Supplemental Appendix C: Supplemental AM/FM Radio and Television Analysis

Wind Power GeoPlanner™

AM, FM and TV Impact Study

Scioto Ridge 345 kV Transmission Line

Prepared on Behalf of
Innogy Renewables US LLC

August 27, 2019

COMSEARCH®
A CommScope Company

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1. Introduction

Comsearch identified AM, FM, and over-the-air (OTA) TV broadcast stations whose service could potentially be affected by the Scioto Ridge 345 kV Transmission Lines project in Hardin, County, Ohio. Comsearch then examined the coverage of these stations with respect to the homes near the project area that could potentially have degraded signal reception due to the location of the transmission line.

Figure 1 shows a map of the transmission line route and the location of the three nearest home locations with respect to the route. Table 1 lists the ID number of the homes, their address, coordinates, and closest distance to the transmission line.

Figure 1: Map of Scioto Transmission Lines and Homes in the Vicinity

Home ID	Owner Status	Address	LAT	LON	Distance to Trans. Line (meters)
1	Participating	PO Box 165, Kenton, OH 43326	40.56169	-83.75268	83.2
2	Participating	17780 CR 75, Belle Center, OH 43310	40.56351	-83.75135	109.9
3	Non Participating	100 E Water St, Sandusky, OH 44870	40.58348	-83.74164	142.7

Table 1: Homes Within 500 ft of Transmission Line

2. Summary of Results

AM Radio Analysis

Comsearch found ten database records[1] for AM stations within approximately 50 km of the project transmission line, as shown in Table 2 and Figure 2. All of the stations are licensed separately for daytime and nighttime operations, with a higher transmit power generally permitted during daytime hours. With the exception of WQTT, the coverage contours of these AM stations overlap with the homes in Table 1.

ID	Call Sign	Status	Frequency (kHz)	Transmit ERP (kW)	Operation Time	Latitude (NAD 27)	Longitude (NAD 27)	Distance to Trans. Line (km)
1	WBLL	LIC	1390	0.5	Daytime	40.36811	-83.7338	20.7
2	WBLL	LIC	1390	0.081	Nighttime	40.36811	-83.7338	20.7
3	WIMA	LIC	1150	1.0	Daytime	40.67977	-84.1094	32.8
4	WIMA	LIC	1150	1.0	Nighttime	40.67977	-84.1094	32.8
5	WCIT	LIC	940	0.25	Daytime	40.72255	-84.0844	32.9
6	WCIT	LIC	940	0.006	Nighttime	40.72255	-84.0844	32.9
7	WFIN	LIC	1330	1.0	Daytime	41.00839	-83.6352	47.5
8	WFIN	LIC	1330	0.079	Nighttime	41.00839	-83.6352	47.5
9	WQTT	LIC	1270	0.5	Daytime	40.24617	-83.3305	49.8
10	WQTT	LIC	1270	0.5	Nighttime	40.24617	-83.3305	49.8

Table 2: AM Radio Stations within 50 km of Transmission Line

[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.

