

Wind Power GeoPlanner™

Off-Air TV Analysis

Jericho Rise Wind Farm LLC



Prepared on Behalf of
EDP Renewables

January 28, 2015



COMSEARCH
A CommScope Company

Table of Contents

1. Introduction	- 1 -
2. Summary of Results	- 1 -
3. Impact Assessment	- 5 -
4. Recommendations	- 5 -
5. Contact	- 5 -
6. Appendix A	- 6 -

1. Introduction

Off-air television stations broadcast signals from terrestrially-based facilities directly to television receivers. Comsearch identified those off-air stations whose service could potentially be affected by the proposed Jericho Rise Wind Farm project in Franklin County, New York. Comsearch then examined the coverage of the stations and the communities in the area that could potentially have degraded television reception due to the location of the proposed wind turbines.

2. Summary of Results

The proposed wind energy project area and local communities are depicted in Figure 1, below.



Figure 1: Wind Farm Project Area and Local Communities

To begin the analysis, Comsearch compiled all off-air television stations¹ within 150 kilometers of the center of the project area of interest (AOI). Appendix A contains a tabular summary of these stations. A plot depicting their locations appears in Figure 2, below.

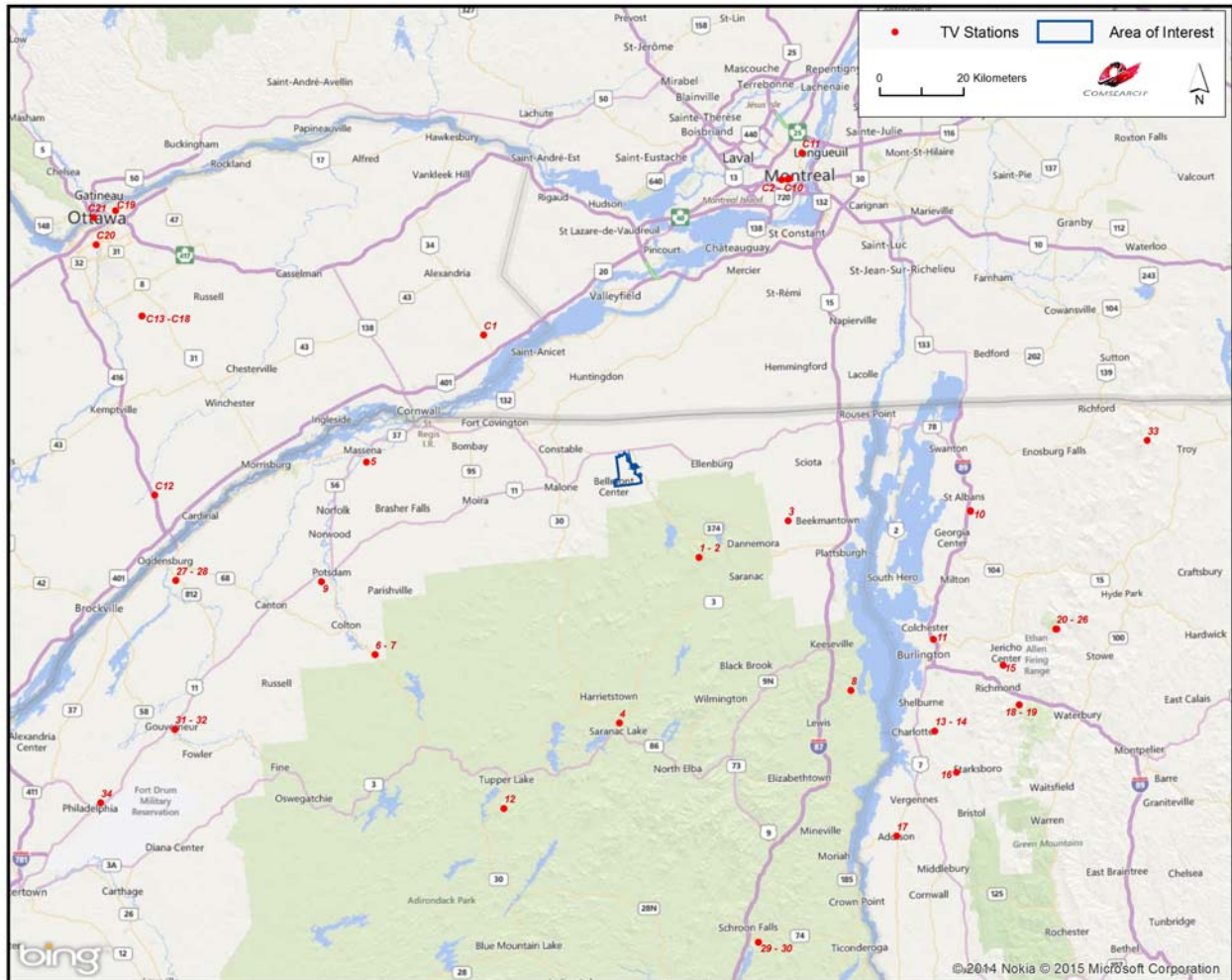


Figure 2: Plot of Off-Air TV Stations within 150 Kilometers of Project Area

TV stations at a distance of 75 kilometers or less are the most likely to provide off-air coverage to the project area and neighboring communities. These stations are listed in Tables 1 and 2, below, and a plot depicting their locations is provided in Figure 3. There are a total of nineteen database records for stations within approximately 75 kilometers of the limits of the project AOI,

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

nine in the United States and ten in Canada. Only fourteen of these stations are currently licensed and operational, three of which are low-power stations or translators. Translator stations are low-power stations that receive signals from distant broadcasters and retransmit the signal to a local audience. These stations serve local audiences and have limited range, which is a function of their transmit power and the height of their transmit antenna.

