

**Exhibit V**  
**AM and FM Radio Report**  
**Westwood**  
**March 4, 2021**

# Wind Power GeoPlanner™

## AM and FM Radio Report

### Grover Hill Wind Project



Prepared on Behalf of  
Westwood Professional  
Services, Inc.

March 4, 2021



## Table of Contents

<b>1. Introduction</b>	<b>- 1 -</b>
<b>2. Summary of Results</b>	<b>- 1 -</b>
<b>3. Impact Assessment</b>	<b>- 5 -</b>
<b>4. Recommendations</b>	<b>- 5 -</b>
<b>5. Contact</b>	<b>- 5 -</b>

## 1. Introduction

Comsearch analyzed AM and FM radio broadcast stations whose service could potentially be affected by the proposed Grover Hill Wind Project in Paulding County, Ohio.

## 2. Summary of Results

### AM Radio Analysis

Comsearch found four database records<sup>1</sup> for AM stations within approximately 30 kilometers of the project, as shown in Table 1 and Figure 1. The closest station is WERT, which is currently licensed in Van Wert, Ohio, to the south of the project, 14.09 km from the nearest proposed turbine location.

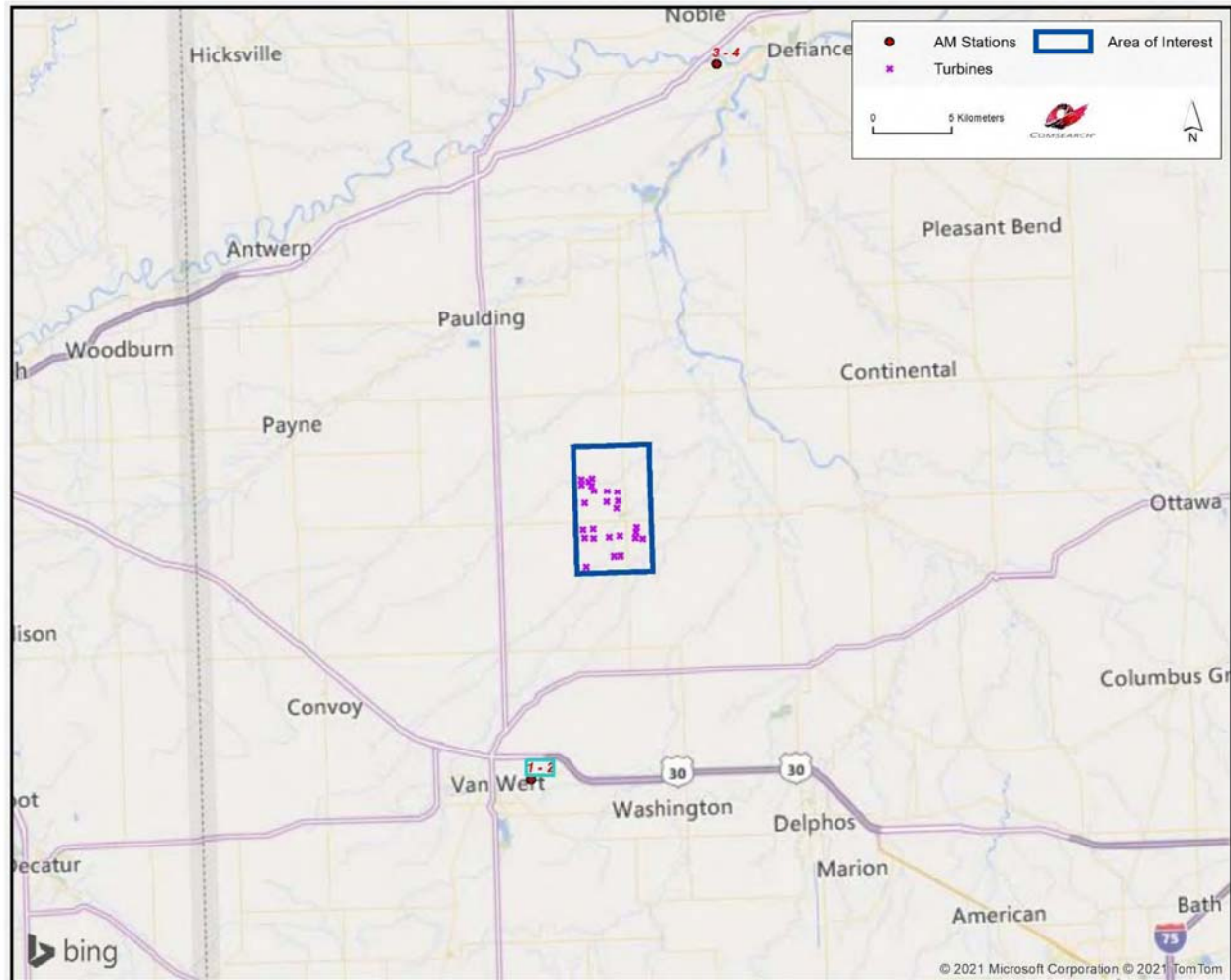
ID	Call Sign	Status <sup>2</sup>	Frequency (kHz)	Transmit ERP <sup>3</sup> (kW)	Operation Time	Latitude (NAD 83)	Longitude (NAD 83)	Distance to the nearest turbine location (km)
1	WERT	LIC	1220	0.25	Daytime	40.871993	-84.554121	14.09
2	WERT	LIC	1220	0.029	Nighttime	40.871993	-84.554121	14.09
3	WONW	LIC	1280	1.0	Daytime	41.278938	-84.397169	27.49
4	WONW	LIC	1280	0.5	Nighttime	41.278938	-84.397169	27.49

