Federal Aviation Administration Determinations of No Hazard for 51 Turbine Locations to a height of 656 feet above ground level

Coles Wind submitted a request for Federal Aviation Administration (FAA) Determinations of No Hazard (DNH) on December 19, 2024 for the Aeronautical Study Numbers included in the table below. On September 29, 2025, the FAA issued DNHs for all of the turbines listed below. Coles Wind is providing DNHs for the 51 turbines planned for construction. Coles Wind notes that the FAA has approved a turbine height of up to 656 feet above ground level. The GE-158 6.1 MW turbine has an above ground height of 643 feet. The turbine locations approved by the FAA are the same turbine locations and are a subset of those approved by Coles County in the Project's Approval Ordinance No. 2025-02.

Turbine ID[1]	Aeronautical Study Number (ASN)	NAD 83		Height (feet above ground level)[2]
		Latitude	Longitude	
T1	2024-WTE-11563-OE	39-38-59.98	88-11-16.82	656
T2	2024-WTE-11564-OE	39-38-48.22	88-12-10.16	656
T3	2024-WTE-11565-OE	39-38-49.86	88-10-52.89	656
T4	2024-WTE-11566-OE	39-38-24.42	88-12-06.82	656
T5	2024-WTE-11567-OE	39-38-30.90	88-13-02.29	656
T6	2024-WTE-11568-OE	39-38-26.80	88-13-37.36	656
T7	2024-WTE-11569-OE	39-38-07.74	88-13-33.74	656
T8	2024-WTE-11570-OE	39-37-53.33	88-13-44.47	656
T9	*2024-WTE-11571-OE*	*39-37-49.55*	*88-12-01.64*	*656*
T10	2024-WTE-11572-OE	39-37-54.15	88-11-21.06	656
T11	2024-WTE-11573-OE	39-37-40.87	88-10-49.24	656
T12	2024-WTE-11574-OE	39-37-34.54	88-11-16.05	656
T13	2024-WTE-11575-OE	39-37-44.74	88-13-23.50	656
T14	*2024-WTE-11576-OE*	*39-37-35.61*	*88-13-46.35*	*656*
T15	2024-WTE-11577-OE	39-37-35.63	88-14-09.85	656
T16	*2024-WTE-11578-OE*	*39-36-49.28*	*88-13-15.19*	*656*
T17	2024-WTE-11579-OE	39-36-53.04	88-12-29.63	656
T18	2024-WTE-11580-OE	39-37-15.82	88-11-55.63	656
T19	2024-WTE-11581-OE	39-36-44.67	88-11-20.01	656
T20	2024-WTE-11582-OE	39-36-44.31	88-10-48.81	656
T21	*2024-WTE-11583-OE*	*39-38-54.70*	*88-10-26.33*	*656*
T22	2024-WTE-11584-OE	39-38-43.41	88-9-52.86	656
T23	2024-WTE-11585-OE	39-38-59.22	88-9-47.01	656
T24	*2024-WTE-11586-OE*	*39-38-49.74*	*88-9-16.04*	*656*
T25	2024-WTE-11587-OE	39-38-32.07	88-8-43.12	656
T26	2024-WTE-11588-OE	39-38-27.35	88-9-01.48	656
T27	*2024-WTE-11589-OE*	*39-38-30.14*	*88-9-40.59*	*656*
T28	2024-WTE-11590-OE	39-38-26.61	88-10-14.00	656

Turbine ID[1]	Aeronautical Study Number (ASN)	NAD 83		Height (feet above ground level)[2]
		Latitude	Longitude	
T29	2024-WTE-11591-OE	39-37-58.45	88-9-40.48	656
T30	2024-WTE-11592-OE	39-37-47.35	88-8-19.56	656
T31	2024-WTE-11593-OE	39-37-08.12	88-7-21.47	656
T32	*2024-WTE-11594-OE*	*39-36-46.76*	*88-8-29.86*	*656*
T33	2024-WTE-11595-OE	39-37-02.62	88-8-31.59	656
T34	2024-WTE-11596-OE	39-36-49.59	88-9-13.99	656
T35	2024-WTE-11597-OE	39-37-08.69	88-9-45.90	656
T36	2024-WTE-11598-OE	39-36-12.22	88-9-35.81	656
T37	*2024-WTE-11599-OE*	*39-36-23.29*	*88-9-19.44*	*656*
T38	2024-WTE-11600-OE	39-35-52.75	88-8-41.56	656
T39a[3]	2024-WTE-11601-OE	39-35-28.12	88-7-14.45	656
T40	2024-WTE-11602-OE	39-35-27.57	88-9-04.80	656
T41	*2024-WTE-11603-OE*	*39-35-28.88*	*88-9-41.36*	*656*
T42	*2024-WTE-11604-OE*	*39-35-28.07*	*88-10-02.26*	*656*
T43	2024-WTE-11605-OE	39-35-23.84	88-10-21.20	656
T44	2024-WTE-11606-OE	39-35-08.76	88-10-27.55	656
T45	2024-WTE-11607-OE	39-35-04.78	88-7-02.76	656
T46	2024-WTE-11608-OE	39-34-28.53	88-7-05.58	656
T47a[3]	2024-WTE-11609-OE	39-34-21.96	88-7-56.58	656
T48	2024-WTE-11610-OE	39-33-54.43	88-7-56.83	656
T49	2024-WTE-11611-OE	39-34-09.63	88-8-12.59	656
T50	*2024-WTE-11612-OE*	*39-34-28.72*	*88-8-54.73*	*656*
T51	2024-WTE-11613-OE	39-34-23.47	88-9-17.79	656
T52	2024-WTE-11614-OE	39-33-55.42	88-9-08.73	656
T53	2024-WTE-11615-OE	39-34-23.77	88-10-11.67	656
T54	2024-WTE-11616-OE	39-33-54.12	88-12-04.55	656
T55	2024-WTE-11617-OE	39-34-23.25	88-12-06.69	656
T56	2024-WTE-11618-OE	39-34-27.71	88-12-30.41	656
T57	2024-WTE-11619-OE	39-34-27.87	88-13-03.93	656
T58	2024-WTE-11620-OE	39-34-50.93	88-14-25.53	656
T59	2024-WTE-11621-OE	39-35-14.16	88-14-09.16	656
T60	2024-WTE-11622-OE	39-35-07.15	88-12-41.84	656
T61	2024-WTE-11623-OE	39-36-17.39	88-12-38.81	656
T62	2024-WTE-11624-OE	39-36-13.13	88-13-15.57	656

[1] Coles Wind requested FAA approval for 62 turbines; however, only 51 will be constructed. The 11 turbines that have been removed from the layout are denoted in *gray/italics*.

[2] Coles Wind requested FAA approval for turbines up to 656 feet above ground level. The GE-158 6.1 MW turbine has an above ground level of 643 feet (rounded up).

[3] The location of this turbine has shifted slightly since FAA submittal; however, the location remains within the FAA's allowed 1-arc second tolerance.

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

Aeronautical Study No.
2024-WTE-11563-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T1	39-38-59.98N	88-11-16.82W	675 Ft	656 Ft	1331 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (0 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11563-OE.

Signature Control No: 642472883-679427548 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

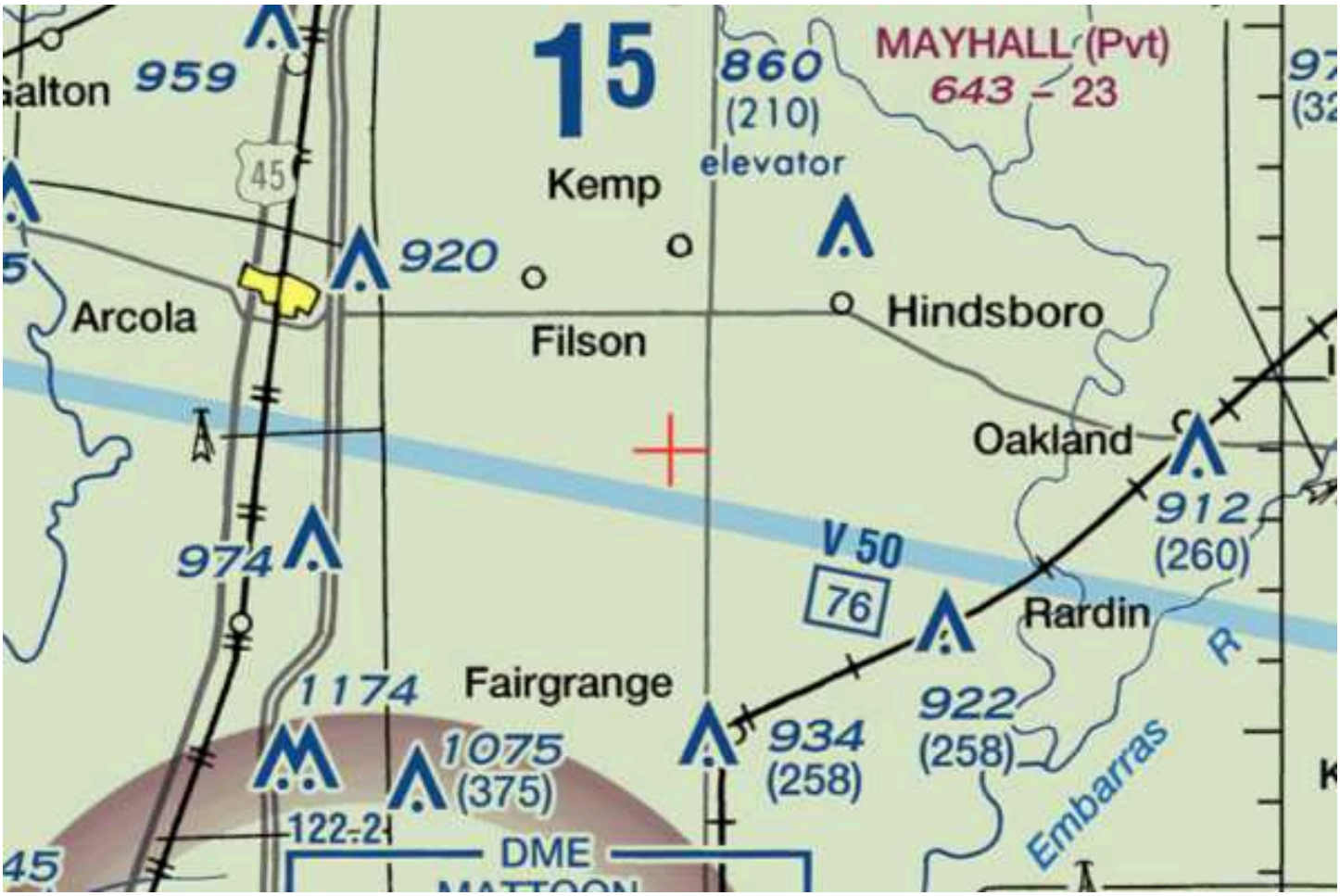
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


15
MAYHALL (Pvt)
643 – 23
860
(210)
elevator
Kemp
959
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
122.2
DME
Embarras
45

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

Aeronautical Study No.
2024-WTE-11564-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T2	39-38-48.22N	88-12-10.16W	678 Ft	656 Ft	1334 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1334 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11564-OE.

Signature Control No: 642472884-679427564 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
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2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


15
Galton
959
45
Kemp
860
(210)
elevator
MAYHALL (Pvt)
643 – 23
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
1075
(375)
934
(258)
922
(258)
122.2
DME
MATTOON
Embarras

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

Aeronautical Study No.
2024-WTE-11565-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T3
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T3	39-38-49.86N	88-10-52.89W	681 Ft	656 Ft	1337 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1337 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11565-OE.

Signature Control No: 642472885-679427539 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


15
959
860
(210)
elevator
MAYHALL (Pvt)
643 – 23
45
Kemp
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
934
(258)
1075
(375)
122.2
DME
MATTOON
Embarras

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

Aeronautical Study No.
2024-WTE-11566-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T4	39-38-24.42N	88-12-06.82W	686 Ft	656 Ft	1342 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1342 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11566-OE.