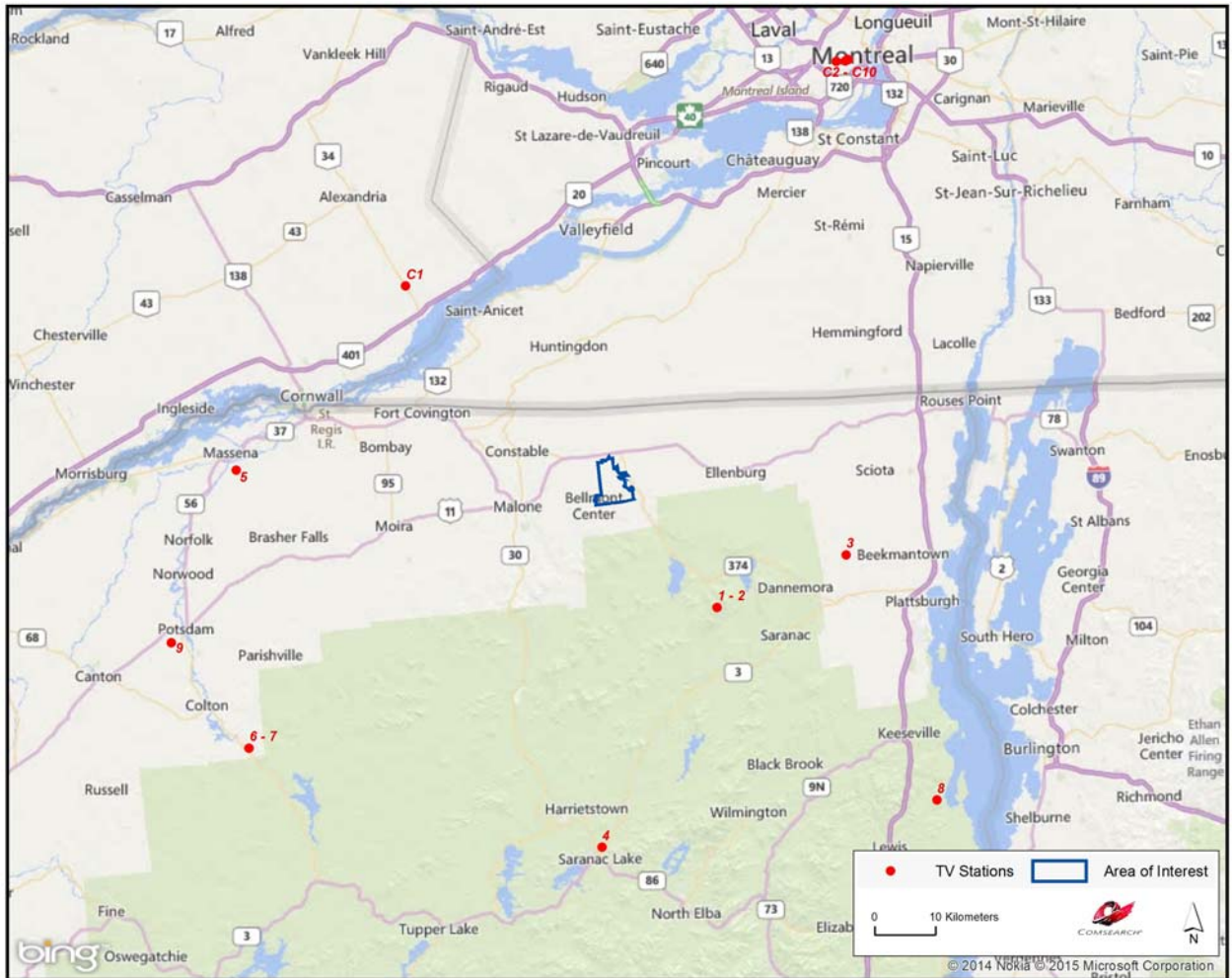


Figure 3: Plot of Off-Air TV Stations within 75 Kilometers of Project Area

ID	Call Sign	Status	Service ²	Channel	Transmit ERP ³ (kW)	Latitude (NAD 27)	Longitude (NAD 27)	Distance to Center of AOI (km)
1	WCFC-TV	LIC	DT	38	55.0	44.695278	-73.883333	26.58
2	WCFC-TV	LIC	DX	38	28.24	44.695278	-73.883333	26.58
3	W36DN-D	APP	LD	47	15.0	44.770556	-73.613611	40.24
4	WNMN	LIC	DT	40	11.4	44.341111	-74.128611	59.75
5	DW20BA	LIC	TX	20	9.0	44.903889	-74.883611	62.03
6	WWNY-CD	LIC	DC	18	4.0	44.491389	-74.857500	73.91
7	WNPI-DT	LIC	DT	23	40.0	44.491389	-74.857500	73.91
8	W46ED-D	LIC	LD	46	0.182	44.403611	-73.434167	74.62
9	NEW	APP	LD	26	1.0	44.648333	-75.018889	77.17

Table 1: Off-Air TV Stations within 75 Kilometers of Project Area (United States)

ID	Call Sign	Status	Class ⁴	Channel	Transmit ERP (kW)	Latitude (NAD 83)	Longitude (NAD 83)	Distance to Center of AOI (km)
