

# Wind Power GeoPlanner™

## AM and FM Radio Report

Crown City Wind Energy Project



Prepared on Behalf of  
Air Energy TCI Inc

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**COMSEARCH**  
A CommScope Company

## **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 Us</b>	<b>- 5 -</b>

## 1. Introduction

In this report, Comsearch analyzed AM and FM radio broadcast stations whose service could potentially be affected by the proposed Crown City Wind Energy Project in Cortland County, New York.

## 2. Summary of Results

### AM Radio Analysis

Comsearch found three database records<sup>1</sup> for AM stations within approximately 30 kilometers of the project, as shown in Table 1 and Figure 1. These records represent two different stations, WYBY and WHCU, which are located in Cortland County and adjacent Tompkins County. Station WYBY operates at two different power levels, a higher transmit power for daytime operations and a lower transmit power for nighttime operations.

ID	Call Sign	Status <sup>2</sup>	Frequency (kHz)	Transmit ERP <sup>3</sup> (kW)	City	State	Distance to Nearest Turbine (km)
1	WYBY	LIC	920	1.0	CORTLAND	NY	8.48
2	WYBY	LIC	920	0.5	CORTLAND	NY	8.48
3	WHCU	LIC	870	5.0	ITHACA	NY	28.80

*Table 1: AM Radio Stations*

<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

