Wind Power GeoPlanner™

Amateur Radio Report

Hoffman Falls

Prepared on Behalf of
Liberty Renewables Inc.

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1. Introduction

Amateur radio (or "ham radio") uses radio frequency spectrum in the LF, MF, HF, VHF and UHF bands for a variety of non-commercial communications including private recreation and emergency support. In this report, Comsearch identified amateur licenses located within the proposed Hoffman Falls project area in Madison County, New York (the Project). The Project area of interest (AOI) is defined as the area with a minimum of a 2-mile buffer from all turbine locations as noted in Figure 1.

2. Summary of Results

Comsearch found eleven FCC database records[1] for amateur licenses in the vicinity of the Project, as shown in Table 1 and Figure 1. Our search was performed by geocoding the street address of each amateur licensee, after performing an initial cull using the zip code of the licensee. There are seven zip code in the project region: 13035, 13061, 13310, 13334, 13408, 13409, and 13032.

Call Sign	Operator Name	Address	FCC Expiration Date	Operator Class	Distance to Closest Turbine (km)
KD2WBV	Anderson, John A	4621 State Route 20 Morrisville, NY 13408	3/30/31	Technician	0.44
KC2RRA	MC LAUGHLIN, GARY D	RD 1 TIMBERTOP 5056 BUYEA RD CAZENOVIA, NY 13035	6/1/27	Technician	1.28
W2WFJ	JONES Mr, WARREN F	4051Argos Rd. CAZENOVIA, NY 13035	5/29/30	General	1.45
K8RWO	Caretti Mr., Jerome C	2 Brookside Dr Morrisville, NY 13408	10/26/31	General	1.90
KB2WEP	RIGGALL, ROSEMARY W	CAVALIER APTS APT 2 CAVALIER DR MORRISVILLE, NY 13408	11/3/25	Technician	2.11
KD2VDB	STOKER, JOHN T	3038 BINGLEY ROAD CAZENOVIA, NY 13035	11/23/30	Technician	2.75
KD2VCJ	STOKER, JENNIFER A	3038 BINGLEY ROAD CAZENOVIA, NY 13035	11/23/30	Technician	2.75
KD2VCI	PUUKILA, NOAH R	3038 BINGLEY ROAD CAZENOVIA, NY 13035	11/23/30	Technician	2.75
N2MBZ	KIMBALL, AARON J	5801 Oxbow Rd Canastota, NY 13032	12/28/31	General	2.78
N2MBZ	KIMBALL, AARON J	5801 Oxbow Rd Canastota, NY 13032	12/28/31	Advanced	2.78
W2ZXN	HARMON-KIMBALL, ANDREW L	5801 Oxbow Rd Canastota, NY 13032	7/3/27	General	2.78

Table 1: Amateur Radio Licenses

[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 amateur license holder's FCC license and governed by Comsearch's data license notification and agreement located at http://www.comsearch.com/files/data_license.pdf.