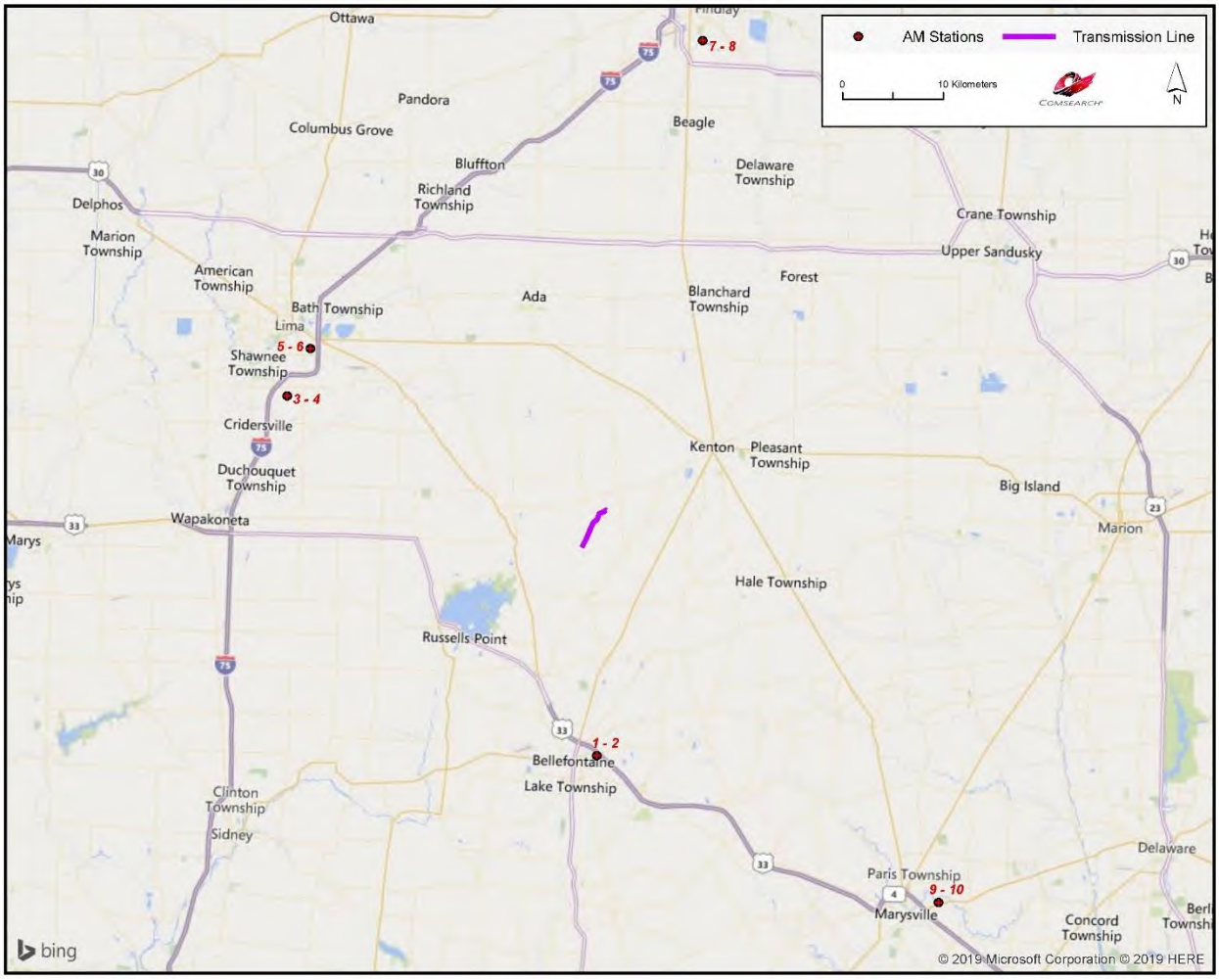

Figure 2: AM Radio Stations within 50 km of Transmission Line

FM Radio Analysis

Comsearch determined that there were 41 database records for FM stations within 50 kilometers of the transmission line, as shown in Table 3 and Figure 3. Of these stations, six of them have coverage contours that overlap with the homes in Table 1: WKTN, WPKO-FM, WIMT, WGLE, WKXA and WIMT.

ID	Call Sign	Status[2]	Service[3]	Frequency (MHz)	Transmit ERP[4] (kW)	Latitude (NAD 27)	Longitude (NAD 27)	Distance to T-Line (km)
1	WOHP-LP	LIC	FL	101.3	0.1	40.44394	-83.8052	12.8
2	W286AB	LIC	FX	105.1	0.05	40.64255	-83.5858	13.8
3	WRPO-LP	LIC	FL	93.5	0.1	40.46811	-83.8924	14.8
4	WKTN	LIC	FM	95.3	3.5	40.64478	-83.5663	15.4
5	WKEN	LIC	FM	88.5	2.8	40.532	-83.5474	16.8
6	W231BY	LIC	FX	94.1	0.01	40.36922	-83.7297	20.6
7	WPKO-FM	LIC	FM	98.3	1.75	40.36811	-83.7338	20.7
8	W297BP	LIC	FX	107.3	0.25	40.36811	-83.7338	20.7
9	WONB	LIC	FM	94.9	3.0	40.76616	-83.8372	21.8
10	WSOH	LIC	FM	88.9	0.4	40.33539	-83.6627	25.5
11	WDEQ-FM	LIC	FM	91.7	0.1	40.31505	-83.923	29.9
12	WIMT	LIC	FS	102.1	13.0	40.66394	-84.0852	30.3
13	WZRX-FM	LIC	FM	107.5	1.35	40.66394	-84.0852	30.3
14	WVLO	LIC	FM	99.3	4.49	40.66377	-84.0859	30.3
15	WYSM	LIC	FM	89.3	3.0	40.65422	-84.1099	31.8
16	WGLE	LIC	FM	90.7	50.0	40.65422	-84.1099	31.8
17	WFGF	LIC	FM	92.1	3.0	40.65561	-84.1149	32.2
18	WEGE	LIC	FM	104.9	3.0	40.72311	-84.0836	32.9
19	W253CM	LIC	FX	98.5	0.25	40.74019	-84.1056	35.4
20	WTTP-LP	LIC	FL	101.1	0.1	40.75116	-84.1202	37.1
21	WBWH-LP	LIC	FL	96.1	0.066	40.897	-83.9027	37.3
22	WHJM	LIC	FM	88.7	1.0	40.46721	-84.19	37.8
23	WZMO-LP	LIC	FL	104.7	0.1	40.60395	-83.2799	38.3

