

August 16, 2023

Ms. Tanowa Troupe, Secretary  
Ohio Power Siting Board  
Docketing Division  
180 East Broad Street, 11<sup>th</sup> Floor  
Columbus, Ohio 43215-3797

**Re: Case No. 23-459-EL-BGA  
In the Matter of the Application of Grover Hill Wind, LLC to Amend its  
Certificate Issued in Case No. 20-417-EL-BGN.**

**Response to First Data Request from Staff of the Ohio Power Siting Board**

Dear Ms. Troupe:

Attached please find Grover Hill Wind, LLC's ("Applicant") Response to the First Data Request from the staff of the Ohio Power Siting Board ("OPSB Staff"). The Applicant provided this response to OPSB Staff on August 16, 2023.

We are available, at your convenience, to answer any questions you may have.

Respectfully submitted,

*/s/ Christine M.T. Pirik*

Christine M.T. Pirik (0029759)

(Counsel of Record)

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Grant Zeto

*Attorneys for Grover Hill Wind, LLC*

Ms. Tanowa Troupe  
Grover Hill Wind, LLC  
Case No. 23-459-EL-BGA  
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### CERTIFICATE OF SERVICE

The Ohio Power Siting Board's e-filing system will electronically serve notice of the filing of this document on the parties referenced in the service list of the docket card who have electronically subscribed to these cases. In addition, the undersigned certifies that a copy of the foregoing document is also being served upon the persons below this 16<sup>th</sup> day of August, 2023.

*/s/ Christine M.T. Pirik* \_\_\_\_\_

Christine M.T. Pirik

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[thomas.lindgren@ohioAGO.gov](mailto:thomas.lindgren@ohioAGO.gov)

Administrative Law Judges:

[isabel.marcelletti@puco.ohio.gov](mailto:isabel.marcelletti@puco.ohio.gov)

4887-3307-7367 [73809-23]

**BEFORE  
THE OHIO POWER SITING BOARD**

In the Matter of the Application of Grover Hill Wind, )  
LLC to Amend its Certificate Issued in Case No. 20- )  
417-EL-BGN. ) Case No. 23-459-EL-BGA

**GROVER HILL WIND, LLC  
RESPONSE TO THE FIRST DATA REQUEST  
FROM THE STAFF OF THE OHIO POWER SITING BOARD**

On May 3, 2023, Grover Hill Wind, LLC (“Applicant” or “Grover Hill”) filed an application to amend its Certificate issued in Case No. 20-417-EL-BGN (“Application”) with the Ohio Power Siting Board (“OPSB”) to construct a wind-powered electric generation facility in Paulding County (“Project”).

On August 11, 2023, the Staff of the OPSB (“OPSB Staff”) provided the Applicant with OPSB Staff’s First Data Request. Now comes the Applicant providing the following response to the First Data Request from the OPSB Staff.

**Aviation**

- The FAA determination of no hazard (DNH) letters for Aeronautical Study Numbers 2023-WTE-854-OE and 2023-WTE-855-OE seem to have been delayed. Please provide the FAA DNH letters for those aeronautical studies or explain when Grover Hill anticipates receiving the letters.**

**Response:** The Applicant received determination of no hazard (“DNH”) letters from Federal Aviation Administration (“FAA”) on August 14, 2023. The DNH letters are attached hereto.

Respectfully submitted,

*/s/ Christine M.T. Pirik*

Christine M.T. Pirik (0029759)

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Matthew C. McDonnell (0090164)

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*Attorneys for Grover Hill Wind, LLC*

4862-3720-4343 [73809-23]



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

Aeronautical Study No.  
 2023-WTE-854-OE

Issued Date: 08/14/2023

Matthias Weigel  
 Starwood Energy Group, LLC.  
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 2nd Floor  
 Greenwich, CT 06831

**\*\* 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 20230310-34b  
 Location: Grover Hill, OH  
 Latitude: 41-00-43.98N NAD 83  
 Longitude: 84-28-02.28W  
 Heights: 727 feet site elevation (SE)  
 656 feet above ground level (AGL)  
 1383 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 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

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 Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

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 02/14/2025 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 September 13, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on September 23, 2023 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 Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, 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.

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 Paul Holmquist, at (206) 231-2990, or paul.holmquist@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-WTE-854-OE.

