

Wind Power GeoPlanner™

AM and FM Radio Report

Buckeye Phase II



Prepared on Behalf of
Everpower

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COMSEARCH
A CommScope Company

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1. Introduction

In this report, Comsearch analyzed AM and FM radio broadcast stations whose service could potentially be affected by the proposed Buckeye Phase II wind energy project in Champaign County, Ohio.

2. Summary of Results

AM Radio Analysis

Comsearch found one database record¹ for AM stations within approximately 30 kilometers of the project, as shown in Table 1 and Figure 1. This record represents station WIZE, which is located in Springfield, Ohio and has a non-directional antenna.

ID	Call Sign	Status	Frequency (kHz)	Transmit ERP (kW)	City	State	Distance to Nearest Turbine (km)
1	WIZE	LIC	1340	1.0	SPRINGFIELD	OH	13.58

Table 1: AM Radio Stations

LIC = Licensed and Operational
 kHz = kiloHertz
 ERP = Transmit Effective Radiated Power
 kW = kilowatts
 km = kilometers

¹ 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.

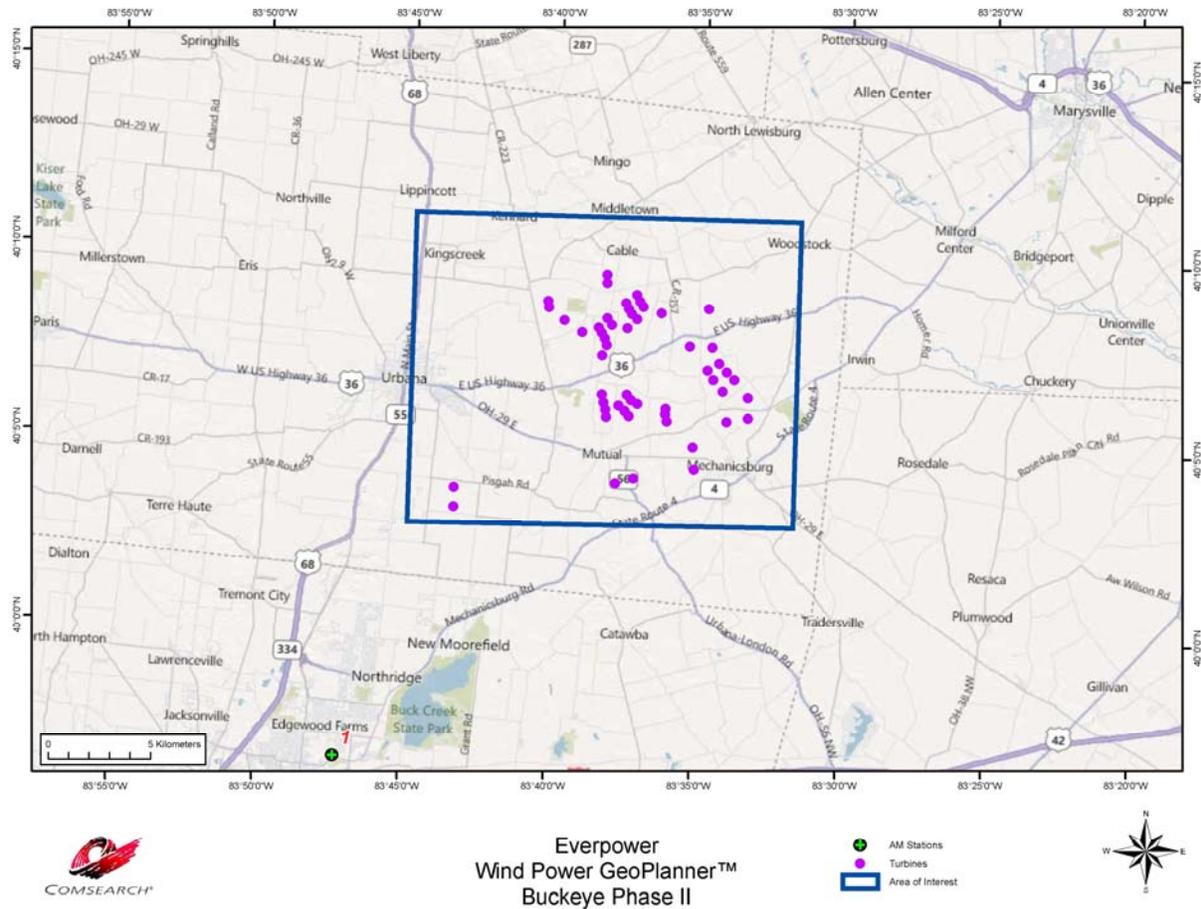


Figure 1: Plot of AM Radio Stations

FM Radio Analysis

Comsearch determined that there were two database records for FM stations within a 30 kilometer radius of the Buckeye Phase II project, as shown in Table 2 and Figure 2. The first of these, W279BB, is a translator station that operates at low power and has limited range. The second record is a full-power station, which is located in South Vienna, OH and operates under call sign WOAR.