[2] LIC = Licensed and operational station; APP = Application for construction permit; CP=Construction permit granted; CP MOD = Modification of construction permit.

[3] FM = FM broadcast station; FX = FM translator station; FL = Low-power FM station; FS = FM auxiliary (backup) station; FB = FM booster station.

[4] ERP = Transmit Effective Radiated Power.

ID	Call Sign	Status[2]	Service[3]	Frequency (MHz)	Transmit ERP[4] (kW)	Latitude (NAD 27)	Longitude (NAD 27)	Distance to T-Line (km)
24	WKXA-FM	LIC	FS	100.5	20.0	40.91667	-83.5958	38.4
25	WKXA-FM	LIC	FM	100.5	20.0	40.91672	-83.5958	38.4
26	WTGN	LIC	FM	97.7	6.0	40.75644	-84.1333	38.4
27	WIMT	LIC	FM	102.1	11.0	40.63422	-84.208	39.1
28	WMLX	LIC	FM	103.3	1.95	40.63422	-84.208	39.1
29	WCBV-LP	LIC	FL	105.9	0.093	40.73727	-84.1624	39.5
30	W231AZ	LIC	FX	94.1	0.027	40.33727	-84.1308	39.7
31	WOSB	LIC	FM	91.1	6.8	40.6845	-83.2566	41.6
32	WMRN-FM	LIC	FM	94.3	3.0	40.60756	-83.2371	41.9
33	WWSR	LIC	FM	93.1	3.0	40.76311	-84.183	42.4
34	WNHC-LP	LIC	FL	104.1	0.09	40.77005	-84.1841	42.8
35	WBUK	LIC	FM	106.3	1.4	40.95589	-83.9116	43.7
36	WXMF	LIC	FM	91.9	6.0	40.61422	-83.2155	43.8
37	WNNP	LIC	FM	104.3	3.4	40.30617	-83.3291	45.6
38	W204CU	LIC	FX	88.7	0.027	40.9995	-83.6158	46.8
39	WMVR-FM	LIC	FM	105.5	6.0	40.30116	-84.2058	47.2
40	W231AJ	LIC	FX	94.1	0.05	41.02311	-83.6563	48.8
41	W238CX	LIC	FX	95.5	0.25	41.02311	-83.6563	48.8