**Signature Control No: 575992618-596362776**

( DNH -WT )

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)

## Additional information for ASN 2023-WTE-854-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; <https://oeaaa.faa.gov>. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

A list of commonly used acronyms and abbreviations is available at the end of this document. A full list is available at the FAA's public website at [https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA\\_Acronyms.pdf](https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA_Acronyms.pdf).

This narrative describes two new studies representing new wind turbine locations for the proposed Grover Hill wind turbine project near Grover Hill, OH.

The proposed wind turbine project lies approximately between 2.2 NM north northwest to 2.1 NM southwest from the town of Grover Hill, OH.

For the sake of efficiency, the 2 proposed wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative. Separate letters for each study can be found at the OE/AAA website (<http://oeaaa.faa.gov>).

### 1. LOCATION OF PROPOSED CONSTRUCTION

The Aeronautical Study Number (ASNs), Structure Names, Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	Structure Name	AGL/AMSL	LAT/LONG
2023-WTE-854-OE	20230310-34b	656 / 1383	41-00-43.98N / 84-28-02.28W
2023-WTE-855-OE	20230310-35a	656 / 1384	41-00-33.78N / 84-28-17.06W

### 2. OBSTRUCTION STANDARDS EXCEEDED

The following proposed turbines would exceed Part 77 standards as described below.

- Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object. All proposed structures would exceed this surface by 157 feet.
- Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The 2 proposed structures would have the following effect: HUUVR ONE ARRIVAL (RNAV) Increase Minimum Obstruction Clearance Altitude (MOCA) from MSKTS to JJUST from 2300 feet to 2400 feet



AMSL. (Procedure serves KAKR KCAK 1G3). The height at which there is no effect is at or below 1300 feet AMSL. No objection due to previous coordination with the affected Air Traffic Facility.

### 3. VFR ROUTE

VFR en route is evaluated in accordance with Part 77 Section 77.29 (a)(1): the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At 656 feet AGL, the 2 structures would extend into airspace normally utilized for VFR en route flight by 157 feet. The structures would be located within 2 statute miles of a VFR Route as defined by FAAO 7400.2, Section 6-3-8 and would have an adverse effect upon VFR air navigation.

### 4. RADAR IMPACTS

The FAA found that the 2 proposed wind turbines would have a Radar Line of Sight (RLOS) impact to the Airport Surveillance Radar (ASR) -9 at Fort Wayne, IN (FWA). Since they are visible to the ASR, they could cause unwanted primary-only returns (clutter) and primary-only target drops, all in the immediate area of the turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines.

No effect will occur on the Secondary (Beacon) Radar System.

### 4. CIRCULATION AND COMMENTS RECEIVED

The proposed wind turbine project was originally circulated for public comment under ASN 2021-WTE-140-OE on 02 June 2021. No comments were received by 09 July 2021. The two studies described in this narrative represent minor location changes and did not cause any additional adverse effects as described in the original public notice, therefore, public notice for comment was deemed unnecessary for these 2 proposals. MOCA adverse effects were not circularized to the public for comments because the effect to the MOCAs identified above only requires an internal review from the FAA Air Traffic Control facility.

### 5. BASIS FOR DECISION

#### a. IFR EFFECTS

The aeronautical study identified an MSA increase to the Boscobel Airport (OVS) Boscobel WI, RWY 25 RNAV (GPS) terminal approach procedure. MSA altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control (ATC). Consequently, MSAs are not circulated for public comment as they are not considered a factor in determining the extent of adverse effect.

#### b. VFR EFFECTS

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The 2 proposed wind turbines in this narrative exceed the Part 77 Section 77.17(a)(1) surface by 157 feet, however, no substantial adverse effect was found and no issues were raised during the original public comment period. At 656 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with FAA Order 7400.2, the proposed wind farm would not

affect a significant volume of aircraft and therefore it is determined it will not have a substantial adverse effect on en route VFR flight operations.

c. RADAR EFFECTS

The aeronautical study identified 2 of the proposed turbines as being within the RLOS for the Arlington-IA (QJO) Common Air Route Surveillance Radar (CARSR). Impacts to radar only require a review by the responsible ATC facility and military services. Further study determined the structures would have no substantial adverse effect on military or air traffic operations at this time.

d. CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

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

6. DETERMINATION - NO HAZARD TO AIR NAVIGATION

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 provided the conditions set forth in this determination are met.