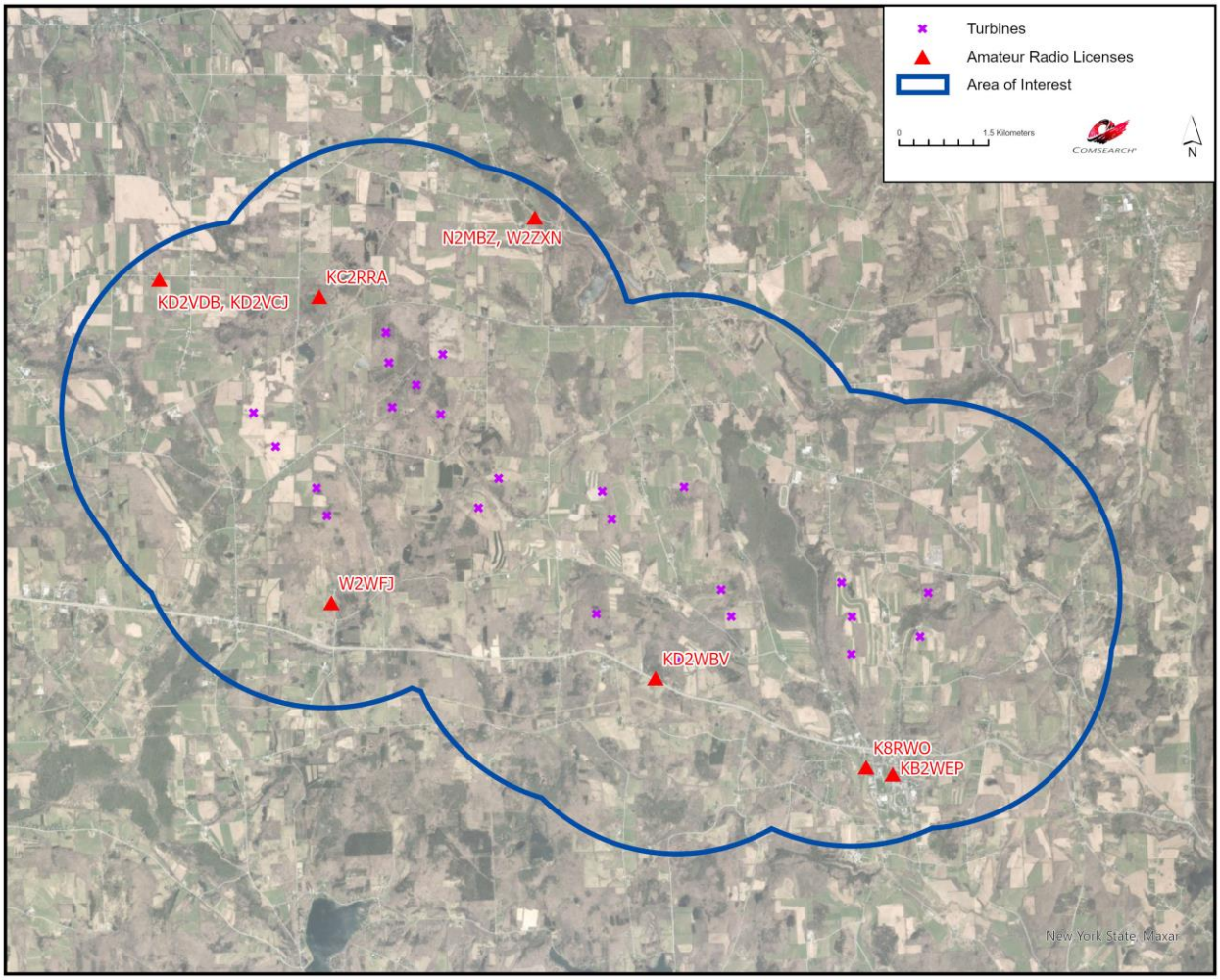

Figure 1: Plot of Amateur Licenses Geocoded by Street Address (Excluding PO Boxes)

Five additional active licenses were found with a Post Office Box address in an overlapping zip code. They can be found in table 2 below.

Call Sign	Operator Name	Address	FCC Expiration Date	Operator Class
KD2APA	Pierce, Tyrone C	PO Box 122 EATON, NY 13334	08/09/2031	Technician
NB2Z	CUKIERSKI, WALTER J	PO Box 193 MUNNSVILLE, NY 134092725	12/08/2033	Amateur Extra
KD2IDL	Episcopo, Brandon A	PO Box 542 Morrisville, NY 13408	03/06/2025	Technician
N2MAE	EPISCOPO, MATTHEW A	PO Box 542 MORRISVILLE, NY 13408	04/03/2025	General
KC2UEH	VREELAND, MICHAEL W	PO Box 78 CAZENOVIA, NY 13035	11/17/2028	Technician

Table 2: Amateur Radio Licenses with Office Box Address

3. Impact Assessment

Amateur radio systems are typically unaffected by the presence of wind turbines, and we do not anticipate any significant harmful effect to their operations in the vicinity of the Project. Although each licensee operates in different frequency ranges using various modes of communication including phone, image and data signaling, there is commonality among these systems with regard to the impact of wind turbines on their operation. Radio wave signals in the US Amateur Radio Bands (i.e., LF, MF, HF, VHF and UHF bands) have long wavelengths which enables them to pass through and around objects such as wind turbine towers and blades.

Furthermore, the frequencies on which these systems operate enable amateurs to transmit and receive signals that propagate large distances despite being in a non-line-of-sight (NLOS) environment. In the LF and MF bands (30 – 3,000 kHz), radio waves propagate by interacting with the Earth's conductive surface, thereby following its curvature and propagating through rugged terrain and over the horizon. This is referred to as "groundwave" propagation. In the HF band (3 – 30 MHz), radio waves use the upper region of the atmosphere known as the "ionosphere" as a reflector back to Earth and thereby extend beyond the horizon. This is referred to as "skywave" propagation which is made possible by the layers of charged particles in the upper atmosphere that cause radio waves to change direction as they propagate back towards the Earth. In the VHF and UHF bands for US amateur radio (50 – 225 MHz and 420 – 1300 MHz, respectively), radio waves can propagation large distances by means of refraction due to the lower region of the atmosphere known as the "troposphere" which has a refraction index that changes as a function of temperature and air pressure.

Therefore, based on these wave characteristics and propagation of signals used for amateur radio communications in the above frequency bands, we do not anticipate any significant harmful effect to their operation by the proposed wind turbines in the Hoffman Falls project area..

4. Contact Us

For questions or information regarding the Amateur Radio Report, please contact:

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