Signature Control No: 642472886-679427546 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

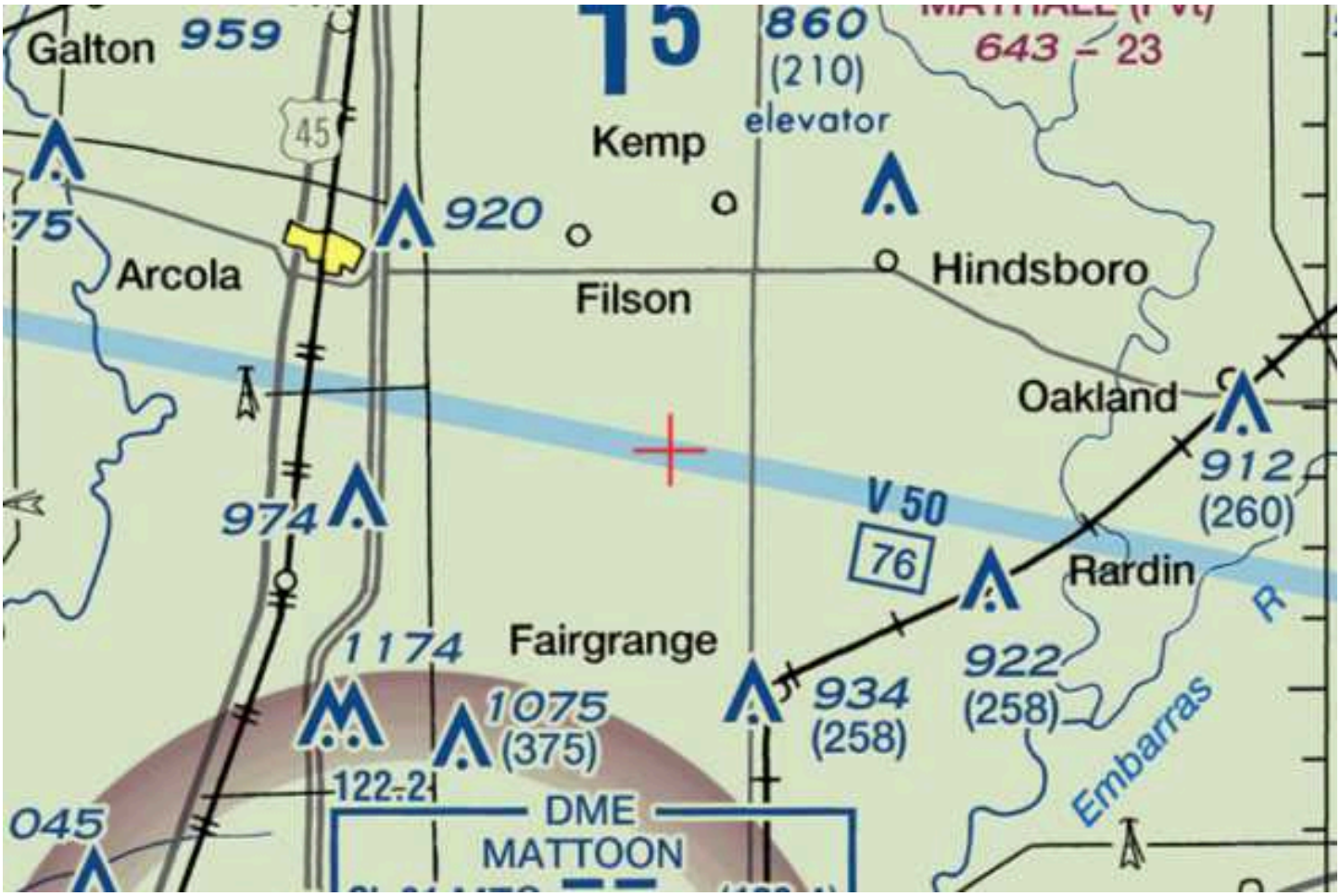
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Galton
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(210)
elevator
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Kemp
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Filson
Hindsboro
Oakland
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Rardin
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DME
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Embarras

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

Aeronautical Study No.
2024-WTE-11567-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T5	39-38-30.90N	88-13-02.29W	682 Ft	656 Ft	1338 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1338 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11567-OE.

Signature Control No: 642472887-679427538 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

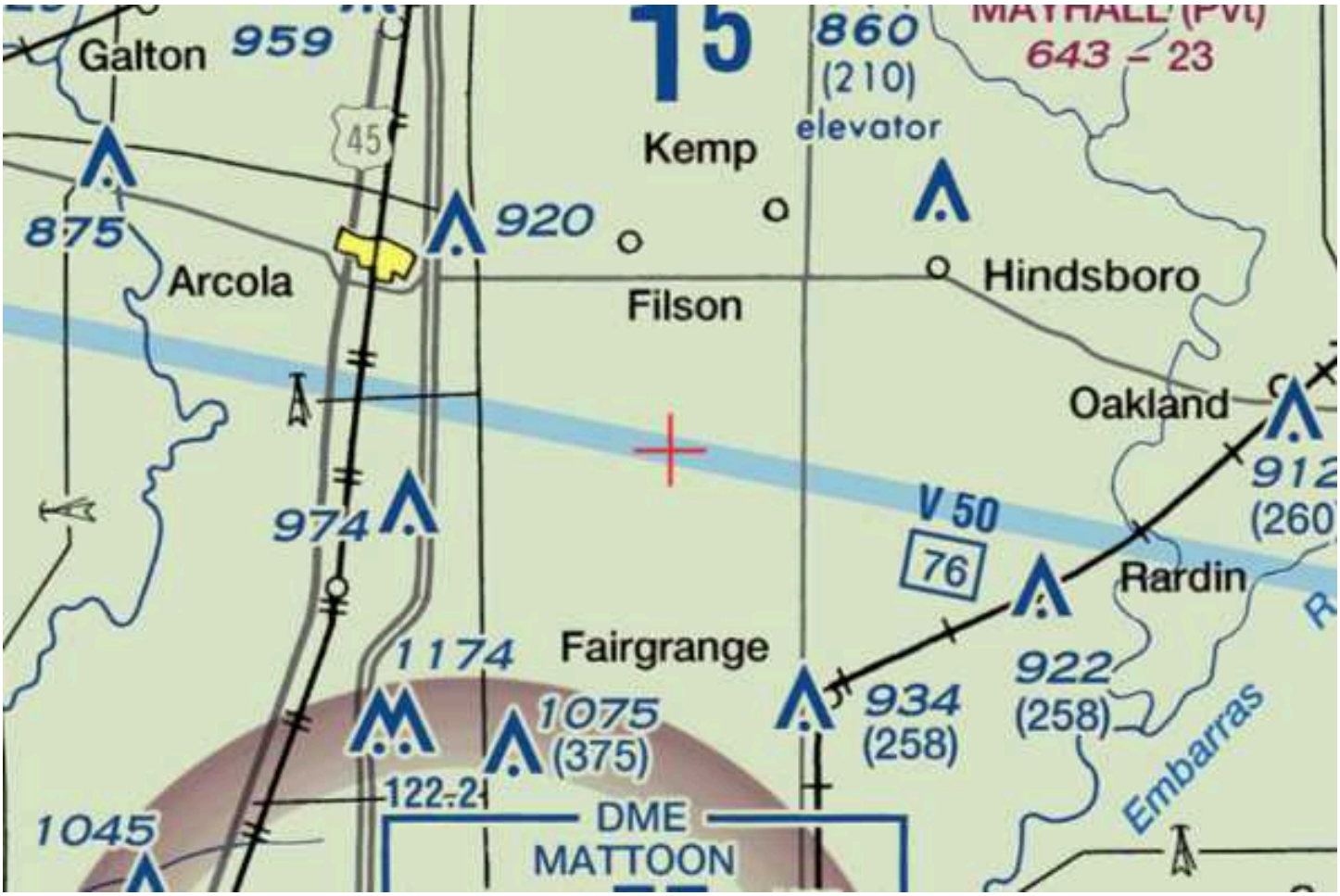
It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11567-OE



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

Aeronautical Study No.
2024-WTE-11568-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T6	39-38-26.80N	88-13-37.36W	686 Ft	656 Ft	1342 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1342 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11568-OE.

Signature Control No: 642472888-679427535 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

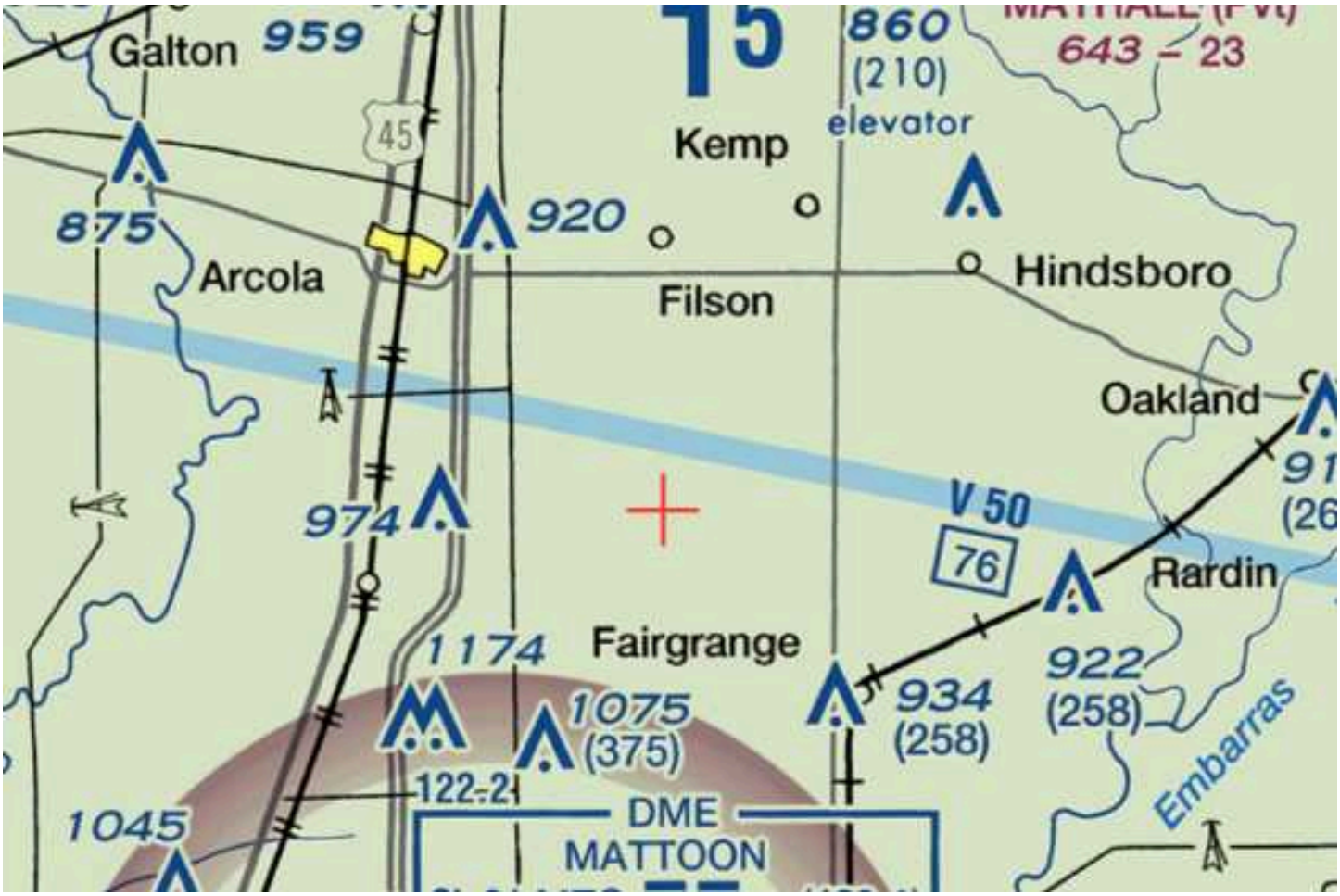
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Galton
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Arcola
Filson
Hindsboro
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DME
MATTOON
1045
Embarras

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

Aeronautical Study No.
2024-WTE-11569-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T7	39-38-07.74N	88-13-33.74W	689 Ft	656 Ft	1345 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1345 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11569-OE.

Signature Control No: 642472889-679427567 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Galton
959
45
875
Arcola
920
Kemp
(210)
elevator
643 – 23
Filson
Hindsboro
Oakland
974
V 50
76
Rardin
1174
Fairgrange
1075
(375)
934
(258)
922
(258)
Embarras
122.2
DME
MATTOON
1045
Ch 31 MTO
(109.4)

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

Aeronautical Study No.
2024-WTE-11570-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T8
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T8	39-37-53.33N	88-13-44.47W	692 Ft	656 Ft	1348 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1348 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11570-OE.

Signature Control No: 642472890-679427543 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

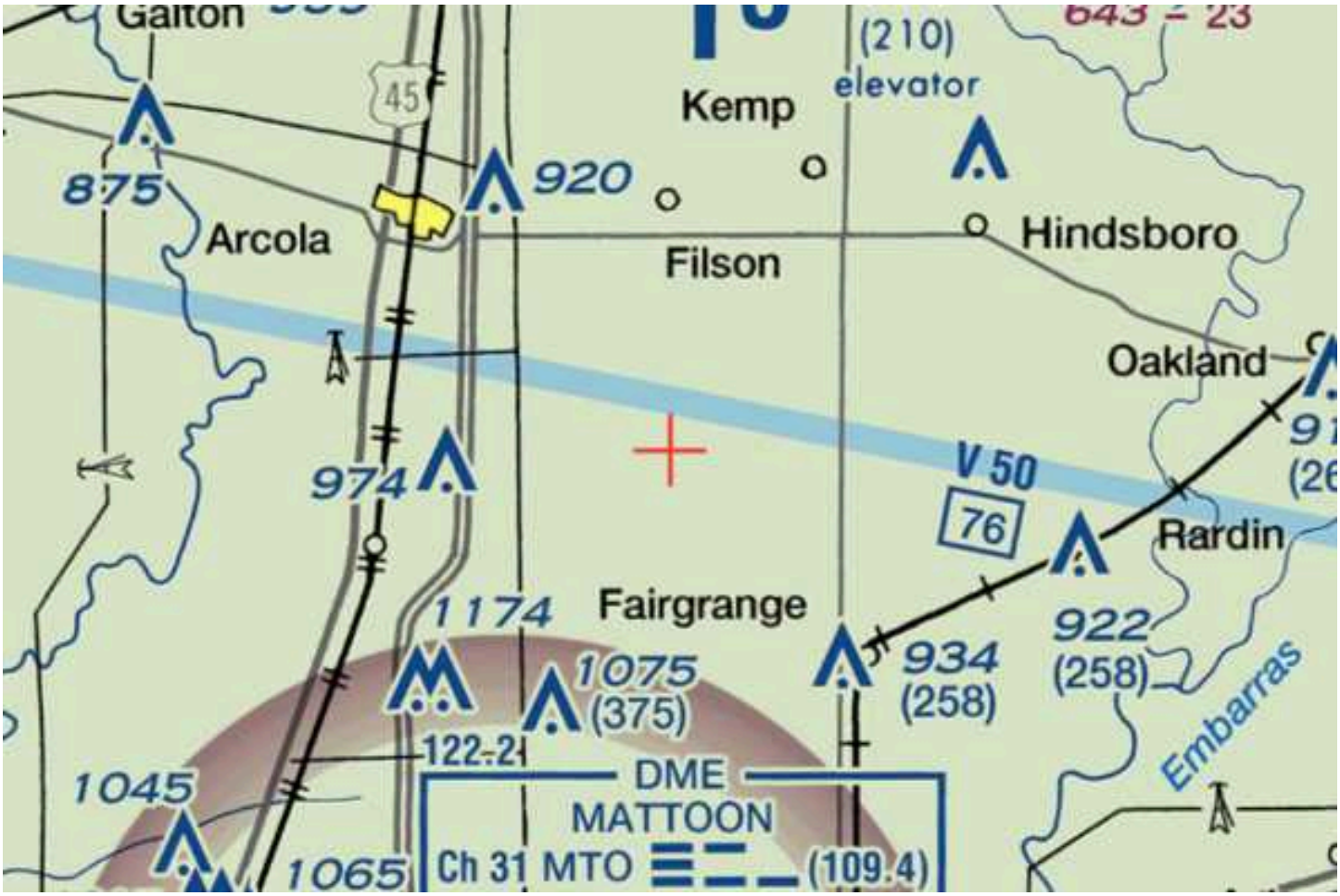
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Galton
(210)
elevator
Kemp
45
875
920
Arcola
Filson
Hindsboro
Oakland
974
V 50
76
Rardin
1174
Fairgrange
1075
(375)
934
(258)
922
(258)
Embarras
122.2
DME
MATTOON
1045
1065
Ch 31 MTO
(109.4)