7. CONDITIONS

At least ten (10) days before the start of construction the proponent is required to file a FAA form 7460-2, Part 1, Actual Construction notification, at the OE/AAA website (<http://oeaaa.faa.gov>). This actual construction notification will be used to update published instrument flight procedures.

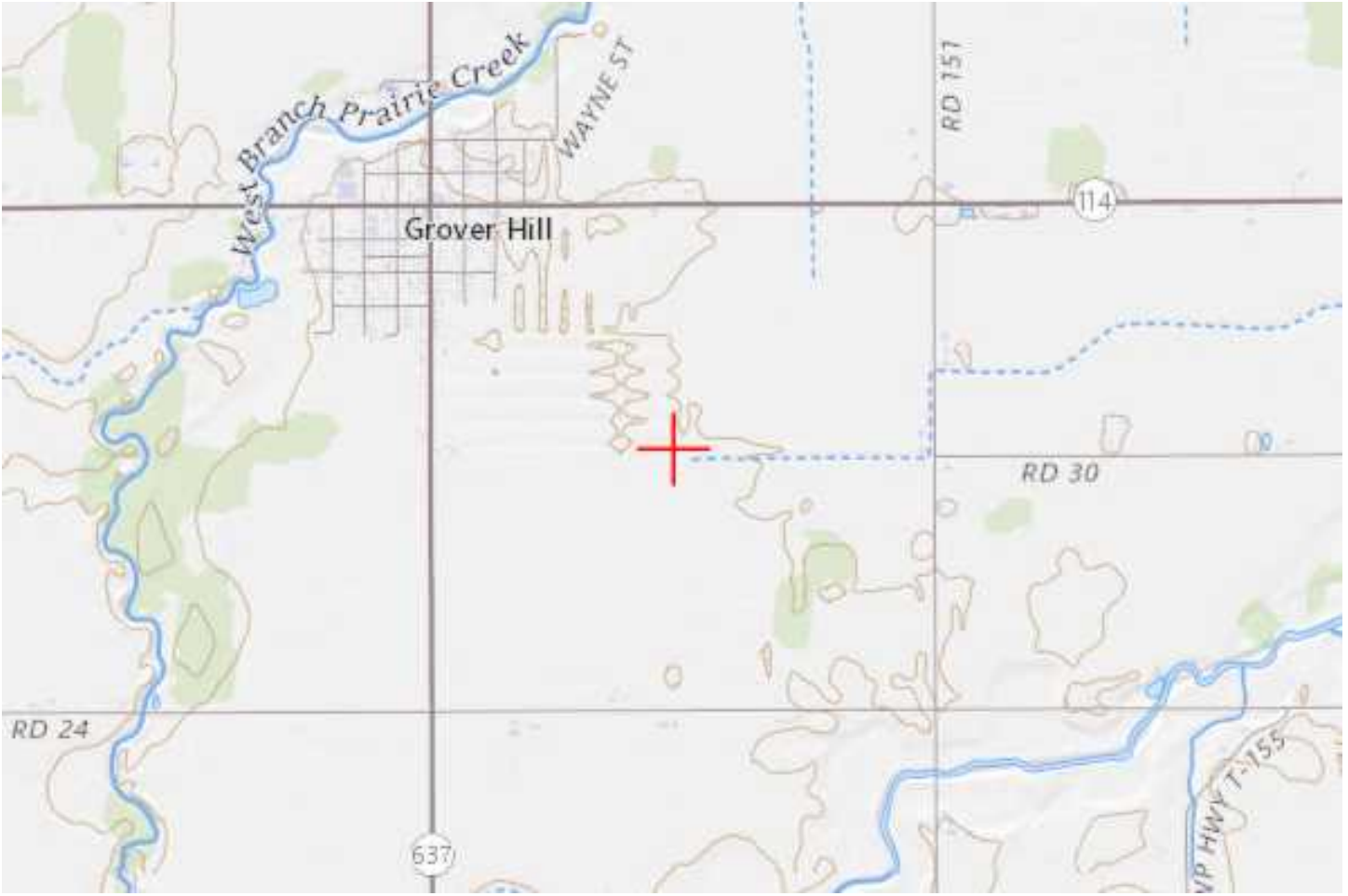
Additionally, within five days after each structures reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (<http://oeaaa.faa.gov>). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

