2738-OE / 78 ft.
2015-WTE-2739-OE / 69 ft.
2015-WTE-2746-OE / 57 ft.
2015-WTE-2750-OE / 60 ft.
2015-WTE-2752-OE / 55 ft.
2015-WTE-2753-OE / 78 ft.
2015-WTE-2755-OE / 68 ft.

2. Minimum Safe Altitudes (MSAs)

The following turbines would increase the MSA for aircraft on the VOR-A approach to the Le Roy Airport (5G0), Le Roy, New York. The MSA increase would be within the area between the 090 clockwise through to the 360 degree radials from the Geneseo, NY VOR/DME (GEE). The MSA increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

The following turbines would increase the MSA for aircraft on the RNAV (GPS) RWY 13 approach to the Canandaigua Airport (D38) Canandaigua, NY. The MSA increase would be to the 25 NM area of Runway 13. The increase would be from 3,600 ft. AMSL to 3,700 ft. AMSL.

2015-WTE-2713-OE
2015-WTE-2725-OE

3. Minimum Vectoring Altitudes (MVAs)

The following turbines would increase the MVA in the vicinity of the turbines for the Rochester, NY Air Traffic Control Tower/Approach Control (ROC ATCT/TRACON) from 3500 ft. to 3600 ft. (Sector L on the ROC MVA chart).

2015-WTE-2701-OE
2015-WTE-2709-OE
2015-WTE-2710-OE
2015-WTE-2712-OE
2015-WTE-2713-OE
2015-WTE-2722-OE
2015-WTE-2725-OE
2015-WTE-2727-OE
2015-WTE-2728-OE
2015-WTE-2729-OE
2015-WTE-2732-OE
2015-WTE-2734-OE
2015-WTE-2738-OE
2015-WTE-2739-OE
2015-WTE-2742-OE
2015-WTE-2750-OE
2015-WTE-2752-OE

The proposals that exceed Section 77.17(a)(2) and those that would affect IFR departures were circularized on August 5, 2016 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No comments were received as a result of the circularization. The MVA impacts were not circularized for public comment as those impacts require FAA comment only. The MSA impacts were not circularized for comment as an MSA is the minimum obstacle clearance altitude for emergency use within a specified distance from the navigation facility upon which a procedure is predicated. These altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control. Consequently, they are not considered a factor in determining the extent of adverse effect.

Aeronautical study disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival, departure, or en route IFR operations or procedures. Further study did not indicate that the departure impacts would affect a significant number of operations, so those impacts would not create substantial adverse effect. The ROC ATCT/TRACON indicated that increasing their MVA as noted above would not have a significant impact on their operations.

Study for possible VFR effect disclosed that the proposed structure would have no significant adverse effect on any existing or proposed arrival or departure VFR operations or procedures. Further study of the impacts on the VFR traffic pattern airspace for Runway 18/36 at HTF did not indicate that a significant number of Category D operations would be affected. Therefore, that impact would not create substantial adverse effect. The proposed structure would not conflict with airspace required to conduct normal VFR traffic pattern operations at any other known public-use or military airports. At 493 ft. AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