C1	CJOH-TV-8	OP	R	8	260.0	45.176389	-74.526944	47.27
C2	CFTU-DT	OP	R	29	0.91	45.503056	-73.615556	79.13
C3	CFHD-DT	OP	R	47	5.5	45.503333	-73.596389	79.89
C4	CJNT-DT	AU	R	49	4.0	45.505000	-73.591111	80.25
C5	CBMT-DT(2)	AU	R	21	436.34	45.505556	-73.591667	80.29
C6	CBFT-DT(2)	AU	R	19	447.82	45.505556	-73.591667	80.29
C7	CFCF-DT	OP	R	12	10.6	45.505556	-73.591667	80.29
C8	CKMI-DT-1	OP	R	15	8.0	45.505556	-73.591667	80.29
C9	CFTM-DT	OP	R	10	11.0	45.505556	-73.591667	80.29
C10	CFJP-DT	OP	R	35	17.71	45.505556	-73.591667	80.29

Table 2: Off-Air TV Stations within 75 Kilometers of Project Area (Canada)

² Definitions of US service and status codes:

DT – Digital television broadcast station
 DX – Digital auxiliary station
 LD – Low-power digital television broadcast station
 TX – Translator station
 DC – Class A digital television broadcast station
 LIC – Licensed and operational station
 APP – Application for construction permit, not yet operational