ID	Call Sign	Status	Frequency (MHz)	Transmit ERP (kW)	City	State	Distance to Nearest Turbine (km)
1	W279BB	LIC	103.7	0.013	URBANA	OH	3.97
2	WOAR	LIC	88.3	1.0	SOUTH VIENNA	OH	15.05

Table 2: FM Radio Stations

LIC – Licensed and operational station
 MHz = megaHertz
 ERP = Transmit Effective Radiated Power
 kW = kiloWatts
 km = kilometers

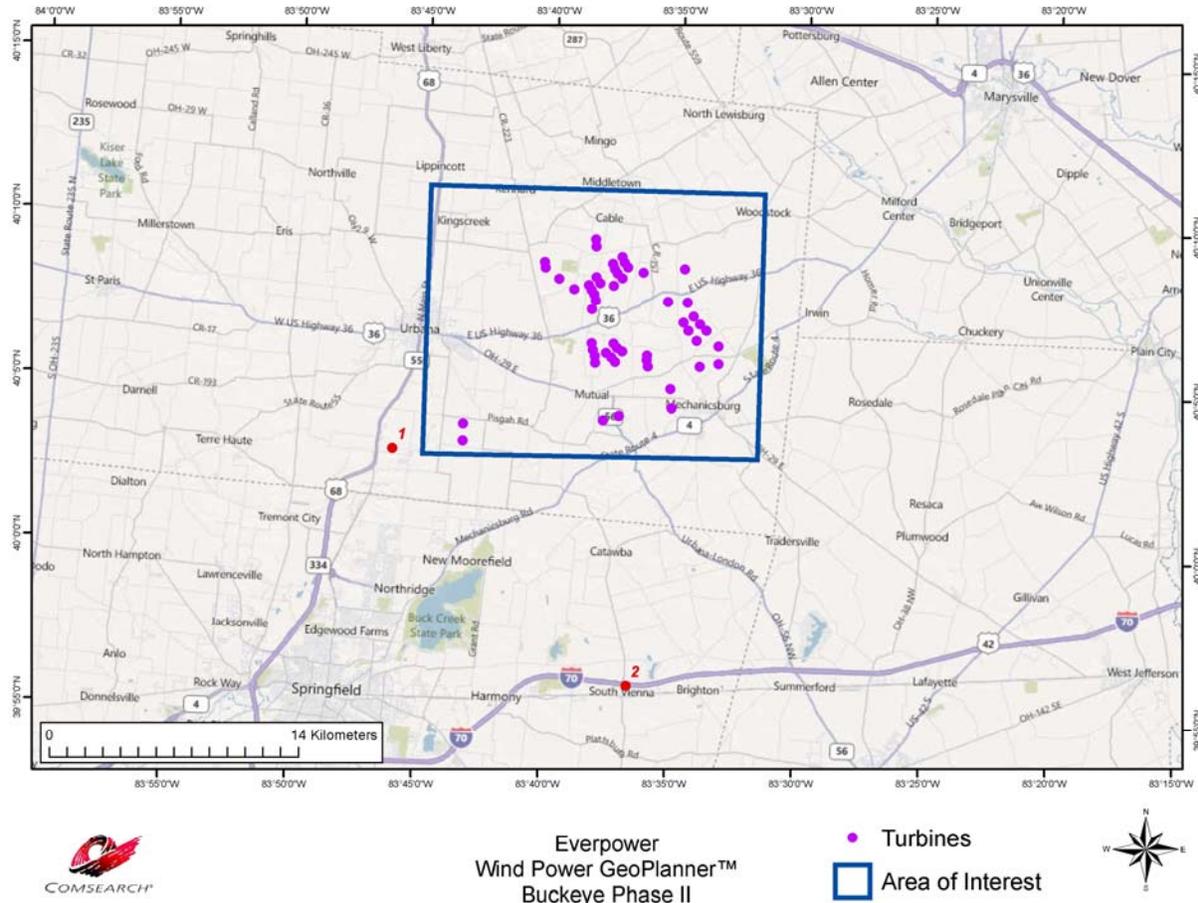


Figure 2: Plot of FM Radio Stations

3. Impact Assessment

Potential problems with AM broadcast coverage are only anticipated when AM broadcast stations with directive antennas are within 3.2 kilometers of wind turbine towers and AM broadcast stations with non-directive antennas are within 0.8 kilometers. The closest station to the Buckeye wind energy project, WIZE, is non-directive and located more than 13.5 kilometers from the nearest turbine. Therefore, no impact to the coverage of AM stations should result due to the presence of the proposed turbines.