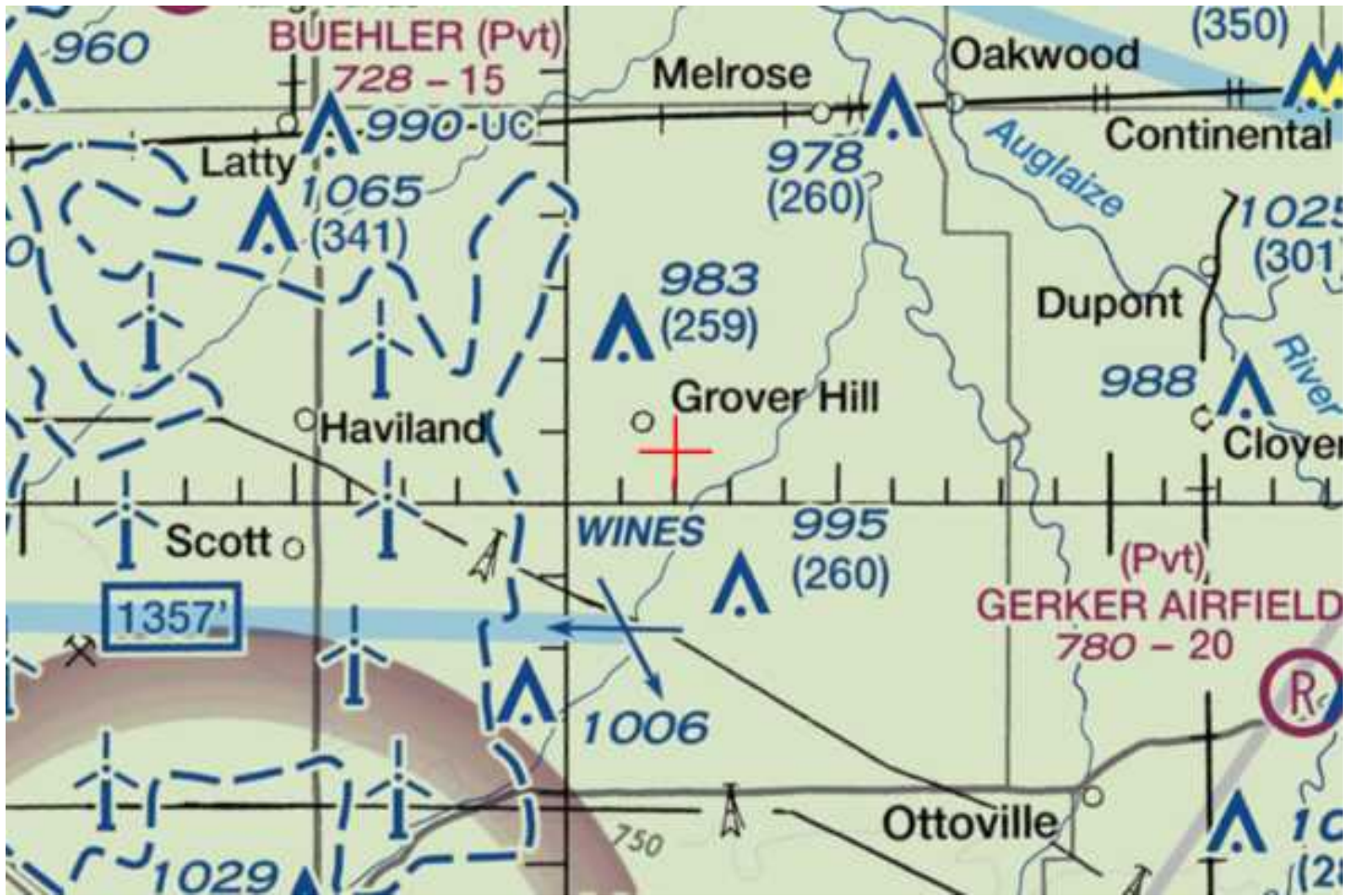
\*\*\*\*\*

ACRONYMS & ABBREVIATIONS

- AGL, Above Ground Level
- AMSL, Above Mean Sea Level
- ARP, Airport Reference Point
- ARSR, Air Route Surveillance Radar
- ARTCC, Air Route Traffic Control Center
- ASN, Aeronautical Study Number
- ASR, Airport Surveillance Radar
- ATC, Air Traffic Control