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

Aeronautical Study No.
2024-WTE-11572-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T10	39-37-54.15N	88-11-21.06W	697 Ft	656 Ft	1353 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1353 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11572-OE.

Signature Control No: 642472892-679427537 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


(210)
elevator
Kemp
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
1075
(375)
934
(258)
922
(258)
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
1065
Embarras

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

Aeronautical Study No.
2024-WTE-11573-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T11	39-37-40.87N	88-10-49.24W	694 Ft	656 Ft	1350 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1350 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11573-OE.

Signature Control No: 642472893-679427565 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


(210)
elevator
Kemp
45
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
934
(258)
1075
(375)
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
1065
Embarras

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

Aeronautical Study No.
2024-WTE-11574-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T12	39-37-34.54N	88-11-16.05W	693 Ft	656 Ft	1349 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1349 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11574-OE.

Signature Control No: 642472894-679427566 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Kemp
elevator
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
Embarras
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
45
1065
Ashmore

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

Aeronautical Study No.
2024-WTE-11575-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T13	39-37-44.74N	88-13-23.50W	691 Ft	656 Ft	1347 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1347 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11575-OE.

Signature Control No: 642472895-679427541 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

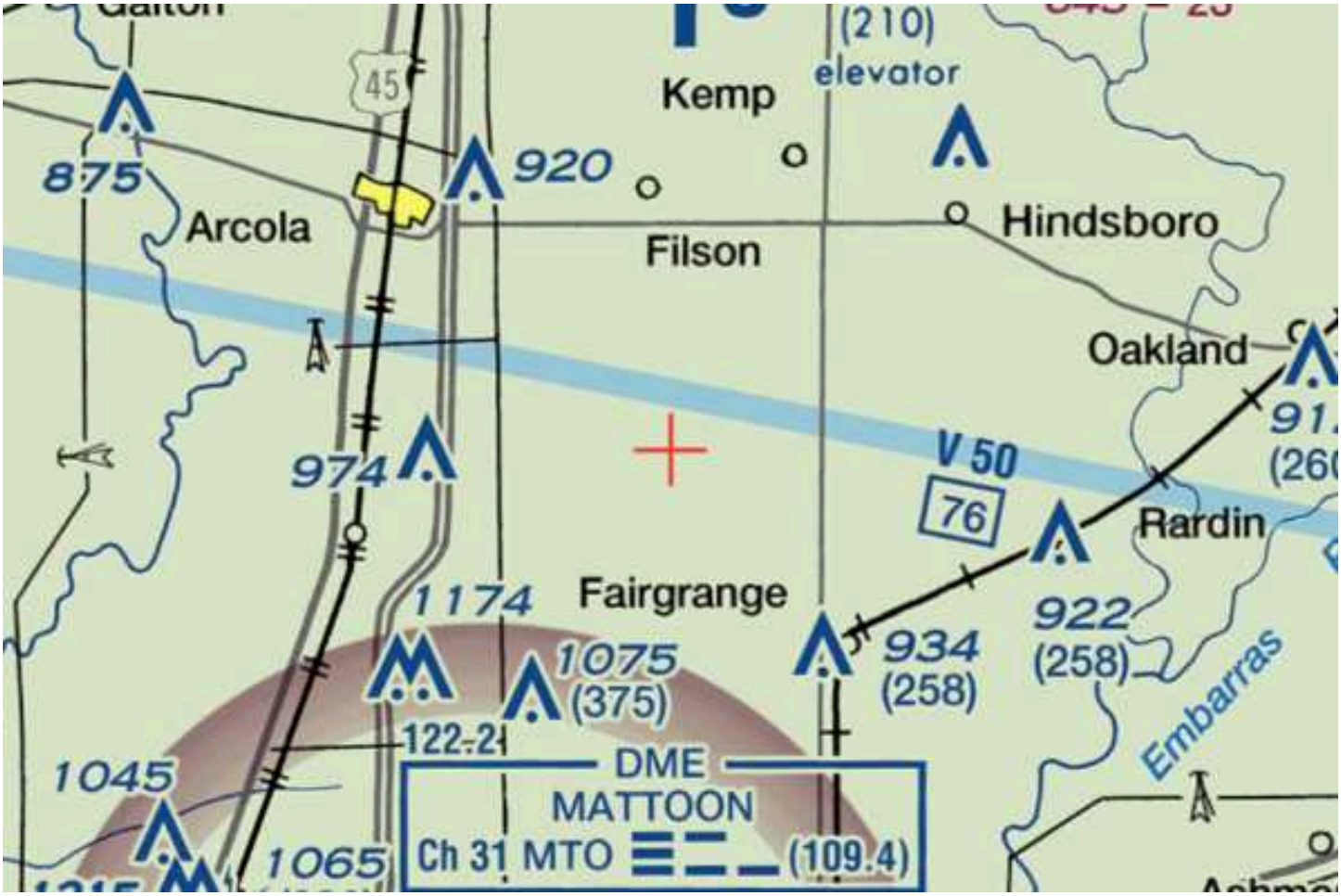
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


(210)
elevator
Kemp
45
875
920
Arcola
Filson
Hindsboro
Oakland
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
Embarras
122.2
DME
MATTOON
1045
Ch 31 MTO
(109.4)
1065

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

Aeronautical Study No.
2024-WTE-11577-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T15	39-37-35.63N	88-14-09.85W	687 Ft	656 Ft	1343 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1343 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11577-OE.

Signature Control No: 642472897-679427544 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11577-OE



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

Aeronautical Study No.
2024-WTE-11579-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T17
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T17	39-36-53.04N	88-12-29.63W	666 Ft	656 Ft	1322 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1322 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11579-OE.

Signature Control No: 642472899-679427547 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Kemp
elevator
920
875
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
R
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
Embarras
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
1045
1065
(380)
215
ST LOUIS
987
Ashmore

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

Aeronautical Study No.
2024-WTE-11580-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T18	39-37-15.82N	88-11-55.63W	679 Ft	656 Ft	1335 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1335 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11580-OE.

Signature Control No: 642472900-679427542 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Kemp
elevator
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
Embarras
1065
(380)
Ashmore

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

Aeronautical Study No.
2024-WTE-11581-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T19	39-36-44.67N	88-11-20.01W	679 Ft	656 Ft	1335 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1335 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11581-OE.

Signature Control No: 642472901-679427562 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11581-OE



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

Aeronautical Study No.
2024-WTE-11582-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T20
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T20	39-36-44.31N	88-10-48.81W	689 Ft	656 Ft	1345 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1345 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11582-OE.

Signature Control No: 642472902-679427563 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Kemp
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
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Embarras
122.2
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Ch 31 MTO
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1065
(380)
ST LOUIS
987
Ashmore

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

Aeronautical Study No.
2024-WTE-11584-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T22	39-38-43.41N	88-9-52.86W	693 Ft	656 Ft	1349 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1349 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11584-OE.

Signature Control No: 642472905-679427765 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

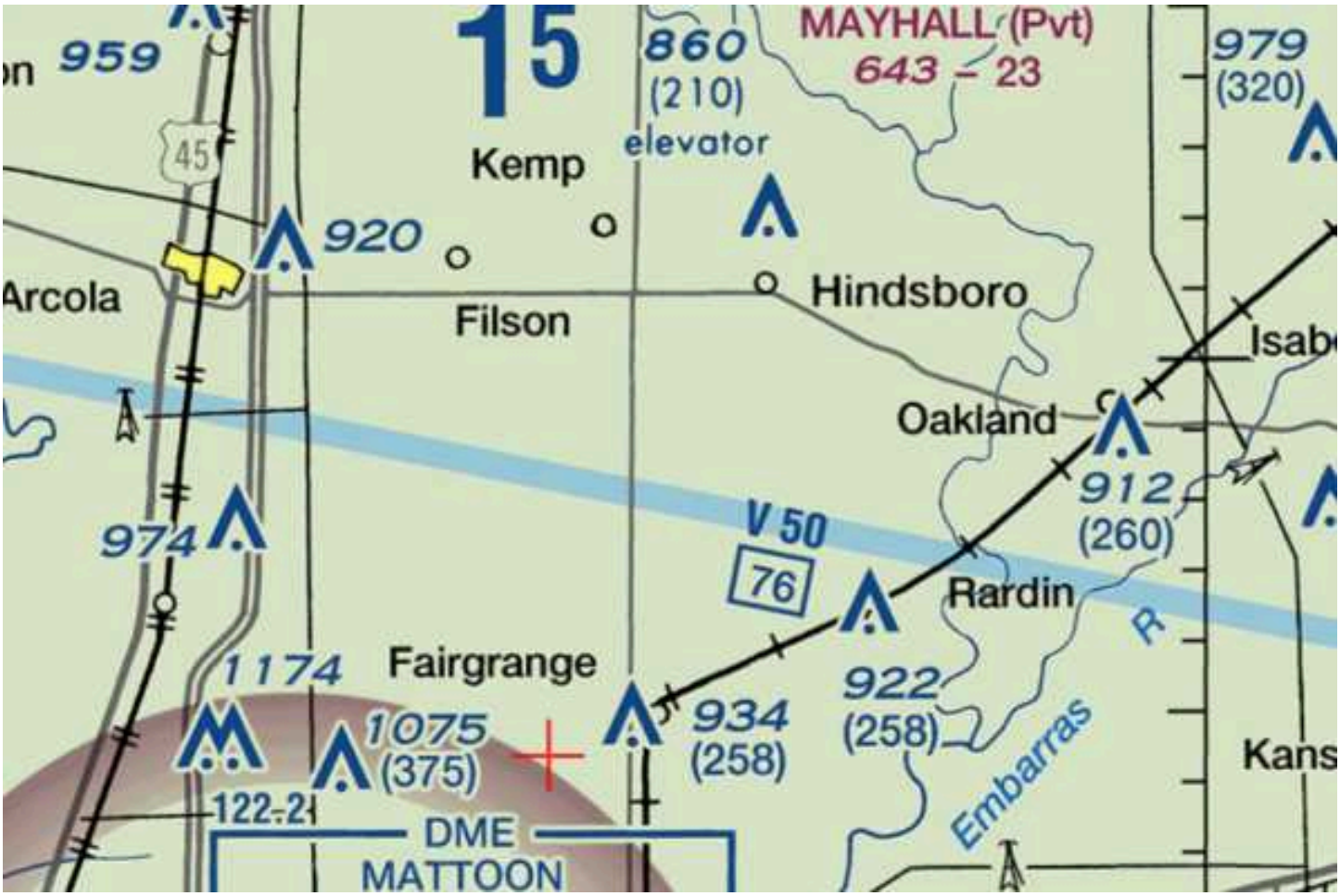
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


959
15
860
(210)
elevator
MAYHALL (Pvt)
643 – 23
979
(320)
45
Kemp
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
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Fairgrange
922
(258)
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(375)
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122.2
DME
MATTOON
Embarras

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

Aeronautical Study No.
2024-WTE-11585-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T23	39-38-59.22N	88-9-47.01W	682 Ft	656 Ft	1338 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1338 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11585-OE.