³ ERP = Transmit Effective Radiated Power

⁴ Definitions of Canadian class and status codes:

R – Regular VHF Television Broadcast Station
 OP – Licensed and operational station
 AU – Authorized, not yet fully operational

3. Impact Assessment

Two of the licensed full-power stations, WCFE-TV (U.S.) and CJOH-TV-8 (Canada), may have their reception disrupted in and around the Jericho Rise Wind Farm project, primarily in locations on the opposite side of the project area, relative to the station antennas. Communities and homes to the north and west of the project may have degraded reception of station WCFE-TV, which is located southeast of the project area, after the wind turbines are installed. Similarly, Canadian station CJOH-TV-8, which broadcasts from northwest of the project area, may have diminished reception in communities directly to the south and the east.

However, based on the low number of full-power TV channels available in the immediate vicinity of the project area, it is unlikely that off-air television stations are the primary mode of television service for the local communities. TV cable service, where available, and direct broadcast satellite service (DBS) are more likely the dominant modes of service delivery.

4. Recommendations

Both cable service and direct broadcast satellite service will be unaffected by the presence of the wind turbine facility and may be offered to those residents who can show that their off-air TV reception has been disrupted by the presence of the wind turbines after they are installed.

5. Contact

For questions or information regarding the Off-Air TV Analysis, please contact:

Contact person:	Denise Finney
Title:	Account Manager
Company:	Comsearch
Address:	19700 Janelia Farm Blvd., Ashburn, VA 20147
Telephone:	703-726-5650
Fax:	703-726-5595
Email:	dfinney@comsearch.com
Web site:	www.comsearch.com

Appendix A

ID	Call Sign	Status	Service ⁵	Channel	Transmit ERP ⁶ (kW)	Latitude (NAD 27)	Longitude (NAD 27)	Distance to Center of AOI (km)
1	WCFE-TV	LIC	DT	38	55.0	44.695278	-73.883333	26.58
2	WCFE-TV	LIC	DX	38	28.24	44.695278	-73.883333	26.58
3	W36DN-D	APP	LD	47	15.0	44.770556	-73.613611	40.24
4	WNMN	LIC	DT	40	11.4	44.341111	-74.128611	59.75
5	DW20BA	LIC	TX	20	9.0	44.903889	-74.883611	62.03
6	WWNY-CD	LIC	DC	18	4.0	44.491389	-74.857500	73.91
7	WNPI-DT	LIC	DT	23	40.0	44.491389	-74.857500	73.91
8	W46ED-D	LIC	LD	46	0.182	44.403611	-73.434167	74.62
9	NEW	APP	LD	26	1.0	44.648333	-75.018889	77.17
10	WBVT-LP	APP	TX	30	30.0	44.783333	-73.063611	82.58
11	W51CB	LIC	TX	51	43.2	44.509722	-73.184722	83.27
12	W25AT-D	LIC	LD	25	0.165	44.159444	-74.475278	85.30
13	W19BR	LIC	TX	19	63.8	44.312778	-73.186111	95.96
14	WGMU-LP	LIC	TX	39	60.09	44.312778	-73.186111	95.96
15	WBVT-LP	LIC	TX	30	0.07	44.450556	-72.976944	100.92
16	W25BT-D	LIC	LD	25	0.369	44.223333	-73.124167	106.32
17	W46IT-D	LIC	LD	46	0.341	44.088333	-73.306944	108.08
18	W16AL	LIC	TX	16	43.2	44.364444	-72.931389	108.88
19	W16AL	CP	LD	16	12.8	44.364444	-72.931389	108.88
20	WPTZ	LIC	DT	14	650.0	44.525556	-72.816111	109.00
21	WPTZ	LIC	DX	14	3.98	44.525556	-72.816111	109.00
22	WCAX-TV	LIC	DT	22	443.0	44.525556	-72.816111	109.00
23	WCAX-TV	CP MOD	DT	22	550.0	44.525556	-72.816111	109.00
24	WVNY	LIC	DT	13	10.0	44.525833	-72.815833	109.01
25	WFFF-TV	LIC	DT	43	47.0	44.525833	-72.815833	109.01
26	WETK	LIC	DT	32	90.0	44.525556	-72.814167	109.14
27	W20CV	LIC	TX	20	2.0	44.650000	-75.456111	110.38
28	W20CV	CP	LD	20	0.35	44.650000	-75.456111	110.38