ATCT, Air Traffic Control Tower  
CARSR, Common Air Route Surveillance Radar  
CFR, Code of Federal Regulations  
DME, Distance Measuring Equipment  
FAA, Federal Aviation Administration  
FUS, Fusion  
GPS, Global Positioning System  
IFR, Instrument Flight Rules  
LAT, Latitude  
LONG, Longitude  
Min, Minimum  
MSL, Mean Sea Level  
MVA, Minimum Vectoring Altitude  
NA, Not Authorized  
NAS, National Airspace System  
NEH, No Effect Height  
NM, Nautical Mile  
NOTAM, Notice to Airmen  
NPF, Notice of Preliminary Findings  
OE, Obstruction Evaluation  
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.  
RLOS, Radar Line of Sight  
SE, Site Elevation  
SM, Statute Miles  
TERPS, Terminal Instrument Procedures  
V, Victor Airway  
VFR, Visual Flight Rules  
WTE, Wind Turbine East  
WTW, Wind Turbine West







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 10101 Hillwood Parkway  
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Aeronautical Study No.  
 2023-WTE-855-OE

Issued Date: 08/14/2023

Matthias Weigel  
 Starwood Energy Group, LLC.  
 5 Greenwich Office Park  
 2nd Floor  
 Greenwich, CT 06831

**\*\* 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 20230310-35a  
 Location: Grover Hill, OH  
 Latitude: 41-00-33.78N NAD 83  
 Longitude: 84-28-17.06W  
 Heights: 728 feet site elevation (SE)  
 656 feet above ground level (AGL)  
 1384 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 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

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 Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

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 02/14/2025 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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**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.**

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This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

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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 Paul Holmquist, at (206) 231-2990, or paul.holmquist@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-WTE-855-OE.

**Signature Control No: 575992689-596362775**

( DNH -WT )

Mike Helvey

Manager, Obstruction Evaluation Group

Attachment(s)

Additional Information

Map(s)



## Additional information for ASN 2023-WTE-855-OE

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This narrative describes two new studies representing new wind turbine locations for the proposed Grover Hill wind turbine project near Grover Hill, OH.

The proposed wind turbine project lies approximately between 2.2 NM north northwest to 2.1 NM southwest from the town of Grover Hill, OH.

For the sake of efficiency, the 2 proposed wind turbines in this project that have similar impacts to 14 CFR Part 77 standards are included in this narrative. Separate letters for each study can be found at the OE/AAA website (<http://oeaaa.faa.gov>).

### 1. LOCATION OF PROPOSED CONSTRUCTION

The Aeronautical Study Number (ASNs), Structure Names, Above Ground Level (AGL) heights, Above Mean Sea Level (AMSL) heights and coordinates for each proposed structure are listed as follows:

ASN	Structure Name	AGL/AMSL	LAT/LONG
2023-WTE-854-OE	20230310-34b	656 / 1383	41-00-43.98N / 84-28-02.28W
2023-WTE-855-OE	20230310-35a	656 / 1384	41-00-33.78N / 84-28-17.06W

### 2. OBSTRUCTION STANDARDS EXCEEDED

The following proposed turbines would exceed Part 77 standards as described below.

- a. Section 77.17(a)(1): Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object. All proposed structures would exceed this surface by 157 feet.
- b. Section 77.17(a)(4) -- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the IFR en route minimum obstacle clearance altitude

The 2 proposed structures would have the following effect: HUUVR ONE ARRIVAL (RNAV) Increase Minimum Obstruction Clearance Altitude (MOCA) from MSKTS to JJUST from 2300 feet to 2400 feet

AMSL. (Procedure serves KAKR KCAK 1G3). The height at which there is no effect is at or below 1300 feet AMSL. No objection due to previous coordination with the affected Air Traffic Facility.

### 3. VFR ROUTE

VFR en route is evaluated in accordance with Part 77 Section 77.29 (a)(1): the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At 656 feet AGL, the 2 structures would extend into airspace normally utilized for VFR en route flight by 157 feet. The structures would be located within 2 statute miles of a VFR Route as defined by FAAO 7400.2, Section 6-3-8 and would have an adverse effect upon VFR air navigation.