The coverage of FM stations, when the stations are at distances greater than 4.0 kilometers from wind turbines, is not subject to degradation. The closest station to the Buckeye project, W279BB, is 3.97 kilometers from the nearest turbine location. Figure 3 shows the coverage contour diagram for the station and the wind turbines closest to the coverage. The closest wind turbine, Turbine ID 124, is inside the coverage contour and may cause a slight reduction in the range of the station in the azimuth it obstructs. This means that the listening audience could be

lost in the area directly on the other side of the turbine. Figure 4 depicts the area where the potential lost audience would exist, which is approximately 0.06 square kilometers of farmland. The other turbines are either on or beyond the coverage contour and will not affect the range of the station. The other FM station in the immediate vicinity, WOAR, is more than 15 kilometers from the nearest turbine and falls well outside the area potentially impacted by the turbines.

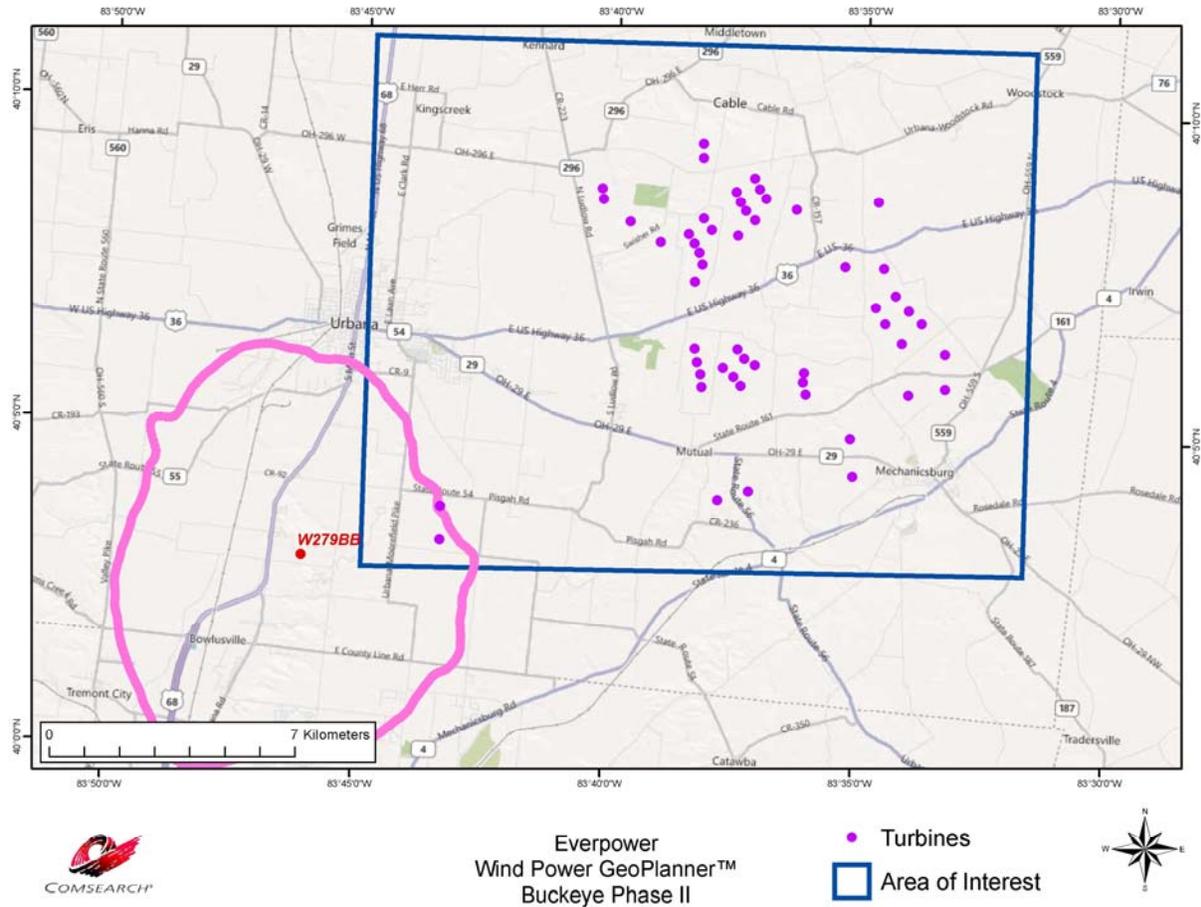