Signature Control No: 642472906-679427767 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

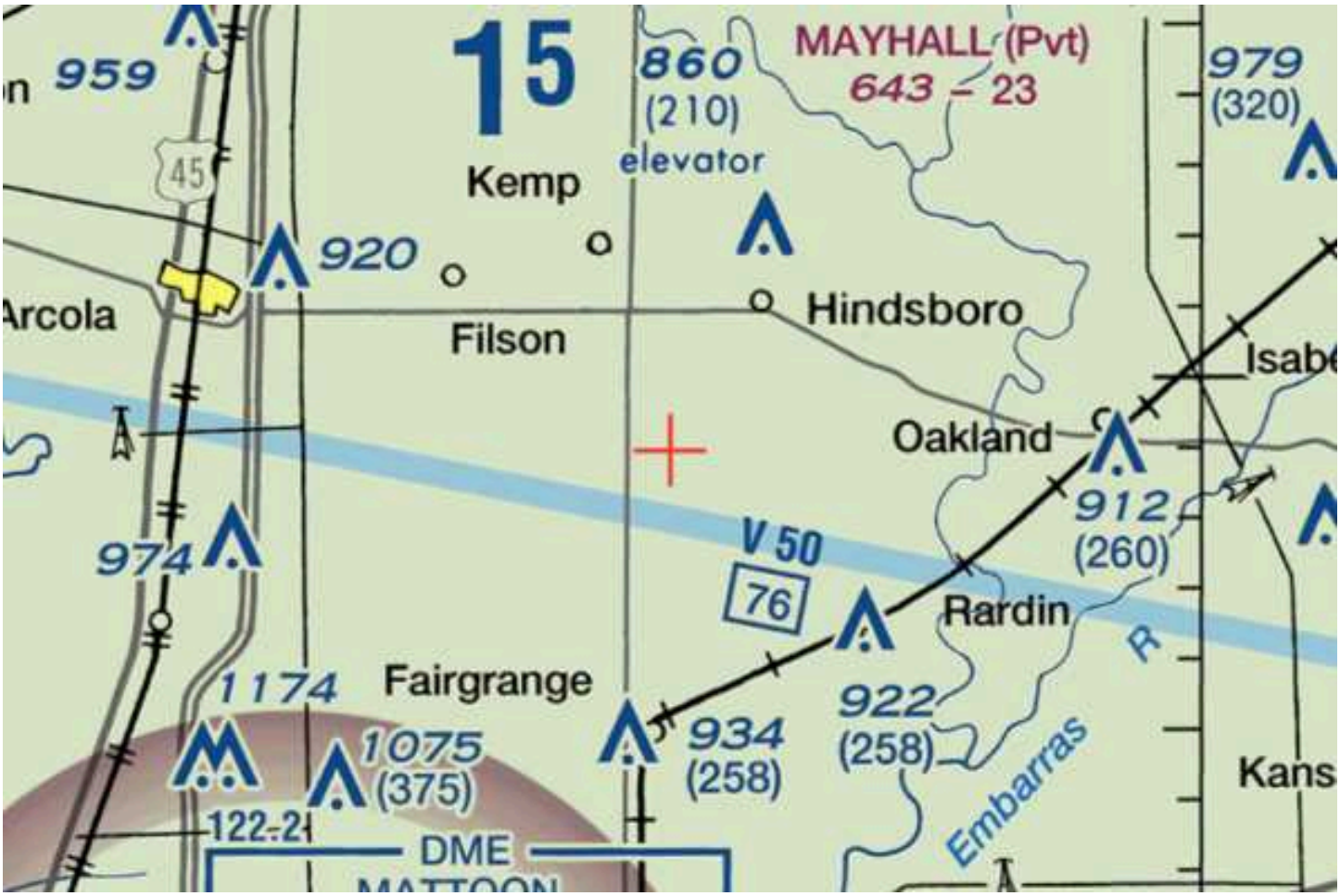
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


15
959
860
(210)
elevator
MAYHALL (Pvt)
643 – 23
979
(320)
45
Kemp
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
1075
(375)
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(258)
122.2
DME
Embarras

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

Aeronautical Study No.
2024-WTE-11587-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T25	39-38-32.07N	88-8-43.12W	713 Ft	656 Ft	1369 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1369 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11587-OE.

Signature Control No: 642472908-679427772 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


959
15
860
(210)
elevator
MAYHALL (PVt)
643 – 23
979
(320)
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Hindsboro
Isabel
Oakland
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1075
(375)
934
(258)
Embarras
Kansas
122.2
DME
MATTOON

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

Aeronautical Study No.
2024-WTE-11588-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T26
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T26	39-38-27.35N	88-9-01.48W	712 Ft	656 Ft	1368 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1368 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11588-OE.

Signature Control No: 642472909-679427774 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


959
860
(210)
elevator
643 – 23
979
(320)
Kemp
45
920
Hindsboro
Filson
Isabel
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
934
(258)
1075
(375)
Kansas
Embarras
122.2
DME
MATTOON

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

Aeronautical Study No.
2024-WTE-11590-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T28
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T28	39-38-26.61N	88-10-14.00W	698 Ft	656 Ft	1354 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1354 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11590-OE.

Signature Control No: 642472911-679427778 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


959
860
(210)
elevator
643 – 23
979
(320)
45
Kemp
920
Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
1075
(375)
934
(258)
922
(258)
122.2
DME
MATTOON
Embarras

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

Aeronautical Study No.
2024-WTE-11591-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T29	39-37-58.45N	88-9-40.48W	699 Ft	656 Ft	1355 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1355 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11591-OE.

Signature Control No: 642472912-679427780 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


(210)
elevator
Kemp
920
Hindsboro
Filson
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
934
(258)
1075
(375)
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
1065
Embarras
(320)

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

Aeronautical Study No.
2024-WTE-11592-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T30	39-37-47.35N	88-8-19.56W	678 Ft	656 Ft	1334 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1334 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11592-OE.

Signature Control No: 642472913-679427782 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


(210)
elevator
Kemp
45
920
Filson
Hindsboro
(320)
Isabel
Oakland
912
(260)
974
50
76
Rardin
1174
Fairgrange
922
(258)
934
(258)
1075
(375)
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
Embarras
Kansas

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

Aeronautical Study No.
2024-WTE-11593-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T31	39-37-08.12N	88-7-21.47W	662 Ft	656 Ft	1318 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1318 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11593-OE.

Signature Control No: 642472914-679427786 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


45
Kemp
elevator
920
Hindsboro
Filson
Isabel
Oakland
912
(260)
V 50
76
Rardin
74
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Fairgrange
922
(258)
934
(258)
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MATTOON
Ch 31 MTO
(109.4)
ST LOUIS
987
Embarras
Kansas
Ashmore

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

Aeronautical Study No.
2024-WTE-11595-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T33
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T33	39-37-02.62N	88-8-31.59W	667 Ft	656 Ft	1323 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1323 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11595-OE.

Signature Control No: 642472916-679427790 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

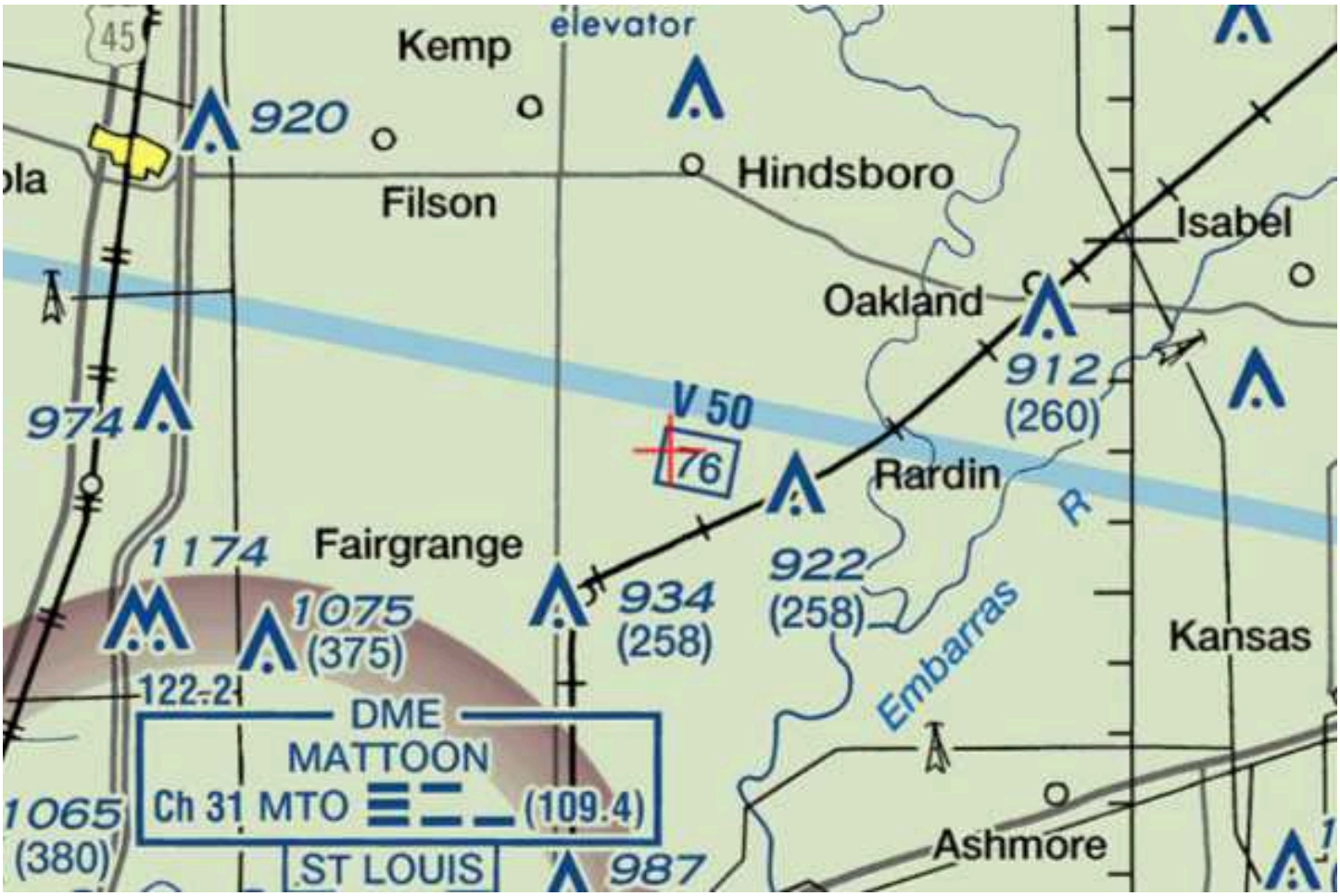
It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11595-OE



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

Aeronautical Study No.
2024-WTE-11596-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T34
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T34	39-36-49.59N	88-9-13.99W	684 Ft	656 Ft	1340 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1340 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11596-OE.

Signature Control No: 642472917-679427792 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

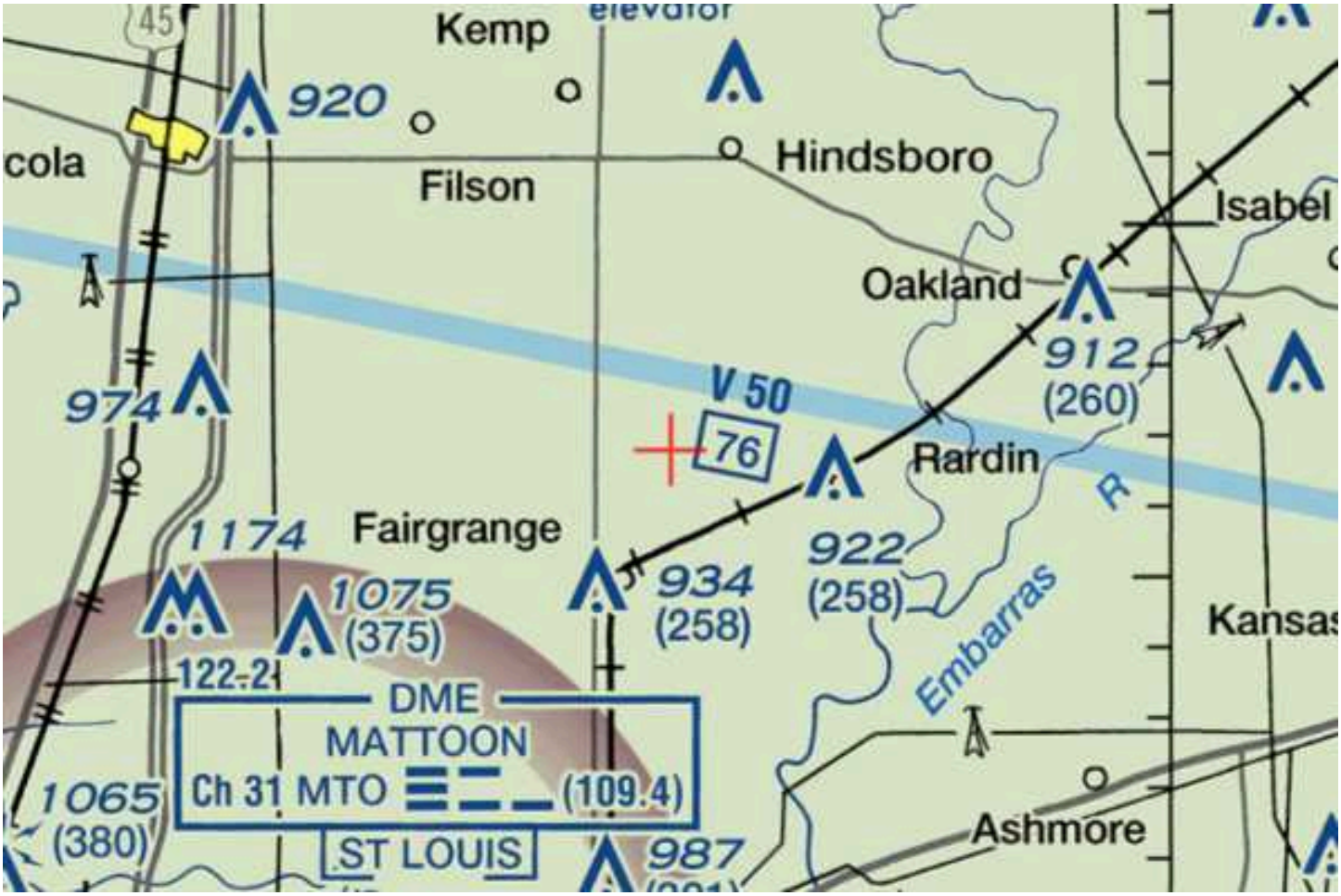
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Kemp
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cola
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(258)
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(380)
ST LOUIS
987
Ashmore

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

Aeronautical Study No.
2024-WTE-11597-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T35
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T35	39-37-08.69N	88-9-45.90W	685 Ft	656 Ft	1341 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1341 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11597-OE.