Table 3: FM Radio Stations within 50 km of Transmission Line

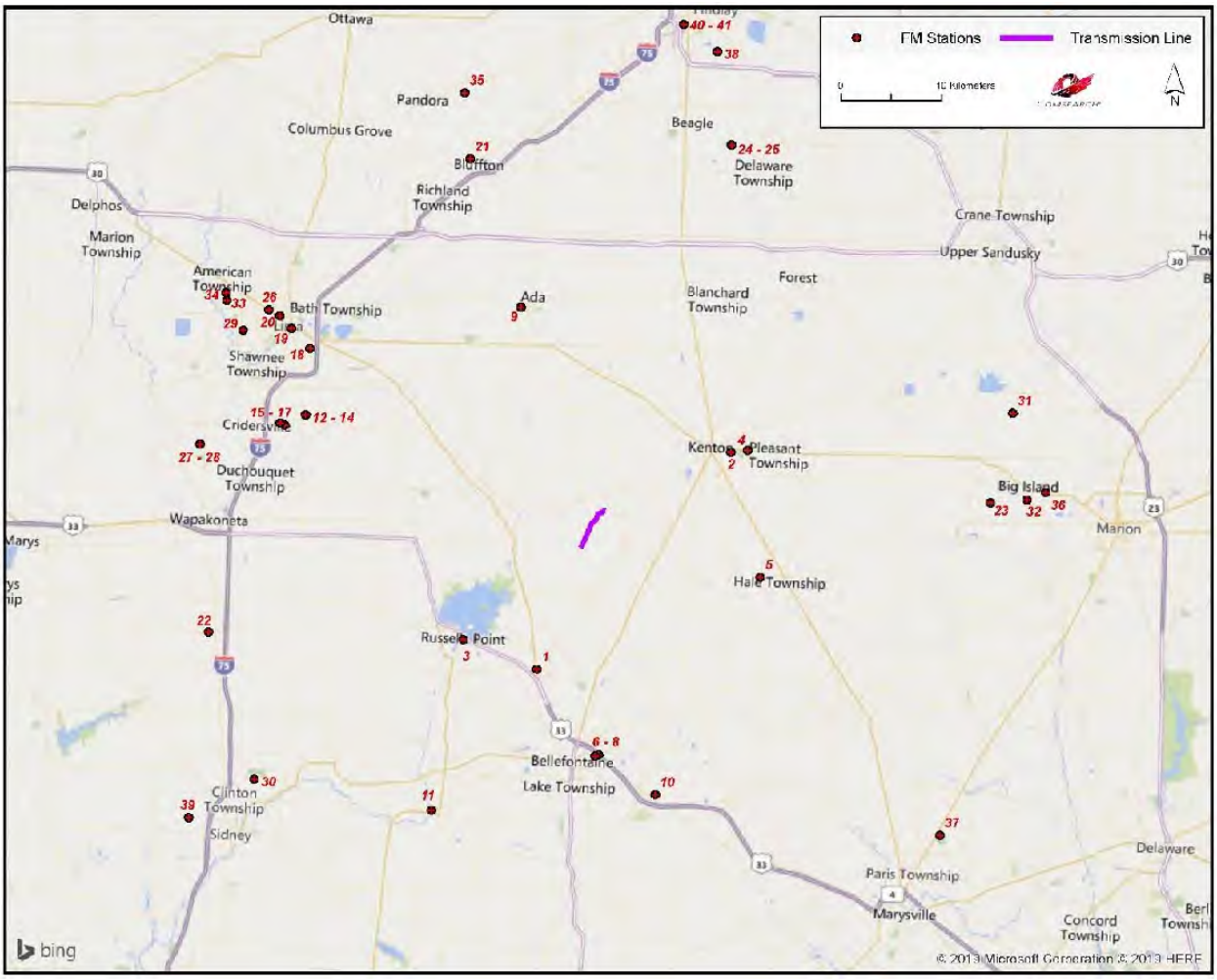

Figure 3: FM Radio Stations within 50 km of Transmission Line

TV Over-the-Air Broadcast Analysis

Comsearch compiled a list of all over-the-air (OTA) television stations[5] within 150 kilometers of the transmission line. This list can be found in the Appendix. A plot depicting all of the station locations is provided in Figure 4.