### 4. RADAR IMPACTS

The FAA found that the 2 proposed wind turbines would have a Radar Line of Sight (RLOS) impact to the Airport Surveillance Radar (ASR) -9 at Fort Wayne, IN (FWA). Since they are visible to the ASR, they could cause unwanted primary-only returns (clutter) and primary-only target drops, all in the immediate area of the turbines. Also, tracked primary-only targets could diverge from the aircraft path and follow wind turbines, when the aircraft is over or near the turbines.

No effect will occur on the Secondary (Beacon) Radar System.

### 4. CIRCULATION AND COMMENTS RECEIVED

The proposed wind turbine project was originally circulated for public comment under ASN 2021-WTE-140-OE on 02 June 2021. No comments were received by 09 July 2021. The two studies described in this narrative represent minor location changes and did not cause any additional adverse effects as described in the original public notice, therefore, public notice for comment was deemed unnecessary for these 2 proposals. MOCA adverse effects were not circularized to the public for comments because the effect to the MOCAs identified above only requires an internal review from the FAA Air Traffic Control facility.

### 5. BASIS FOR DECISION

#### a. IFR EFFECTS

The aeronautical study identified an MSA increase to the Boscobel Airport (OVS) Boscobel WI, RWY 25 RNAV (GPS) terminal approach procedure. MSA altitudes are designed for emergency use only and are not routinely used by pilots or by air traffic control (ATC). Consequently, MSAs are not circulated for public comment as they are not considered a factor in determining the extent of adverse effect.

#### b. VFR EFFECTS

Study for possible VFR effect disclosed that the proposed structures would have no effect on any existing or proposed arrival or departure VFR operations or procedures. The 2 proposed wind turbines in this narrative exceed the Part 77 Section 77.17(a)(1) surface by 157 feet, however, no substantial adverse effect was found and no issues were raised during the original public comment period. At 656 feet AGL, the structures would be within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. In accordance with FAA Order 7400.2, the proposed wind farm would not

affect a significant volume of aircraft and therefore it is determined it will not have a substantial adverse effect on en route VFR flight operations.

c. RADAR EFFECTS

The aeronautical study identified 2 of the proposed turbines as being within the RLOS for the Arlington-IA (QJO) Common Air Route Surveillance Radar (CARSR). Impacts to radar only require a review by the responsible ATC facility and military services. Further study determined the structures would have no substantial adverse effect on military or air traffic operations at this time.

d. CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

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

6. DETERMINATION - NO HAZARD TO AIR NAVIGATION

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 provided the conditions set forth in this determination are met.

7. CONDITIONS

At least ten (10) days before the start of construction the proponent is required to file a FAA form 7460-2, Part 1, Actual Construction notification, at the OE/AAA website (<http://oeaaa.faa.gov>). This actual construction notification will be used to update published instrument flight procedures.

Additionally, within five days after each structures reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (<http://oeaaa.faa.gov>). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