⁵ Definitions of service and status codes :

DT – Digital television broadcast station
 DS – Digital special temporary authority (STA)
 DX – Digital auxiliary station
 LD – Low-power digital television broadcast station
 TX – Translator station
 CA – Class A analog television broadcast station
 DC – Class A digital television broadcast station
 LIC – Licensed and operational station
 CP – Construction permit granted
 CP MOD – Modification of construction permit
 APP – Application for construction permit, not yet operational

⁶ ERP = Transmit Effective Radiated Power

ID	Call Sign	Status	Service ⁵	Channel	Transmit ERP ⁶ (kW)	Latitude (NAD 27)	Longitude (NAD 27)	Distance to Center of AOI (km)
29	W07BI	LIC	TX	7	0.013	43.865556	-73.722500	116.48
30	W09BB	LIC	TX	9	0.013	43.865556	-73.722500	116.48
31	W09CV	LIC	TX	9	0.1	44.329722	-75.455833	123.76
32	W09CV	CP	LD	9	0.25	44.329722	-75.455833	123.76
33	W14CK	LIC	TX	14	11.6	44.924167	-72.526111	124.36
34	NEW	APP	LD	45	5.0	44.170556	-75.676389	148.01

Table A: Off-Air TV Stations within 150 Kilometers of Project Area

ID	Call Sign	Status	Class ⁷	Channel	Transmit ERP (kW)	Latitude (NAD 83)	Longitude (NAD 83)	Distance to Center of AOI (km)
C1	CJOH-TV-8	OP	R	8	260	45.176389	-74.526944	47.27
C2	CFTU-DT	OP	R	29	0.91	45.503056	-73.615556	79.13
C3	CFHD-DT	OP	R	47	5.5	45.503333	-73.596389	79.89
C4	CJNT-DT	AU	R	49	4.0	45.505000	-73.591111	80.25
C5	CBMT-DT(2)	AU	R	21	436.34	45.505556	-73.591667	80.29
C6	CBFT-DT(2)	AU	R	19	447.82	45.505556	-73.591667	80.29
C7	CFCF-DT	OP	R	12	10.6	45.505556	-73.591667	80.29
C8	CKMI-DT-1	OP	R	15	8.0	45.505556	-73.591667	80.29
C9	CFTM-DT	OP	R	10	11.0	45.505556	-73.591667	80.29
C10	CFJP-DT	OP	R	35	17.71	45.505556	-73.591667	80.29
C11	CIVM-DT	OP	R	26	269.0	45.559444	-73.552500	87.00
C12	CKWS-TV-2	OP	A	26	7.2	44.831944	-75.521111	112.54
C13	CITY-DT-3	OP	R	17	5.1	45.216944	-75.563889	121.39
C14	CHCH-DT-1	AU	R	22	25.0	45.216944	-75.563889	121.39
C15	CITS-DT-1	OP	R	42	37.0	45.216944	-75.563889	121.39
C16	CHRO-DT-43	OP	R	43	50.0	45.216944	-75.563889	121.39
C17	CFMT-DT-2	OP	R	27	15.0	45.216944	-75.563889	121.39
C18	CJMT-DT-2	OP	R	20	15.0	45.216944	-75.563889	121.39
C19	CRC-DT-4	TO	R	46	0.318	45.442778	-75.646667	136.91
C20	CRC-DT-3	TO	R	46	0.45	45.369444	-75.704167	137.58
C21	CRC-DT-5	TO	R	46	0.104	45.428056	-75.712500	140.83

Table A-2: Off-Air TV Stations within 150 Kilometers of Project Area (Canada)

⁷ Definitions of class and status codes:
R – Regular VHF Television Broadcast Station
A – Class A Television Broadcast Station
OP – Licensed and operational station
AU – Authorized, not yet fully operational
TO – Temporary operational permit