Signature Control No: 642472918-679427794 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11597-OE



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

Aeronautical Study No.
2024-WTE-11598-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T36	39-36-12.22N	88-9-35.81W	668 Ft	656 Ft	1324 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1324 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11598-OE.

Signature Control No: 642472919-679427796 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

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a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


920
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
934
(258)
1075
(375)
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
ST LOUIS
1065
(380)
987
(321)
Embarras
Ashmore

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

Aeronautical Study No.
2024-WTE-11600-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T38	39-35-52.75N	88-8-41.56W	665 Ft	656 Ft	1321 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1321 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11600-OE.

Signature Control No: 642472921-679427806 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

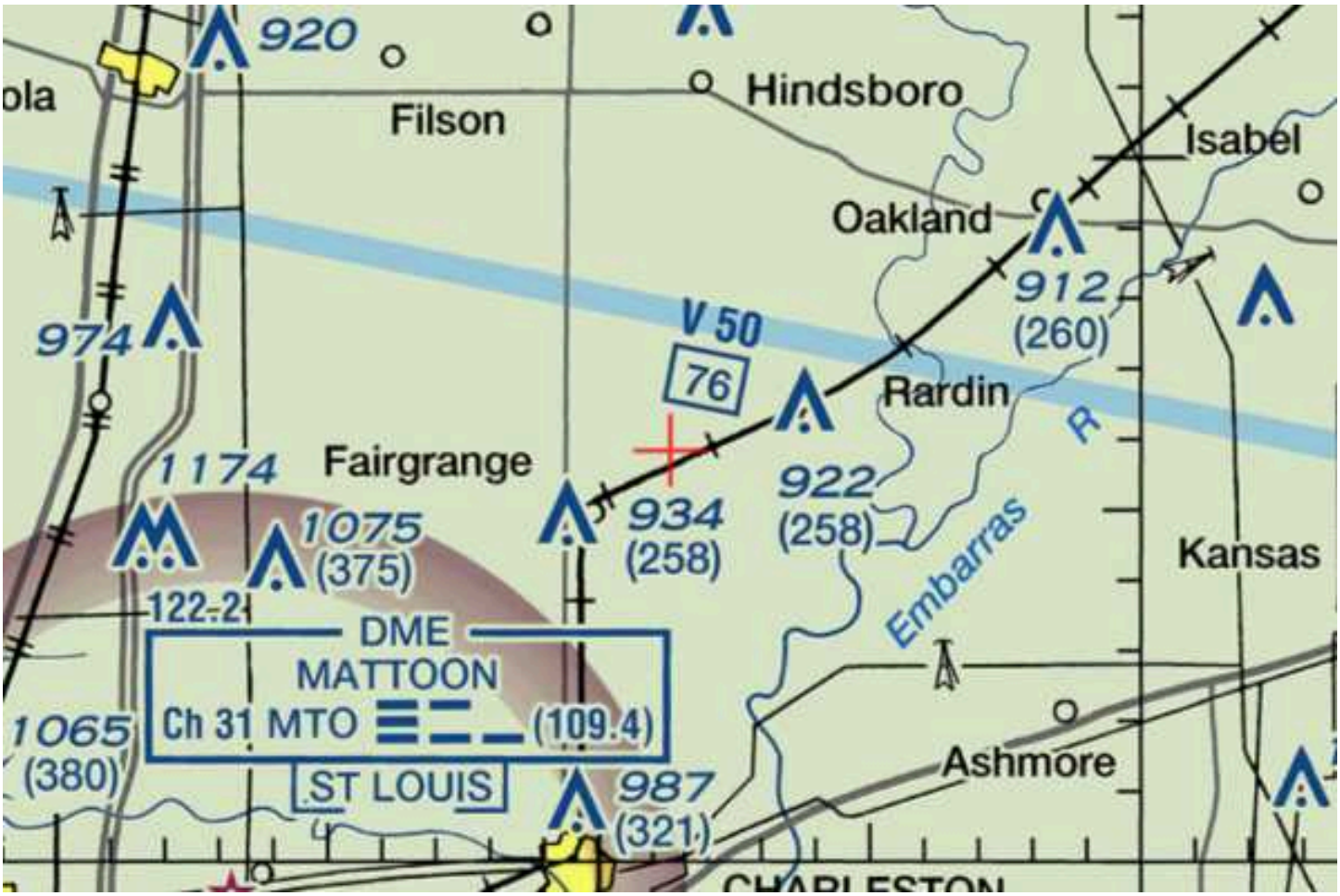
It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11600-OE



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

Aeronautical Study No.
2024-WTE-11601-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T39	39-35-28.12N	88-7-14.45W	664 Ft	656 Ft	1320 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1320 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11601-OE.

Signature Control No: 642472922-679427820 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11601-OE



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

Aeronautical Study No.
2024-WTE-11602-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T40	39-35-27.57N	88-9-04.80W	671 Ft	656 Ft	1327 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1327 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11602-OE.

Signature Control No: 642472923-679427821 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11602-OE



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

Aeronautical Study No.
2024-WTE-11605-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T43
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T43	39-35-23.84N	88-10-21.20W	673 Ft	656 Ft	1329 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1329 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11605-OE.

Signature Control No: 642472926-679427937 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Arcola
Filson
Hindsboro
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
Embarras
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
1065
(380)
ST LOUIS
987
(321)
Ashmore
CHARLESTON

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

Aeronautical Study No.
2024-WTE-11606-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T44	39-35-08.76N	88-10-27.55W	674 Ft	656 Ft	1330 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1330 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11606-OE.

Signature Control No: 642472927-679427943 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11606-OE



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

Aeronautical Study No.
2024-WTE-11607-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T45
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T45	39-35-04.78N	88-7-02.76W	671 Ft	656 Ft	1327 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1327 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11607-OE.

Signature Control No: 642472928-679427947 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Hindsboro
Filson
Isabel
Oakland
912
(260)
V 50
76
Rardin
1174
Fairgrange
922
934
(258)
(258)
1075
(375)
Embarras
Kansas
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
ST LOUIS
987
(321)
Ashmore
CHARLESTON

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

Aeronautical Study No.
2024-WTE-11608-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T46	39-34-28.53N	88-7-05.58W	675 Ft	656 Ft	1331 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1331 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11608-OE.

Signature Control No: 642472929-679427968 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

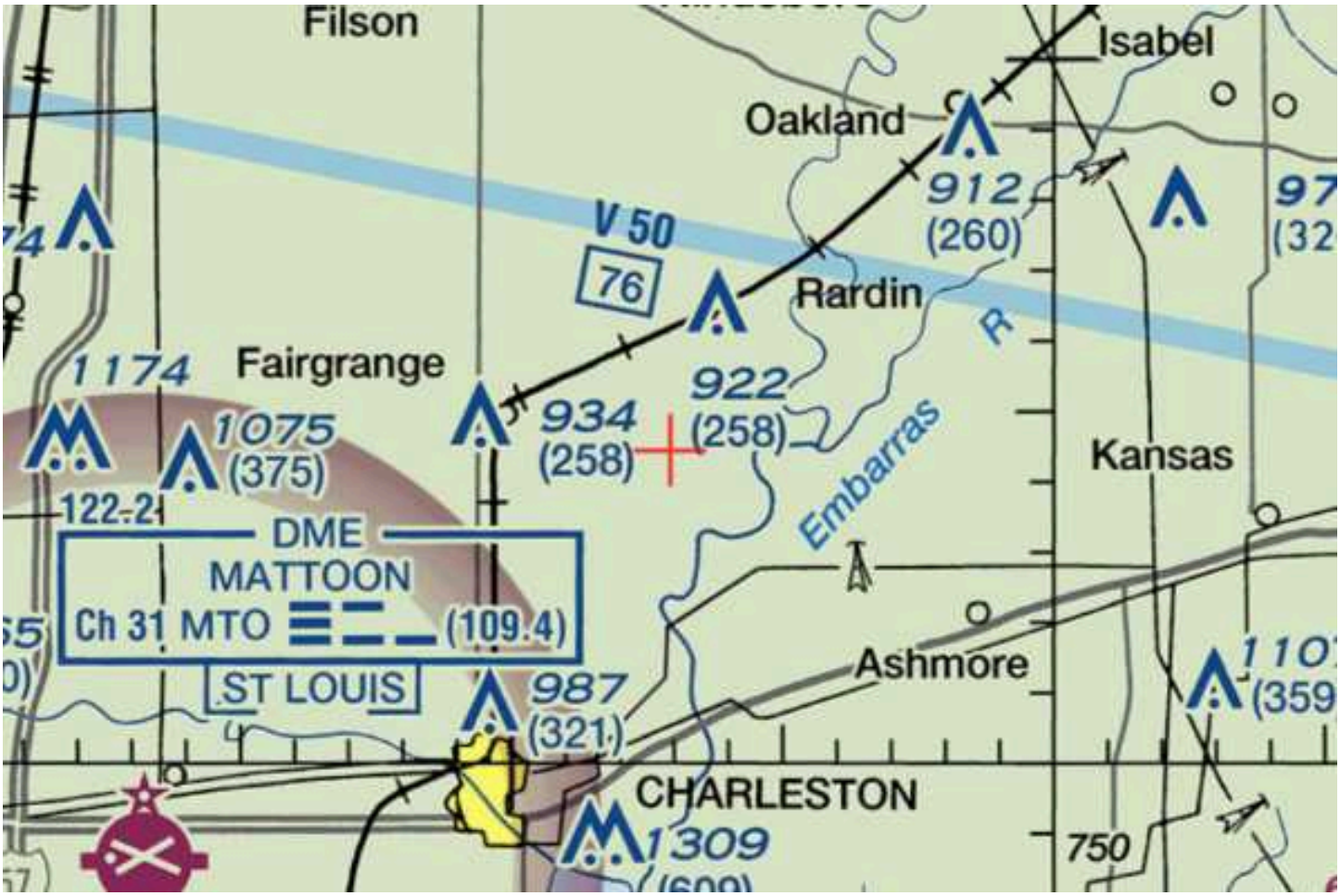
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Filson
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Rardin
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Fairgrange
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Embarras
Kansas
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ST LOUIS
Ashmore
987
(321)
CHARLESTON
1309
750

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

Aeronautical Study No.
2024-WTE-11609-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T47
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T47	39-34-21.96N	88-7-56.58W	673 Ft	656 Ft	1329 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1329 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11609-OE.

Signature Control No: 642472930-679427970 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Filson
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(258)
1075
(375)
Embarras
Kansas
122.2
DME
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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-WTE-11610-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T48	39-33-54.43N	88-7-56.83W	680 Ft	656 Ft	1336 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1336 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11610-OE.

Signature Control No: 642472931-679427975 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11610-OE



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

Aeronautical Study No.
2024-WTE-11611-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T49
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T49	39-34-09.63N	88-8-12.59W	675 Ft	656 Ft	1331 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1331 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11611-OE.

Signature Control No: 642472933-679427973 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Isabel
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Ashmore
CHARLESTON
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(609)
750
57

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

Aeronautical Study No.
2024-WTE-11613-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T51
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T51	39-34-23.47N	88-9-17.79W	681 Ft	656 Ft	1337 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1337 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11613-OE.

Signature Control No: 642472935-679428021 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Filson
Isabel
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
Embarras
Kansas
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
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(380)
ST LOUIS
Ashmore
987
(321)
CHARLESTON
1309
(609)
750
57

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

Aeronautical Study No.
2024-WTE-11614-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T52	39-33-55.42N	88-9-08.73W	681 Ft	656 Ft	1337 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1337 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11614-OE.