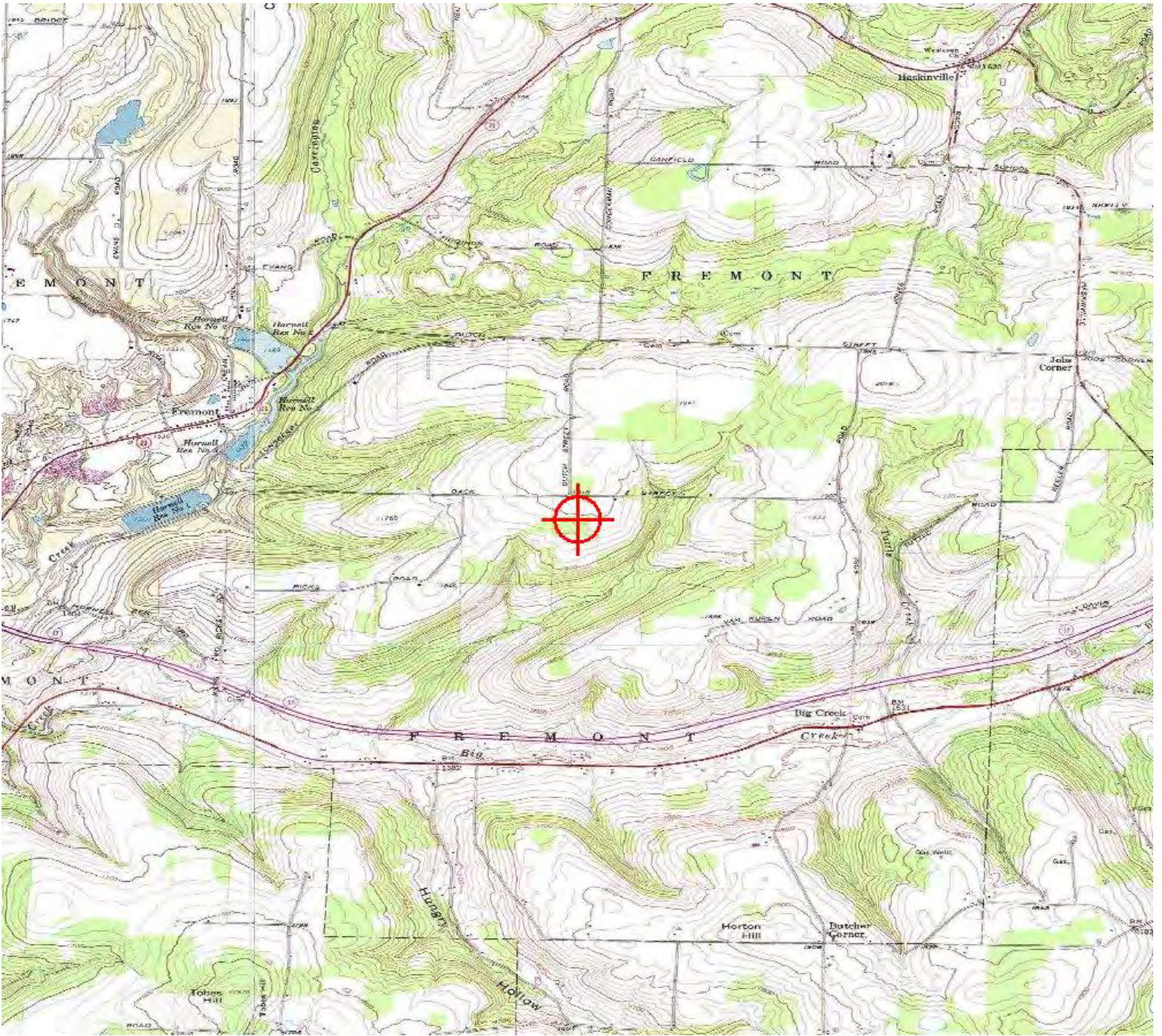
The cumulative impact of the proposed structure, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any adverse effect on existing or proposed public-use or military airports, nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

The FAA's Technical Operations office indicated that all of the proposed wind turbines in this project would exceed radar line of sight (RLOS) for the Dansville, NY Common Air Route Surveillance Radar (CARSR). Eleven proposals would exceed RLOS for the Rochester, NY Airport Surveillance Radar (ASR-9). The four air traffic control facilities that would be affected by the impacts on those radars indicated that those impacts would not have a significant adverse effect on their operations.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation.

All determinations will be issued with an obstruction marking and lighting condition of white paint and synchronized red lights. When the proponent confirms that the layout is final (no changes, no additions, no removals) and all turbines can and will be built at their determined location and height, the sponsor may request a re-evaluation. The request may be e-mailed to Brenda Mumper (brenda.mumper@faa.gov). A portion of the turbines may qualify for the removal of the lighting recommendation.

TOPO Map for ASN 2015-WTE-2810-OE







Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2015-WTE-2811-OE

Issued Date: 11/03/2016

Bob Ward
Barron Winds
1251 Waterfront Place
3rd Floor
Pittsburgh, PA 15222

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

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 T122
Location: Cohocton, NY
Latitude: 42-22-26.36N NAD 83
Longitude: 77-35-45.39W
Heights: 1804 feet site elevation (SE)
493 feet above ground level (AGL)
2297 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 05/03/2018 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before December 03, 2016. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager, Airspace Policy & Regulation, Federal Aviation Administration, 800 Independence Ave, SW, Room 423, Washington, DC 20591.

This determination becomes final on December 13, 2016 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Airspace Regulations & ATC Procedures Group via telephone -- 202-267-8783 - or facsimile 202-267-9328.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Brenda Mumper, at (816) 329-2524. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2015-WTE-2811-OE.

Signature Control No: 253320122-309224254

(DNH -WT)

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

Additional information for ASN 2015-WTE-2811-OE

The proposal would be part of a wind farm currently consisting of 122 wind turbines; Aeronautical Study Numbers (ASNs) are 2015-WTE-2690 thru 2811-OE. The proposed wind farm would be located in an area approximately 3.6 Nautical Miles (NM) east extending north to a point approximately 7.02 NM northeast of the airport reference point for the Hornell Municipal Airport (HTF), Hornell, New York. For the sake of efficiency, the narrative below contains all proposed turbines currently within this project. The determinations for each of the turbines will be available upon issuance on the website, <http://oeaaa.faa.gov>.

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2015-WTE-2729-OE
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TOPO Map for ASN 2015-WTE-2811-OE