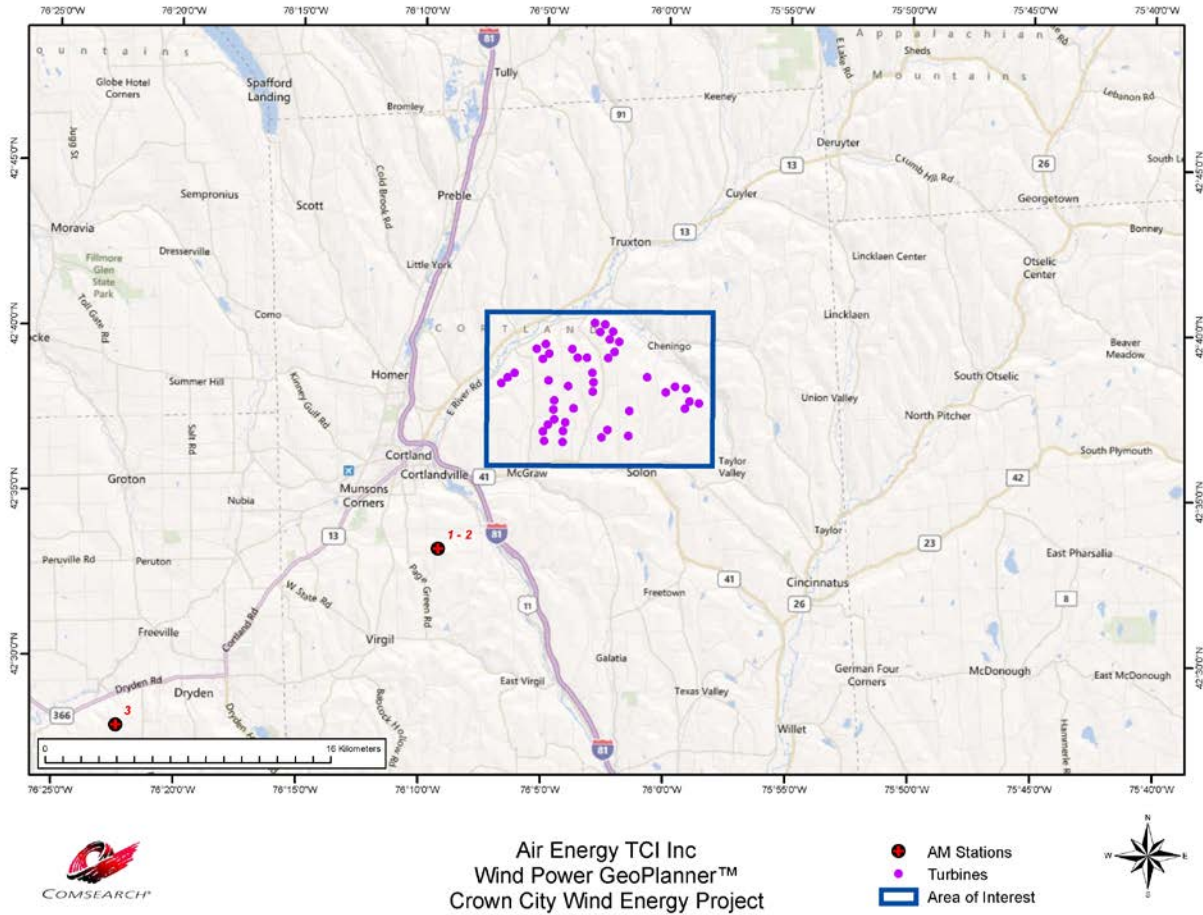


Figure 1: Plot of AM Radio Stations

### FM Radio Analysis

Comsearch determined that there were nineteen database records for FM stations within a 30 kilometer radius of the Crown City Wind Energy Project, as shown in Table 2 and Figure 2. Eleven of these stations are currently licensed and operational, six of which are low-power or translator stations that operate with limited range.

ID	Call Sign	Status	Frequency (MHz)	Transmit ERP (kW)	City	State	Distance to Nearest Turbine (km)
1	NEW	APP	96.3	0.01	CORTLANDVILLE	NY	1.65
2	WDRX-LP	LIC	100.7	0.1	CORTLAND	NY	6.81
3	WSUC-FM	LIC	90.5	0.21	CORTLAND	NY	7.91
4	WSUC-FM	CP	90.5	1.4	CORTLAND	NY	7.91
5	W222AH	LIC	92.3	0.027	CORTLAND	NY	8.23
6	WIII	LIC	99.9	26.0	CORTLAND	NY	8.47
7	WXHC	LIC	101.5	1.3	HOMER	NY	8.69
8	NEW	APP	96.3	0.01	CORTLAND	NY	8.71
9	W240AH	LIC	95.9	0.004	CORTLAND	NY	9.52
10	NEW	APP	92.3	0.01	DRYDEN	NY	17.85
11	NEW	APP	101.1	0.01	MARATHON	NY	20.52
12	WOLF-FM	LIC	105.1	33.0	DERUYTER	NY	20.00
13	WOLF-FM	CP	105.1	1.38	DERUYTER	NY	20.00
14	WOLF-FM	LIC	105.1	1.15	DERUYTER	NY	20.00
15	NEW	APP	92.3	0.01	GROTON	NY	23.69
16	NEW	APP	101.1	0.01	RICHFORD	NY	26.04
17	W251AK	LIC	98.1	0.003	NEDROW	NY	26.30
18	WYXL	LIC	97.3	26.0	ITHACA	NY	28.80
19	WYXL	LIC	97.3	0.7	ITHACA	NY	28.83