Signature Control No: 642472936-679428023 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

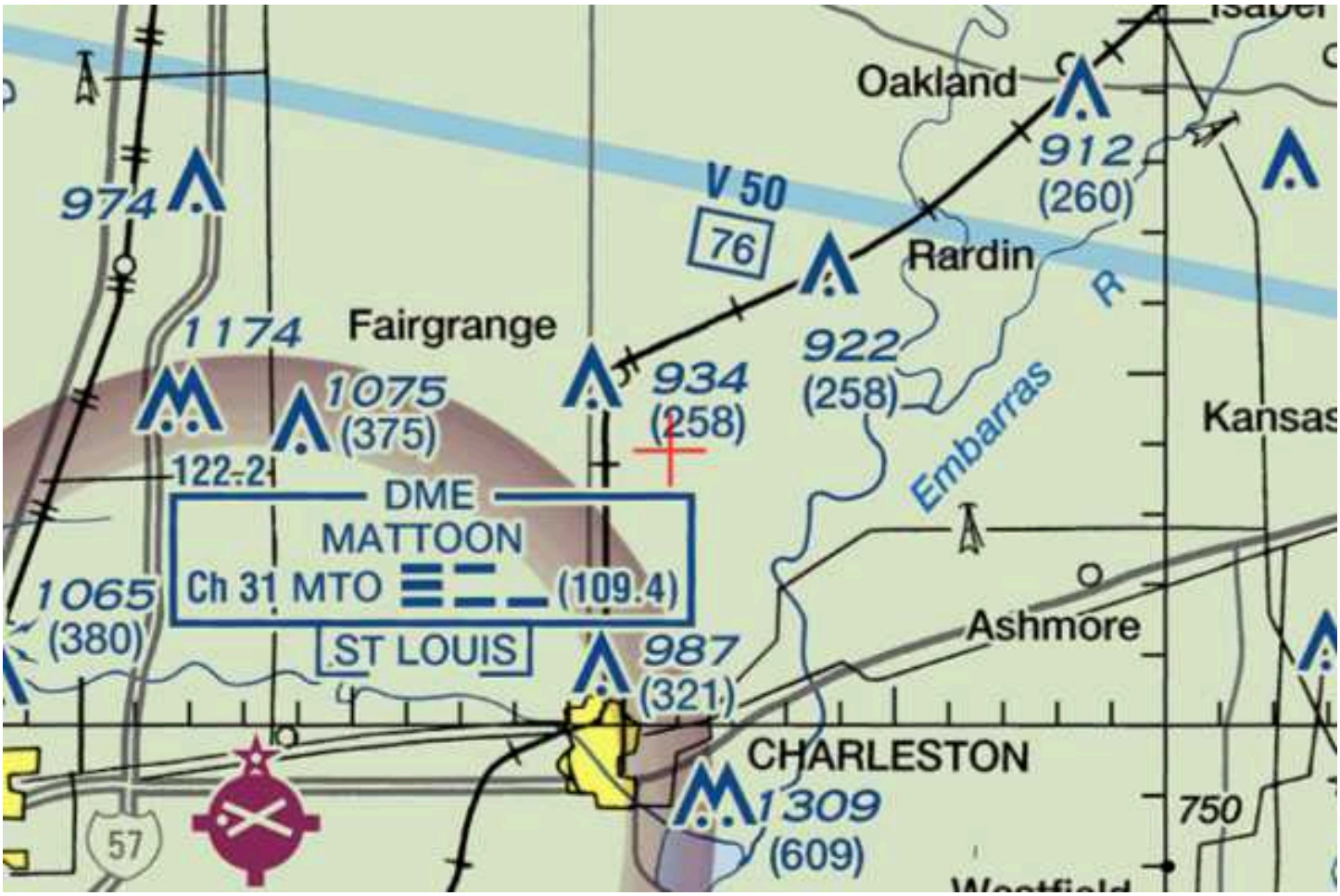
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
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(258)
Embarras
Kansas
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DME
MATTOON
Ch 31 MTO
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Ashmore
987
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CHARLESTON
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(609)
750
57

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

Aeronautical Study No.
2024-WTE-11615-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T53
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T53	39-34-23.77N	88-10-11.67W	679 Ft	656 Ft	1335 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1335 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11615-OE.

Signature Control No: 642472937-679428050 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Filson
Oakland
912
(260)
974
V 50
76
Rardin
1174
Fairgrange
922
(258)
1075
(375)
934
(258)
Embarras
122.2
DME
MATTOON
Ch 31 MTO
(109.4)
1065
(380)
ST LOUIS
987
(321)
Ashmore
CHARLESTON
1309
750
57

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

Aeronautical Study No.
2024-WTE-11616-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T54
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T54	39-33-54.12N	88-12-04.55W	674 Ft	656 Ft	1330 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1330 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11616-OE.

Signature Control No: 642472938-679428057 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Oakland
912
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76
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Ashmore
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CHARLESTON
1309
(609)
57
Westfield

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

Aeronautical Study No.
2024-WTE-11617-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T55
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T55	39-34-23.25N	88-12-06.69W	679 Ft	656 Ft	1335 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1335 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11617-OE.

Signature Control No: 642472939-679428062 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Filson
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912
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Ashmore
CHARLESTON
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(609)
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Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2024-WTE-11618-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T56	39-34-27.71N	88-12-30.41W	673 Ft	656 Ft	1329 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1329 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11618-OE.

Signature Control No: 642472940-679428066 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

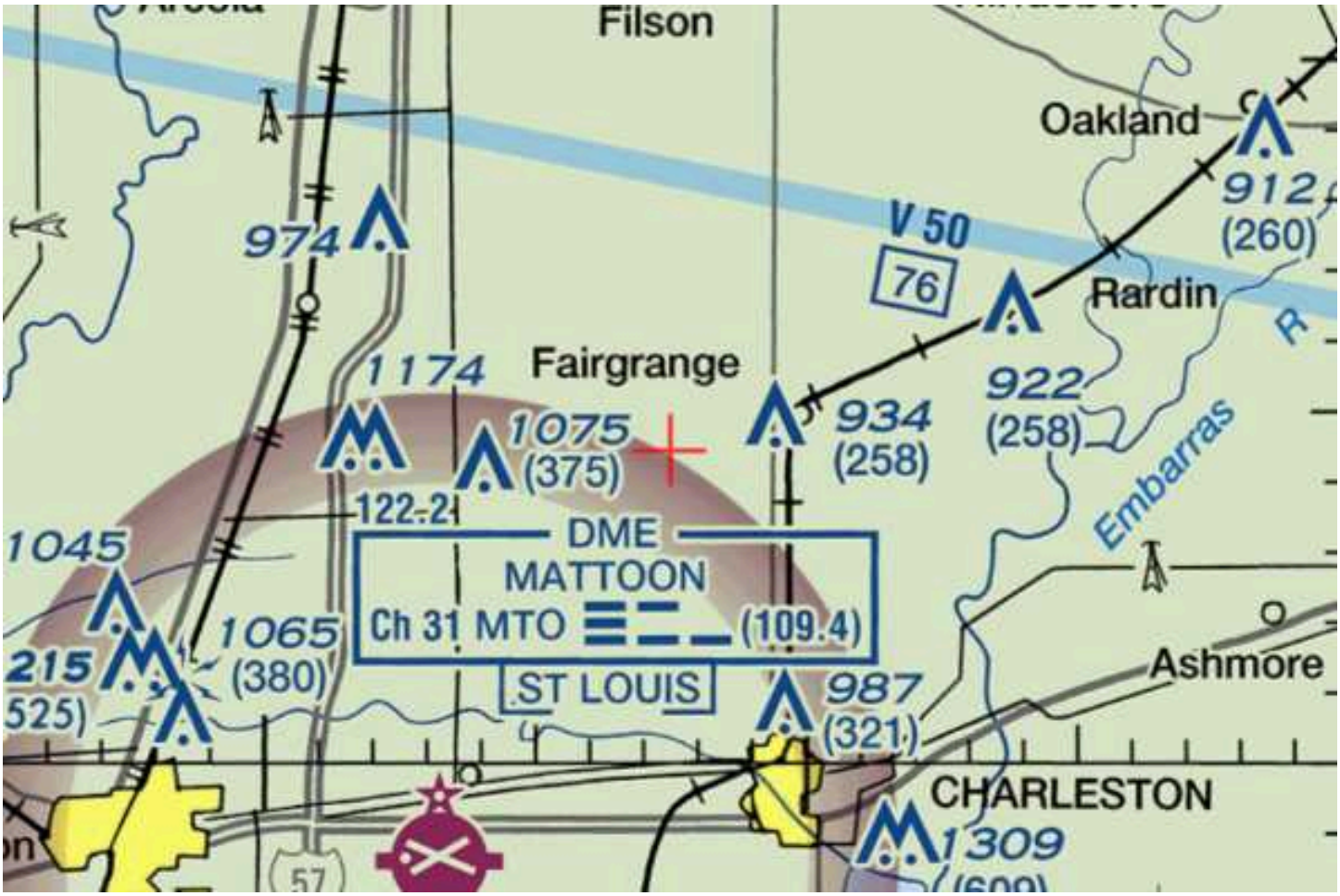
It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11618-OE



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

Aeronautical Study No.
2024-WTE-11619-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T57
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T57	39-34-27.87N	88-13-03.93W	679 Ft	656 Ft	1335 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1335 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11619-OE.

Signature Control No: 642472941-679428072 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

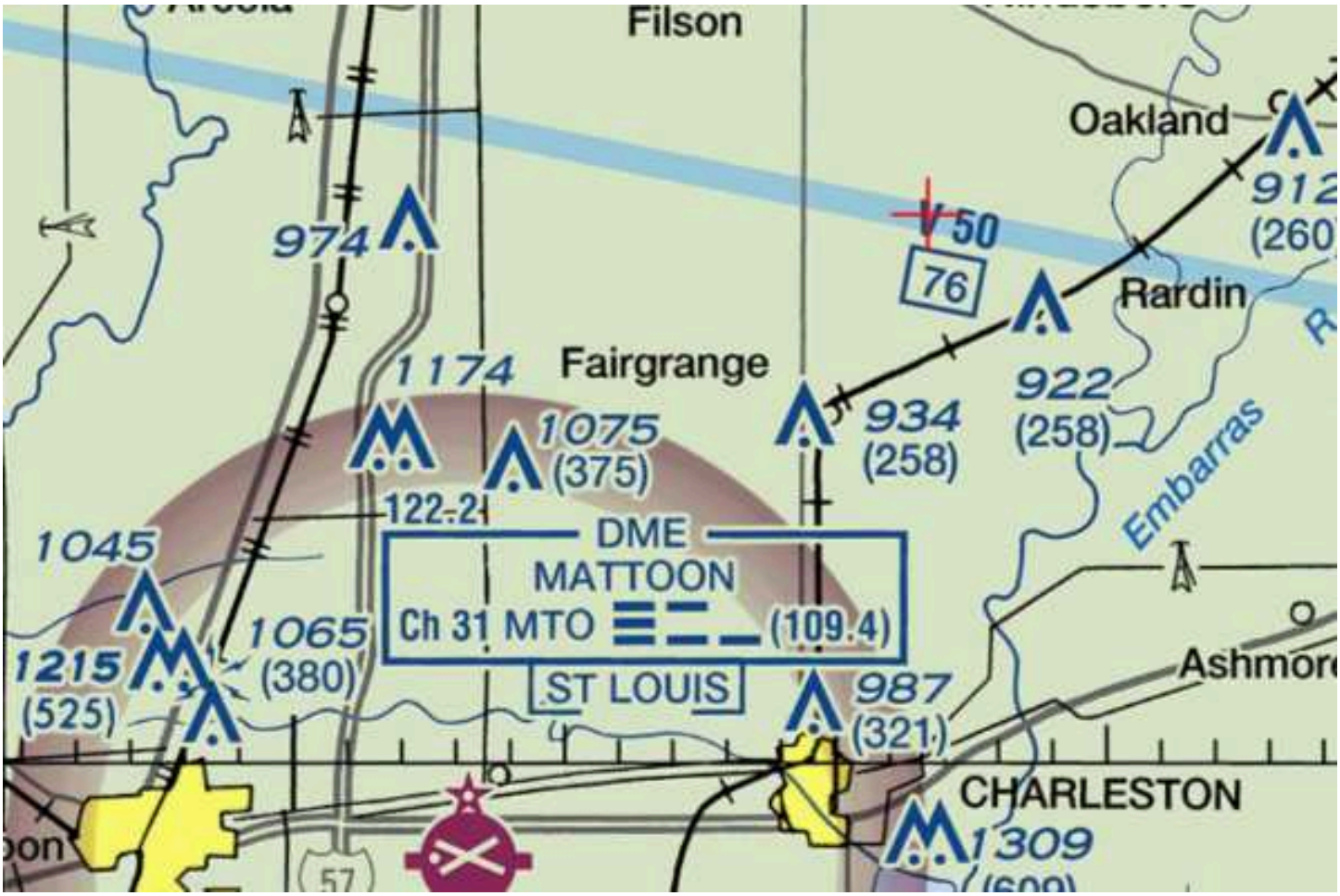
6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West


Filson
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ST LOUIS
987
(321)
Ashmore
CHARLESTON
1309
57

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

Aeronautical Study No.
2024-WTE-11620-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T58	39-34-50.93N	88-14-25.53W	682 Ft	656 Ft	1338 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1338 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11620-OE.