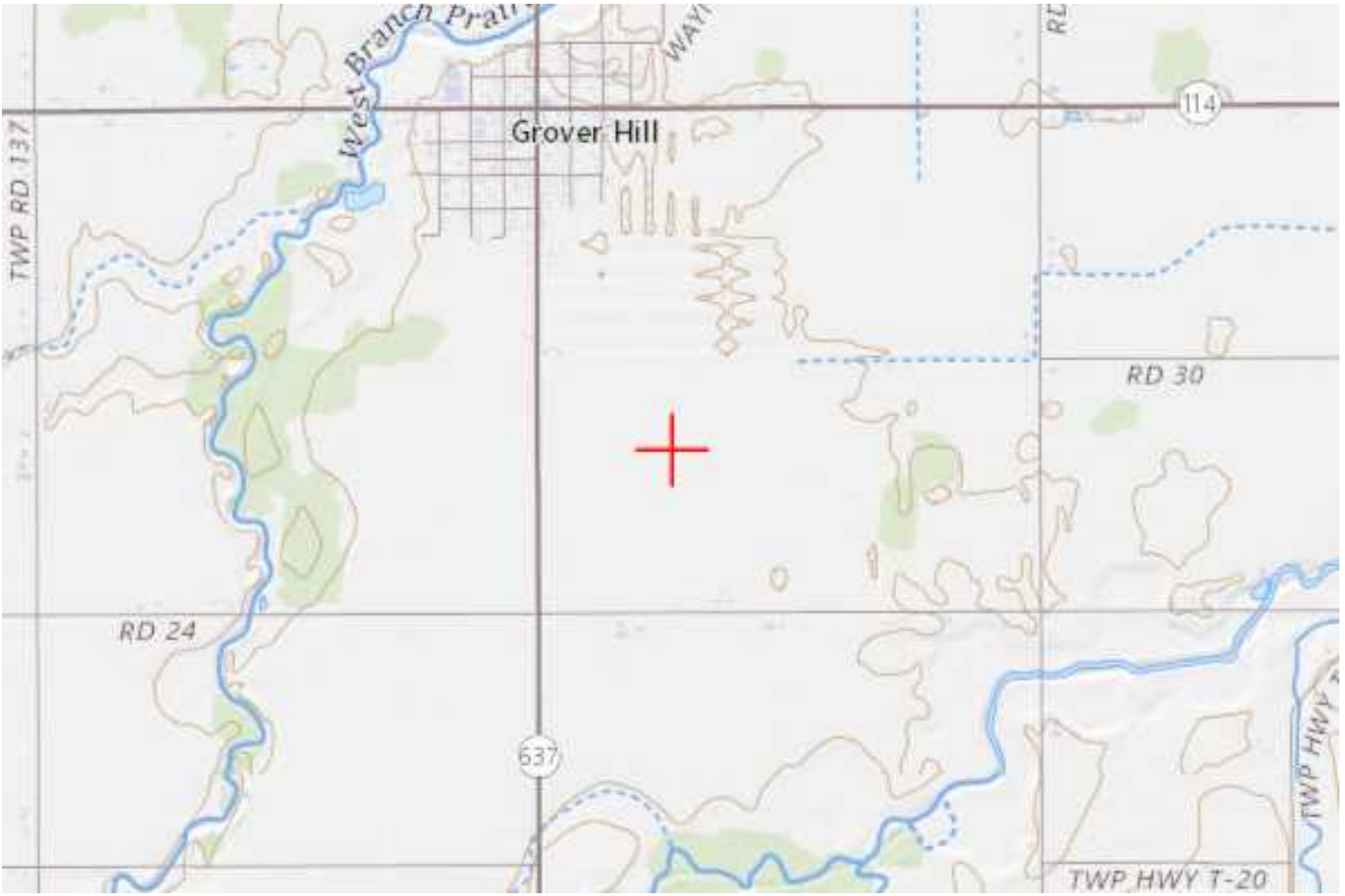
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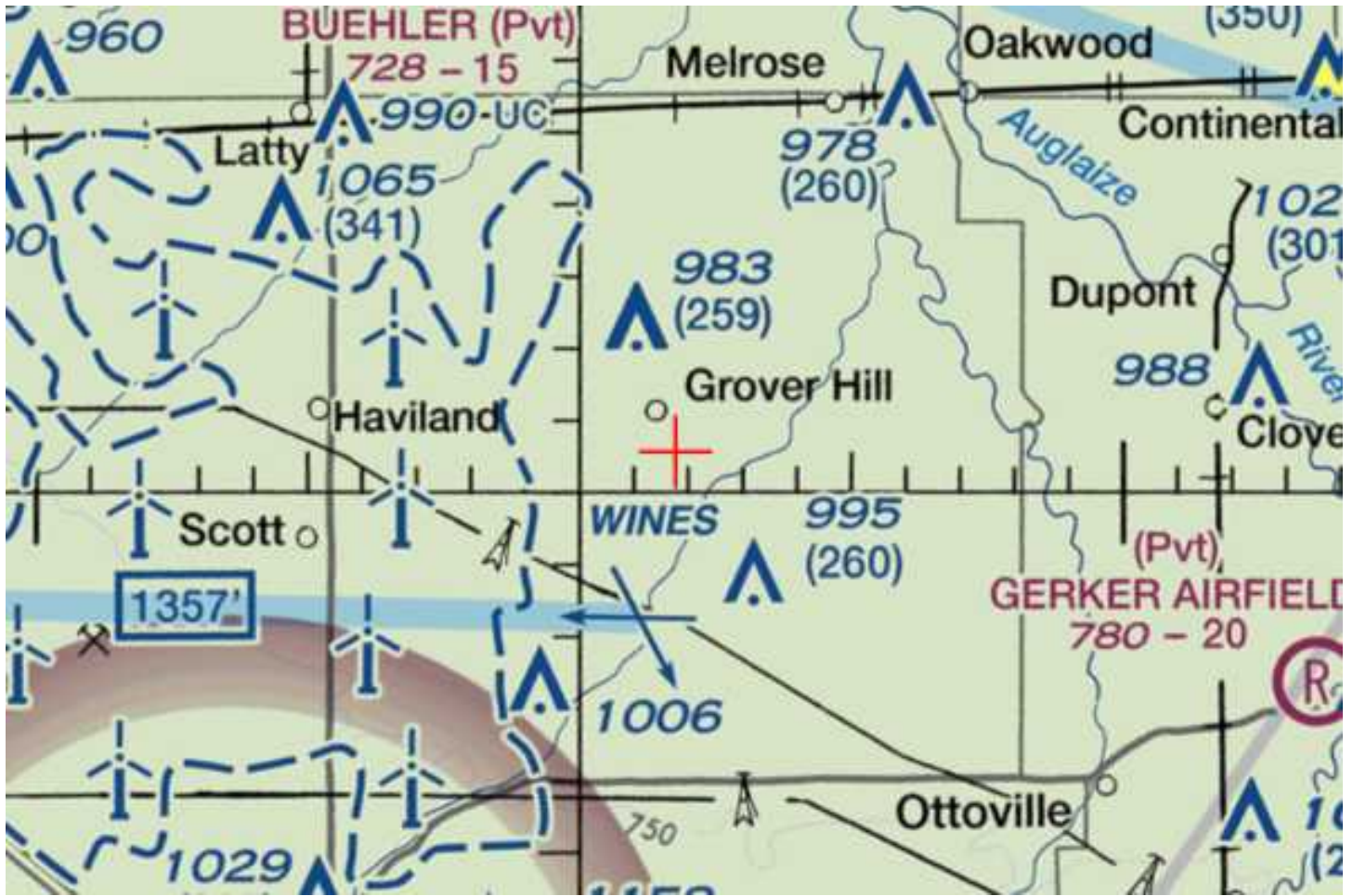
ACRONYMS & ABBREVIATIONS