*Table 2: FM Radio Stations*

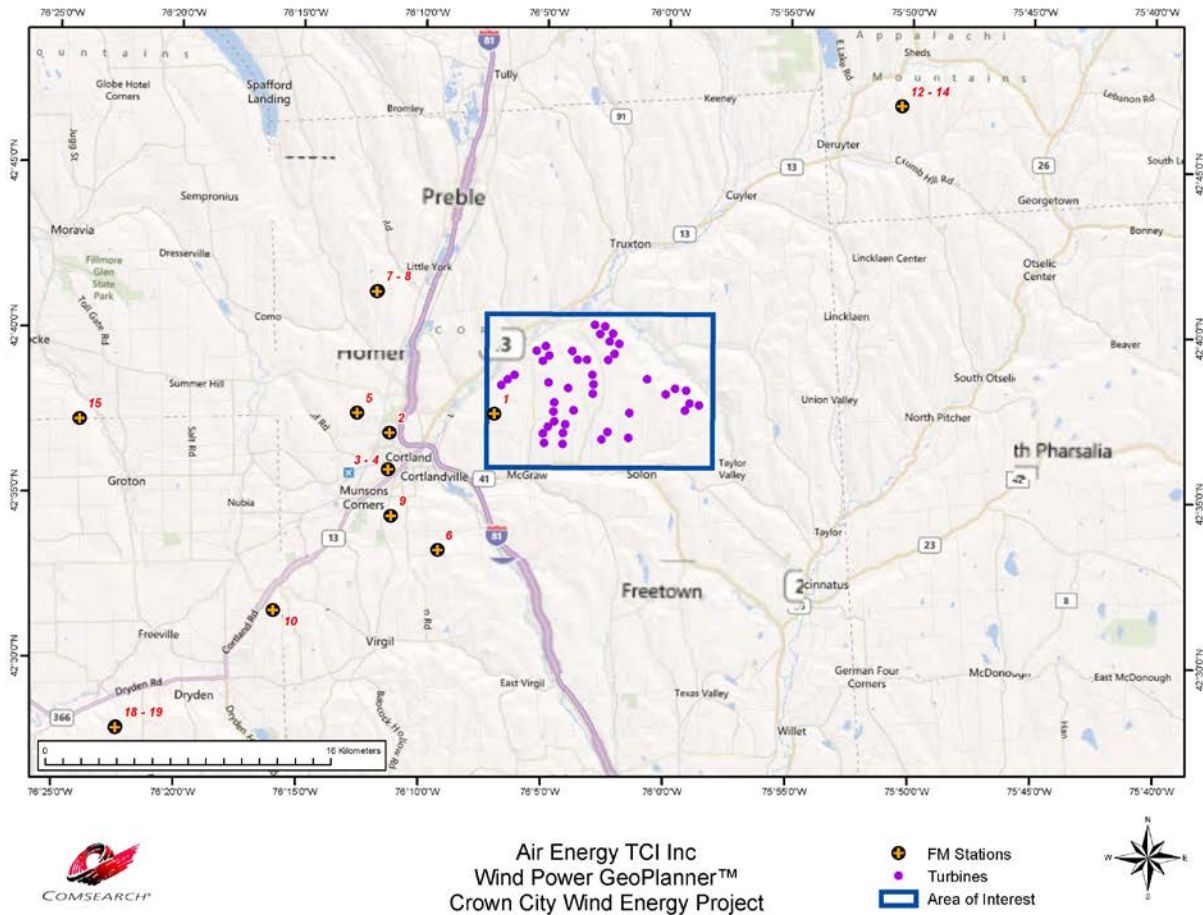


Figure 2: Plot of FM Radio Stations

### **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 operational station to the Crown City Wind Energy Project, WYBY, is non-directive and located more than 8.4 kilometers from the nearest turbine. Therefore, the proposed wind farm should not impact the coverage of local AM stations.

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 operational station to the Crown City Wind Energy Project, WDRX-LP, is more than 6.8 kilometers from the nearest turbine, and falls outside the area potentially impacted by the turbines. However, there is a very low power FM station inside the project area that is not operational but has applied for a license. This station is a mutually exclusive application filed by State University of New York for the city of Cortland at 96.3 MHz. The station is located 1.65 kilometer from the nearest wind turbine with a proposed antenna height of 34 meters. At this height its signal should pass beneath the turbines which have a swath of operation ranging from 50 meters to 150 meters above ground level.

### **4. Recommendations**

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

### **5. Contact Us**

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

Contact person:	Lester Polisky
Title:	Senior Principal Engineer
Company:	Comsearch
Address:	19700 Janelia Farm Blvd., Ashburn, VA 20147
Telephone:	703-726-5860
Fax:	703-726-5595
Email:	lpolisky@comsearch.com
Web site:	www.comsearch.com