Signature Control No: 642472942-679428095 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

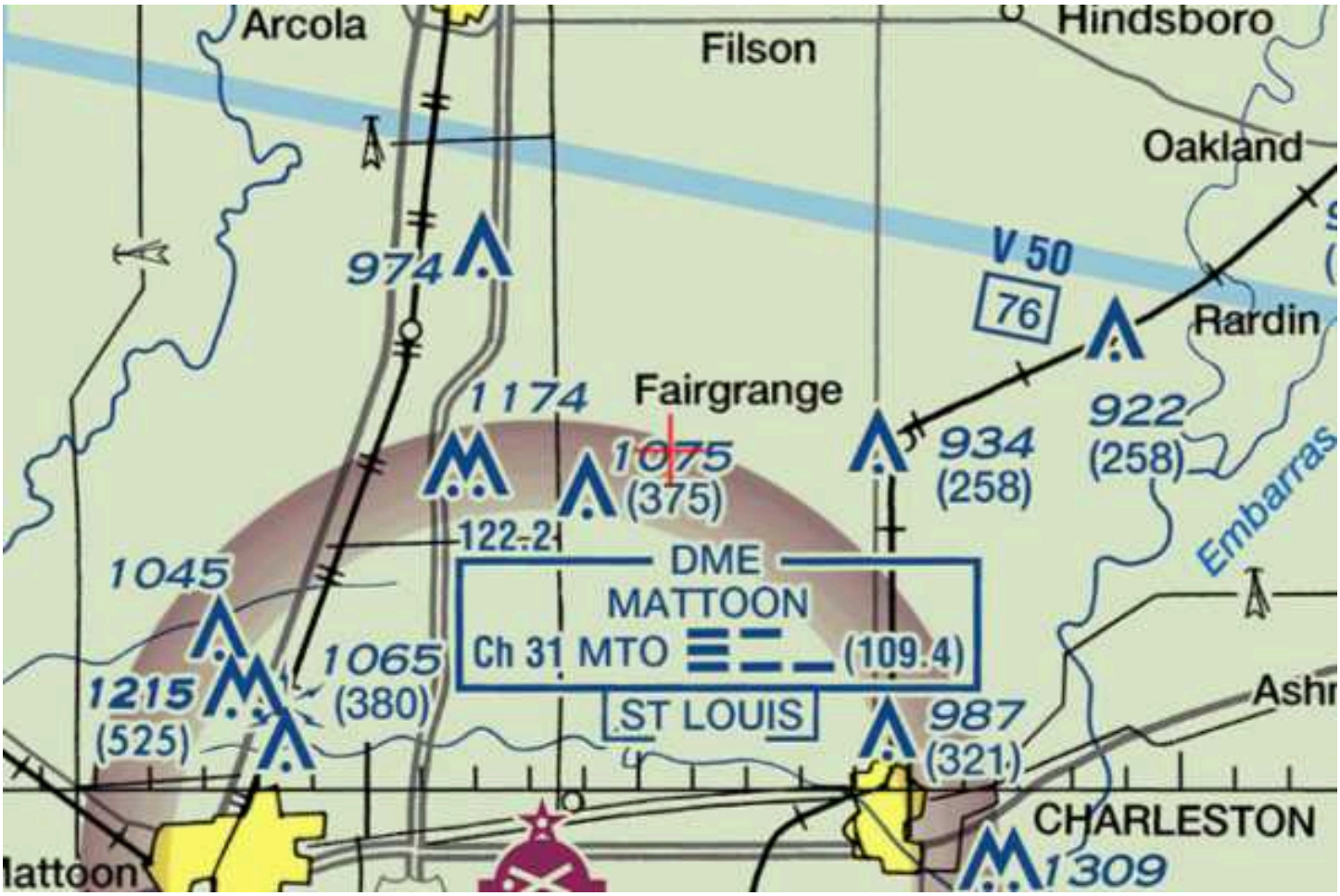
It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11620-OE



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

Aeronautical Study No.
2024-WTE-11621-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T59	39-35-14.16N	88-14-09.16W	688 Ft	656 Ft	1344 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1344 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11621-OE.

Signature Control No: 642472943-679428156 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

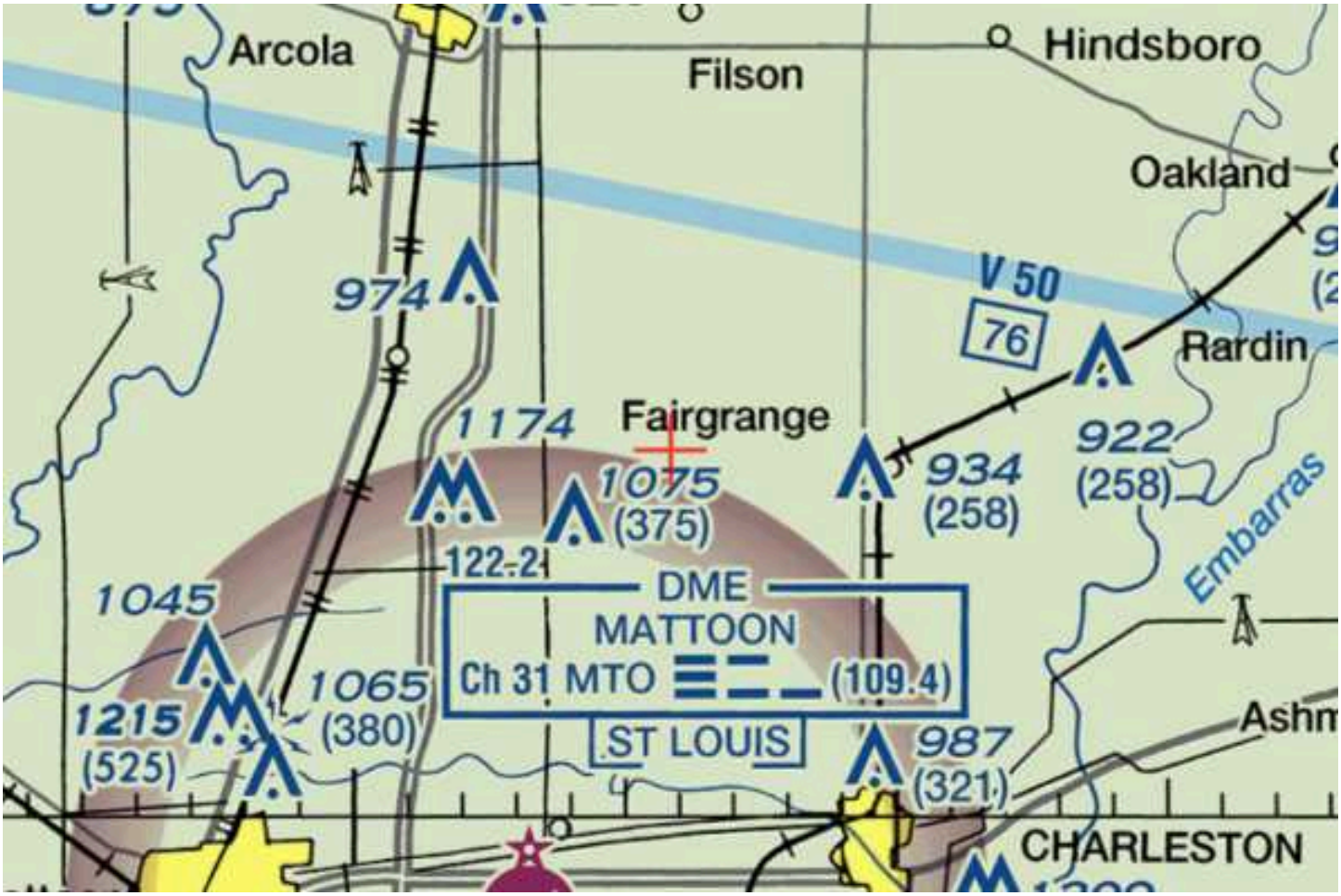
It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11621-OE



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

Aeronautical Study No.
2024-WTE-11622-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T60	39-35-07.15N	88-12-41.84W	687 Ft	656 Ft	1343 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1343 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11622-OE.

Signature Control No: 642472944-679428162 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

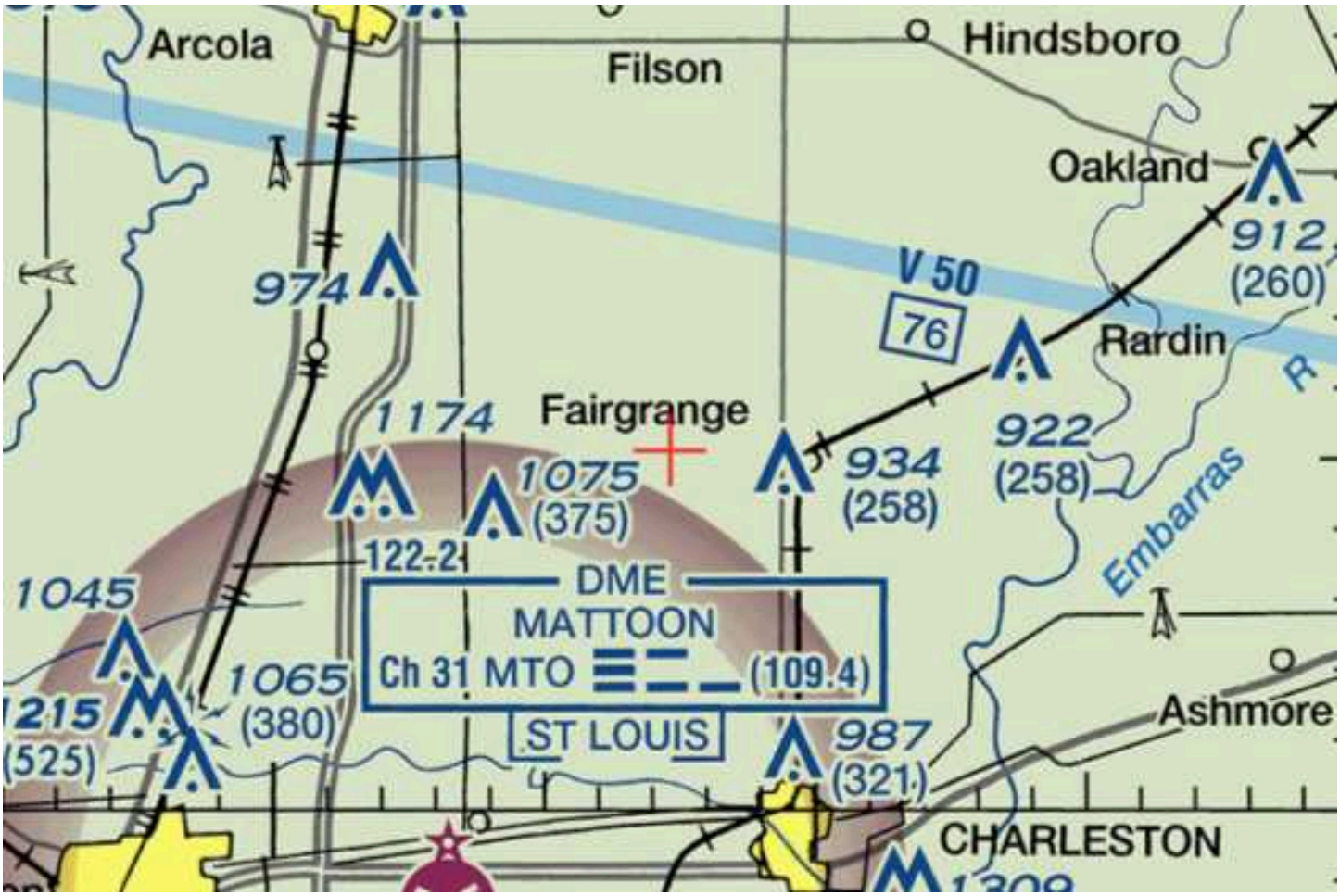
It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11622-OE



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

Aeronautical Study No.
2024-WTE-11623-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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 T61
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T61	39-36-17.39N	88-12-38.81W	673 Ft	656 Ft	1329 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1329 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11623-OE.

Signature Control No: 642472945-679428305 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	/	AGL	/	AMSL	/	LAT	/	LONG
2024-WTE-11563-OE	/	656	/	1331	/	39-38-59.98N	/	88-11-16.82W
2024-WTE-11564-OE	/	656	/	1334	/	39-38-48.22N	/	88-12-10.16W
2024-WTE-11565-OE	/	656	/	1337	/	39-38-49.86N	/	88-10-52.89W
2024-WTE-11566-OE	/	656	/	1342	/	39-38-24.42N	/	88-12-06.82W
2024-WTE-11567-OE	/	656	/	1338	/	39-38-30.90N	/	88-13-02.29W
2024-WTE-11568-OE	/	656	/	1342	/	39-38-26.80N	/	88-13-37.36W
2024-WTE-11569-OE	/	656	/	1345	/	39-38-07.74N	/	88-13-33.74W
2024-WTE-11570-OE	/	656	/	1348	/	39-37-53.33N	/	88-13-44.47W
2024-WTE-11571-OE	/	656	/	1354	/	39-37-49.55N	/	88-12-01.64W
2024-WTE-11572-OE	/	656	/	1353	/	39-37-54.15N	/	88-11-21.06W
2024-WTE-11573-OE	/	656	/	1350	/	39-37-40.87N	/	88-10-49.24W
2024-WTE-11574-OE	/	656	/	1349	/	39-37-34.54N	/	88-11-16.05W
2024-WTE-11575-OE	/	656	/	1347	/	39-37-44.74N	/	88-13-23.50W
2024-WTE-11576-OE	/	656	/	1344	/	39-37-35.61N	/	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

****

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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11623-OE



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

Aeronautical Study No.
2024-WTE-11624-OE

Issued Date: 09/29/2025

COLES WIND, LLC
ALAN MOORE
310 4th St. NE
Suite 300
Charlottesville, VA 22902

**** 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
County, State: Coles, Illinois

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
T62	39-36-13.13N	88-13-15.57W	668 Ft	656 Ft	1324 Ft

In accordance with the provisions of 49 U.S.C., Section 44718 and as applicable Title 10 of the Code of Federal Regulations, part 183a, this aeronautical study was sent to the Military Aviation and Installation Assurance Clearinghouse established by the Secretary of Defense for review. The results of that review resulted in a finding of no risk to national security.