- AGL, Above Ground Level
- AMSL, Above Mean Sea Level
- ARP, Airport Reference Point
- ARSR, Air Route Surveillance Radar
- ARTCC, Air Route Traffic Control Center
- ASN, Aeronautical Study Number
- ASR, Airport Surveillance Radar
- ATC, Air Traffic Control

ATCT, Air Traffic Control Tower  
CARSR, Common Air Route Surveillance Radar  
CFR, Code of Federal Regulations  
DME, Distance Measuring Equipment  
FAA, Federal Aviation Administration  
FUS, Fusion  
GPS, Global Positioning System  
IFR, Instrument Flight Rules  
LAT, Latitude  
LONG, Longitude  
Min, Minimum  
MSL, Mean Sea Level  
MVA, Minimum Vectoring Altitude  
NA, Not Authorized  
NAS, National Airspace System  
NEH, No Effect Height  
NM, Nautical Mile  
NOTAM, Notice to Airmen  
NPF, Notice of Preliminary Findings  
OE, Obstruction Evaluation  
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.  
RLOS, Radar Line of Sight  
SE, Site Elevation  
SM, Statute Miles  
TERPS, Terminal Instrument Procedures  
V, Victor Airway  
VFR, Visual Flight Rules  
WTE, Wind Turbine East  
WTW, Wind Turbine West

TOPO Map for ASN 2023-WTE-855-OE





**This foregoing document was electronically filed with the Public Utilities  
Commission of Ohio Docketing Information System on**

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**in**

**Case No(s). 23-0459-EL-BGA**

Summary: Response - Response to First Data Request from Staff of the Ohio  
Power Siting Board electronically filed by Christine M.T. Pirik on behalf of Grover  
Hill Wind, LLC.