*Table 1: AM Radio Stations within 30 Kilometers of Project Area*

<sup>1</sup> Comsearch makes no warranty as to the accuracy of the data included in this report beyond the date of the report. The data presented in this report is derived from the AM/FM station's FCC license and governed by Comsearch's data license notification and agreement located at [http://www.comsearch.com/files/data\\_license.pdf](http://www.comsearch.com/files/data_license.pdf).

<sup>2</sup> LIC = Licensed and operational station; APP = Application for construction permit; CP=Construction permit granted; CP MOD = Modification of construction permit.

<sup>3</sup> ERP = Transmit Effective Radiated Power.



*Figure 1: AM Radio Stations within 30 Kilometers of Project Area*



## FM Radio Analysis

Comsearch determined that there were nine database records for FM stations within a 30-kilometer radius of the Grover Hill Wind Project, as shown in Table 2 and Figure 2. All of these stations are currently licensed and operating, one of which is a translator stations that operates with limited range and one is a low power station. The closest station is WKSD, which is currently licensed in Paulding, Ohio, to the west of the project, 7.07 km from the nearest proposed turbine location.

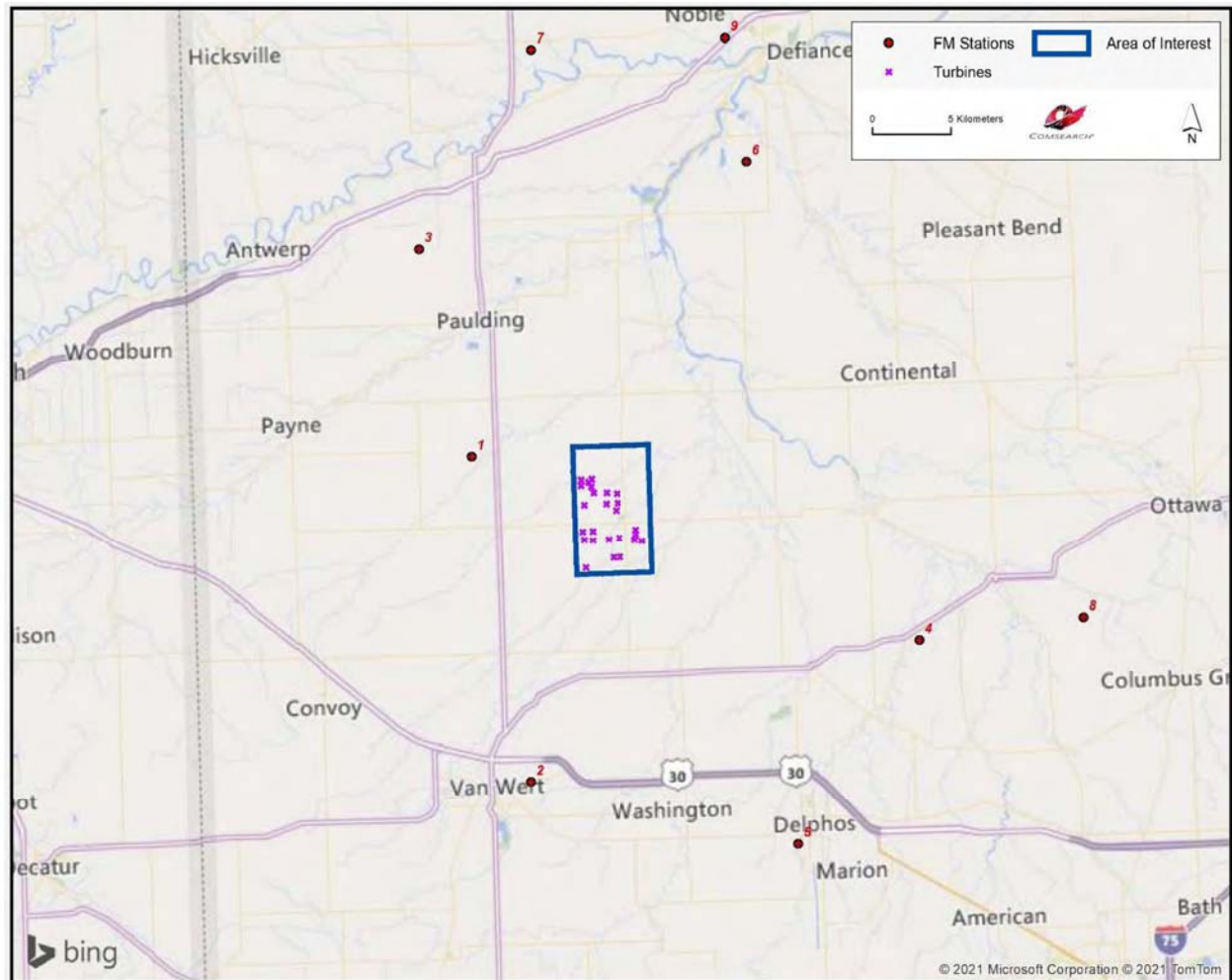
ID	Call Sign	Status <sup>4</sup>	Service <sup>5</sup>	Frequency (MHz)	Transmit ERP <sup>6</sup> (kW)	Latitude (NAD 83)	Longitude (NAD 83)	Distance to the nearest turbine location (km)
1	WKSD	LIC	FM	99.7	3.0	41.058917	-84.591611	7.07
2	W282CF	LIC	FX	104.3	0.25	40.872278	-84.553556	14.05
3	WMYW-LP	LIC	FL	102.7	0.008	41.178667	-84.627167	17.89
4	WBIE	LIC	FM	91.5	5.5	40.946722	-84.256611	18.77
5	WDOH	LIC	FM	107.1	3.3	40.831972	-84.353000	21.52
6	WZOM	LIC	FM	105.7	6.0	41.223111	-84.376611	22.45
7	WDFM	LIC	FM	98.1	50.0	41.291139	-84.538000	27.53
8	WBKS	LIC	FM	93.9	14.0	40.956722	-84.132167	28.54
9	WGDE	LIC	FM	91.9	6.0	41.294778	-84.389944	29.35