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 Change 1, 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 Airmen (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:

__X__ At least 60 days prior to start of construction (7460-2, Part 1)

__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

Any height exceeding 656 feet above ground level (1324 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination expires on 03/29/2027 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 October 29, 2025. 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, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, 5th floor, 600 Independence Ave, SW., Washington, DC 20597. FAA encourages the use of email to ensure timely processing.

This determination becomes final on November 08, 2025 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. Any questions regarding your petition, 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).

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact lan.norris@faa.gov, at 1-404-305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2024-WTE-11624-OE.

Signature Control No: 642472946-679428592 (DNH -WT)
Julie A. Morgan
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

The FAA completed an aeronautical study of this proposal in accordance with 14 CFR Part 77. The results of aeronautical studies conducted by the FAA are published in determination letters which are public record and available through the FAA public website at https://oeaaa.faa.gov.

This is NOT a construction permit application. This determination does not constitute FAA approval or disapproval of the physical development involved in this proposal. It is a determination with respect to the safe and efficient use of the navigable airspace by aircraft. The FAA does not have land use authority or issue construction permits and cannot prevent construction on privately owned/leased property. Land use authority resides with the government body at the local city, county or state level that is responsible for regulating how land can be used within their jurisdiction, typically through zoning ordinances and other land use planning mechanisms. This determination in no way preempts or waives any ordinances, laws, or regulations of any government body or agency.

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.

1. PROPOSAL DESCRIPTION

Proposed are 62 wind turbines for a wind farm project previously studied and determined under prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The wind farm would be located in an area approximately 6.40 nautical miles (NM) - 11.20 NM north-northeast, extending clockwise to approximately 6.35 NM - 11.15 NM northeast of the airport reference point for Coles County Memorial (MTO) Mattoon/Charleston, IL.

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed wind turbines' described heights and locations are expressed in AGL height, Above Mean Sea Level (AMSL) height and latitude (LAT) / longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2024-WTE-11563-OE	656	1331	39-38-59.98N	88-11-16.82W
2024-WTE-11564-OE	656	1334	39-38-48.22N	88-12-10.16W
2024-WTE-11565-OE	656	1337	39-38-49.86N	88-10-52.89W
2024-WTE-11566-OE	656	1342	39-38-24.42N	88-12-06.82W
2024-WTE-11567-OE	656	1338	39-38-30.90N	88-13-02.29W
2024-WTE-11568-OE	656	1342	39-38-26.80N	88-13-37.36W
2024-WTE-11569-OE	656	1345	39-38-07.74N	88-13-33.74W
2024-WTE-11570-OE	656	1348	39-37-53.33N	88-13-44.47W
2024-WTE-11571-OE	656	1354	39-37-49.55N	88-12-01.64W
2024-WTE-11572-OE	656	1353	39-37-54.15N	88-11-21.06W
2024-WTE-11573-OE	656	1350	39-37-40.87N	88-10-49.24W
2024-WTE-11574-OE	656	1349	39-37-34.54N	88-11-16.05W
2024-WTE-11575-OE	656	1347	39-37-44.74N	88-13-23.50W
2024-WTE-11576-OE	656	1344	39-37-35.61N	88-13-46.35W

2024-WTE-11577-OE / 656 / 1343 / 39-37-35.63N / 88-14-09.85W
2024-WTE-11578-OE / 656 / 1321 / 39-36-49.28N / 88-13-15.19W
2024-WTE-11579-OE / 656 / 1322 / 39-36-53.04N / 88-12-29.63W
2024-WTE-11580-OE / 656 / 1335 / 39-37-15.82N / 88-11-55.63W
2024-WTE-11581-OE / 656 / 1335 / 39-36-44.67N / 88-11-20.01W
2024-WTE-11582-OE / 656 / 1345 / 39-36-44.31N / 88-10-48.81W

2024-WTE-11583-OE / 656 / 1339 / 39-38-54.70N / 88-10-26.33W
2024-WTE-11584-OE / 656 / 1349 / 39-38-43.41N / 88-09-52.86W
2024-WTE-11585-OE / 656 / 1338 / 39-38-59.22N / 88-09-47.01W
2024-WTE-11586-OE / 656 / 1352 / 39-38-49.74N / 88-09-16.04W
2024-WTE-11587-OE / 656 / 1369 / 39-38-32.07N / 88-08-43.12W
2024-WTE-11588-OE / 656 / 1368 / 39-38-27.35N / 88-09-01.48W
2024-WTE-11589-OE / 656 / 1361 / 39-38-30.14N / 88-09-40.59W
2024-WTE-11590-OE / 656 / 1354 / 39-38-26.61N / 88-10-14.00W
2024-WTE-11591-OE / 656 / 1355 / 39-37-58.45N / 88-09-40.48W
2024-WTE-11592-OE / 656 / 1334 / 39-37-47.35N / 88-08-19.56W

2024-WTE-11593-OE / 656 / 1318 / 39-37-08.12N / 88-07-21.47W
2024-WTE-11594-OE / 656 / 1314 / 39-36-46.76N / 88-08-29.86W
2024-WTE-11595-OE / 656 / 1323 / 39-37-02.62N / 88-08-31.59W
2024-WTE-11596-OE / 656 / 1340 / 39-36-49.59N / 88-09-13.99W
2024-WTE-11597-OE / 656 / 1341 / 39-37-08.69N / 88-09-45.90W
2024-WTE-11598-OE / 656 / 1324 / 39-36-12.22N / 88-09-35.81W
2024-WTE-11599-OE / 656 / 1324 / 39-36-23.29N / 88-09-19.44W
2024-WTE-11600-OE / 656 / 1321 / 39-35-52.75N / 88-08-41.56W
2024-WTE-11601-OE / 656 / 1320 / 39-35-28.12N / 88-07-14.45W
2024-WTE-11602-OE / 656 / 1327 / 39-35-27.57N / 88-09-04.80W

2024-WTE-11603-OE / 656 / 1326 / 39-35-28.88N / 88-09-41.36W
2024-WTE-11604-OE / 656 / 1326 / 39-35-28.07N / 88-10-02.26W
2024-WTE-11605-OE / 656 / 1329 / 39-35-23.84N / 88-10-21.20W
2024-WTE-11606-OE / 656 / 1330 / 39-35-08.76N / 88-10-27.55W
2024-WTE-11607-OE / 656 / 1327 / 39-35-04.78N / 88-07-02.76W
2024-WTE-11608-OE / 656 / 1331 / 39-34-28.53N / 88-07-05.58W
2024-WTE-11609-OE / 656 / 1329 / 39-34-21.96N / 88-07-56.58W
2024-WTE-11610-OE / 656 / 1336 / 39-33-54.43N / 88-07-56.83W
2024-WTE-11611-OE / 656 / 1331 / 39-34-09.63N / 88-08-12.59W
2024-WTE-11612-OE / 656 / 1330 / 39-34-28.72N / 88-08-54.73W

2024-WTE-11613-OE / 656 / 1337 / 39-34-23.47N / 88-09-17.79W
2024-WTE-11614-OE / 656 / 1337 / 39-33-55.42N / 88-09-08.73W
2024-WTE-11615-OE / 656 / 1335 / 39-34-23.77N / 88-10-11.67W
2024-WTE-11616-OE / 656 / 1330 / 39-33-54.12N / 88-12-04.55W
2024-WTE-11617-OE / 656 / 1335 / 39-34-23.25N / 88-12-06.69W
2024-WTE-11618-OE / 656 / 1329 / 39-34-27.71N / 88-12-30.41W
2024-WTE-11619-OE / 656 / 1335 / 39-34-27.87N / 88-13-03.93W
2024-WTE-11620-OE / 656 / 1338 / 39-34-50.93N / 88-14-25.53W
2024-WTE-11621-OE / 656 / 1344 / 39-35-14.16N / 88-14-09.16W

2024-WTE-11622-OE / 656 / 1343 / 39-35-07.15N / 88-12-41.84W

2024-WTE-11623-OE / 656 / 1329 / 39-36-17.39N / 88-12-38.81W
2024-WTE-11624-OE / 656 / 1324 / 39-36-13.13N / 88-13-15.57W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 157 feet.

b. Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

1) Terre Haute ATCT/TRACON (HUF) Terre Haute, IN. - HUF_MVA_FUS3_2024 & HUF_MVA_FUS5_2024 - The following would increase the Minimum Vectoring Altitude (MVA) for Sector D from 2300 feet to 2400 feet.

2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE

2) Cincinnati / Northern Kentucky International (CVG) Covington, KY. - LOVEY EIGHT DEPARTURE (RNAV) - The following would increase the Minimum Obstruction Clearance Altitude (MOCA) from HELIS to HISNA from 2300 feet to 2400 feet.

2024-WTE-11563-OE
2024-WTE-11564-OE
2024-WTE-11565-OE
2024-WTE-11566-OE
2024-WTE-11567-OE
2024-WTE-11568-OE
2024-WTE-11569-OE
2024-WTE-11570-OE
2024-WTE-11571-OE
2024-WTE-11572-OE
2024-WTE-11573-OE
2024-WTE-11574-OE
2024-WTE-11575-OE
2024-WTE-11576-OE
2024-WTE-11577-OE
2024-WTE-11578-OE

2024-WTE-11579-OE
2024-WTE-11580-OE
2024-WTE-11581-OE
2024-WTE-11582-OE
2024-WTE-11583-OE
2024-WTE-11584-OE
2024-WTE-11585-OE
2024-WTE-11586-OE
2024-WTE-11587-OE
2024-WTE-11588-OE
2024-WTE-11589-OE
2024-WTE-11590-OE
2024-WTE-11591-OE
2024-WTE-11592-OE
2024-WTE-11593-OE
2024-WTE-11594-OE
2024-WTE-11595-OE
2024-WTE-11596-OE
2024-WTE-11597-OE
2024-WTE-11599-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. Wind turbines within 2 SM of a VFR route are considered to have an adverse effect upon VFR air navigation.

b. Section 77.29(a)(6); effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems. There would be 25 wind turbines within Radar Line of Sight (RLOS) of the Terre Haute, IN. (HUF) ASR-8 facility and 62 wind turbines within RLOS of the Champaign, IL. (CMI) ASR-11 facility. The wind turbines may affect the quality and/or availability of the primary radar signals in the area of the proposed wind farm.

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with JO 7400.2L, Chapter 6-3-17, paragraph a.2.(b), circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. This proposal was previously under 55 prior Aeronautical Study Numbers (ASN), 2020-WTE-5908-OE through 2020-WTE-5962-OE. The proposal was circularized for public comments on 11/09/2020 and 04/23/2021. Determinations of No Hazard (DNH) were issued on 09/02/2021. Requests for extensions were submitted on 01/31/2023. A re-evaluation of the proposal revealed no significant changes, and extensions were issued on 03/18/2024. All prior ASNs have expired, and the project was re-filed under this latest proposal. The aeronautical study identified no significant changes to the aeronautical impacts from the previously studied proposal.

5. BASIS FOR DETERMINATION

a. IFR Effects - The aeronautical study identified an IFR effects for HUF and CVG. Minimum Vectoring Altitudes (MVA) are solely used by ATC, not published for public use and therefore are not circulated for public comment. A review by the controlling facility determined that increasing the altitude in the sector would ensure the required obstacle clearance is maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for HUF. Minimum Obstruction Clearance Altitudes (MOCA) assure obstacle clearance over the entire route segment to which they apply and assure navigational signal coverage within 22 NM of the associated VOR navigational facility. For that portion of the route segment beyond 22 NM from the VOR, where the MOCA is lower than the MEA and there are no plans to lower the MEA to the MOCA, a structure that affects only the MOCA would not be considered to have substantial adverse effect. Other situations require study as ATC may assign altitudes down to the MOCA under certain conditions. A review by the controlling ATC facilities determined that increasing the MOCAs would ensure the required obstacle clearances are maintained and therefore the proposal would not have a substantial adverse effect on IFR operations for CVG. The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR Effects - The aeronautical study identified no effect on any existing or proposed VFR arrival or departure operations. The proposals would be located beyond the traffic pattern airspace for any known public use or military airports. Structures greater than 499 feet AGL, would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of traffic data along potential VFR routes indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. 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.

c. NAVAIDs/Radar Effects - The aeronautical study identified the proposed turbines as being within the RLOS of the HUF and CMI radar facilities as described above. 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. Cumulative Effect - The cumulative impact of the proposed structures, when combined with other proposed and existing structures, was not considered to be significant. Adjacent existing and proposed wind turbines were studied, circularized for public comments and coordinated with the responsible ATC facilities. Further 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.

e. Military Airspace - The aeronautical study included a review by the Army, Navy, Air Force, Department of Defense (DOD) and Department of Homeland Security (DHS). In accordance with JO 7400.2, Par. 6-3-6-f., military personnel are responsible for evaluating the effect on airspace and routes used by the military. The Air Force and DOD identified the structures as being located within the confines or near a military radar line of sight. Additional or taller structures which encroach upon radar line of sight may result in mission impacts that warrant further study and possible MRT. All structures are within the terms in the Mitigation Agreement on file with the Military Aviation and Installation Assurance Siting Clearinghouse. Should future updates, including but not limited to footprint expansion or structure height increase(s), be proposed, the DoD will need to conduct additional mission compatibility evaluation actions to assess the new project parameters for potential adverse impacts.

6. DETERMINATION

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 providing the conditions set forth in this determination are met.

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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
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude

NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2024-WTE-11624-OE