Figure 3: Plot of FM Radio W279BB Coverage Contour and Wind Turbines

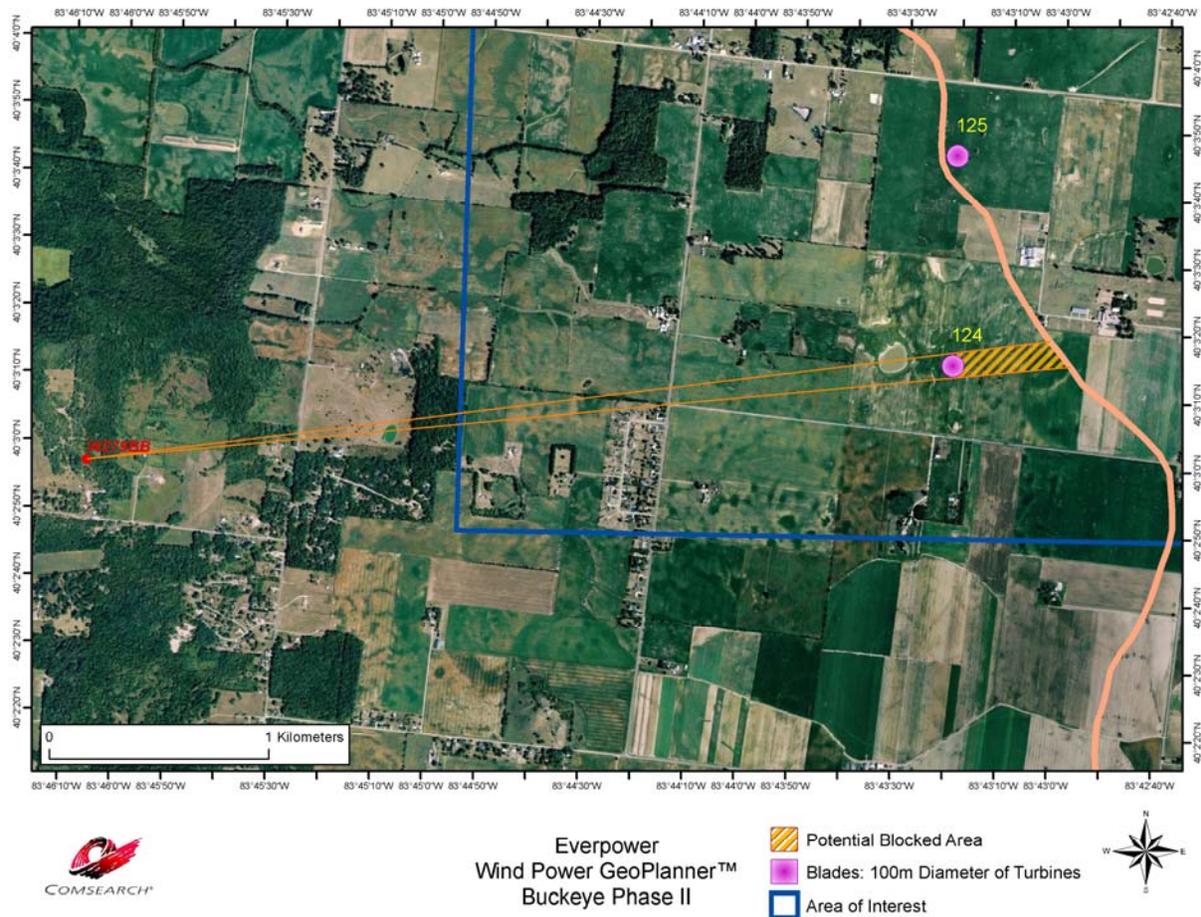


Figure 4: Potential Area of Lost Coverage for FM Radio W279BB Due to Presence of Turbines

4. Recommendations

Since no impact on the AM broadcast station was identified in our analysis, no recommendations or mitigation techniques are required for this project. The obstruction in coverage to FM translator station W279BB will consist of a small geographic area of farmland less than 0.06 square kilometers (see Figure 4). Due to the size and type of land, the FM station will likely not have any objection to the turbine presence. Most broadcast stations do not have property rights with regard to their coverage, as it pertains to any physical structure that may be erected. However, if necessary, the developer can mitigate the obstruction by moving the wind turbine so that it is outside the coverage contour of the station.



5. Contact Us

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

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