*Table 2: FM Radio Stations within 30 km of Project Area*

<sup>4</sup> LIC = Licensed and operational station; APP = Application for construction permit; CP=Construction permit granted; CP MOD = Modification of construction permit.

<sup>5</sup> FM = FM broadcast station; FX = FM translator station; FS = FM auxiliary (backup) station; FB = FM booster station, FL = FM low power station.

<sup>6</sup> ERP = Transmit Effective Radiated Power.



*Figure 2: FM Radio Stations within 30 km of Project Area*

### **3. Impact Assessment**

The exclusion distance for AM broadcast stations varies as a function of the antenna type and broadcast frequency. For directional antennas, the exclusion distance is calculated by taking the lesser of 10 wavelengths or 3 kilometers. For non-directional antennas, the exclusion distance is simply equal to 1 wavelength. Potential problems with AM broadcast coverage are only anticipated when AM broadcast stations are located within their respective exclusion distance limit from wind turbine towers. The closest AM station (WERT) is located 14.09 km from the nearest proposed turbine location. As there were no stations found within 3 kilometers of the project, which is the maximum possible exclusion distance based on a directional AM antenna broadcasting at 1000 KHz or less, the project should not impact the coverage of local AM stations.

The coverage of FM stations is generally not sensitive to interference due to wind turbines, especially when large objects (e.g., wind turbines, towers) are located in the far field region of the radiating antenna to avoid the risk of distorting its radiation pattern. Station WKSD is the nearest FM station to the proposed turbine locations at 7.07 km away. At this distance there should be adequate separation to avoid radiation pattern distortion.

### **4. Recommendations**

Since no impact on the licensed and operational AM or FM broadcast stations was identified in our analysis, no recommendations or mitigation techniques are required for this project.

### **5. Contact**

For questions or information regarding the AM and FM Radio Report, please contact:

Contact person:	David Meyer
Title:	Senior Manager
Company:	Comsearch
Address:	19700 Janelia Farm Blvd., Ashburn, VA 20147
Telephone:	703-726-5656
Fax:	703-726-5595
Email:	<a href="mailto:dmeyer@comsearch.com">dmeyer@comsearch.com</a>
Web site:	<a href="http://www.comsearch.com">www.comsearch.com</a>



**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**5/3/2021 12:45:48 PM**

**in**

**Case No(s). 20-0417-EL-BGN**

Summary: Application - 29 of 40 (Exhibit V - AM and FM Radio Report) electronically filed by Christine M.T. Pirik on behalf of Grover Hill Wind, LLC