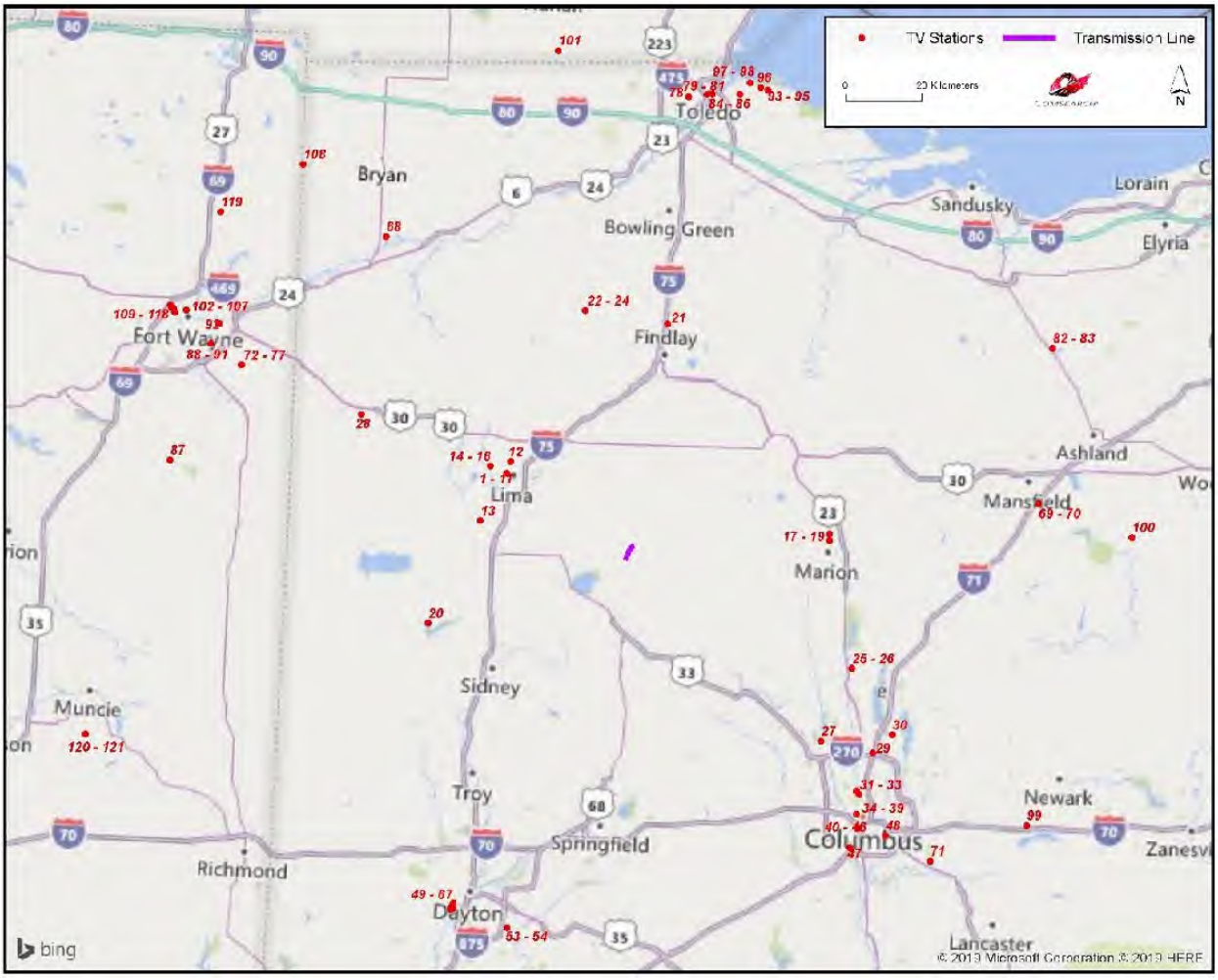

Figure 4: Plot of Off-Air TV Stations within 150 Kilometers of Transmission Line

There are a total of 121 database records for stations within approximately 150 kilometers of the transmission line. Of these stations, only 47 are currently licensed and operating, 17 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.

[5] 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.

3. Impact Assessment

Electromagnetic interference (EMI) from a transmission line is the result of the induction field created by the 60 Hz electrical power carried on the transmission line's conductors and by any harmonic distortions of the 60 Hz fundamental signal. Non-linear loads such as computers, which draw non-linear current with applied voltage due to impedance changes, can cause such harmonic distortion up to several kilohertz. However, power utilities can implement various mitigation methods that reduce harmonics in order to comply with IEEE 519 recommended limits. On the other hand, if the transmission lines are not well maintained, corona and arcing may occur at the insulators or conductor connectors, creating broadband noise which could likewise result in EMI.

Corona discharge takes place when a localized electric field from a transmission line is highly concentrated and ionizes the air near the conductors and thereby generates noise. This is a phenomenon that usually occurs during foul weather at various points that are randomly distributed along transmission lines operating at 345 kV and higher. On the other hand, a gap discharge takes place at small "gaps" between mechanically connected metal parts which, in turn, can spark and form an electric arc across the gap, also generating noise. Typically, this affects low-voltage lines due to loose wire and hardware connections that are on wooden poles. In any case, the interfering signal is amplitude-modulated and can propagate at distances that extend up to around 500 feet. The frequency range of the noise produced by corona discharge extends up to 100 MHz, whereas that produced by gap discharge can reach up to the GHz range.

Generally, transmission lines do not create reception problems for FM and TV broadcast signals. However due to the frequency range of the noise potentially generated by poorly maintained transmission lines, it could cause interference to FM radio and TV tuner receivers, especially in residences that are located within approximately 500 feet of the transmission line.

Based on a contour analysis of the licensed stations within 150 kilometers of the transmission line, it was determined that eight (8) television stations that are licensed and operational have service contours that overlap with areas that are within 500 ft of the transmission line and thus serve the homes listed in Table 1.

ID	Call Sign	Status	Service[6]	Channel	Transmit ERP[7] (kW)	Latitude (NAD 83)	Longitude (NAD 83)	Distance to Trans. Line (km)
12	WOHL-CD	LIC	DC	15	11.5	40.77544	-84.1206	38.6
14	WTLW	LIC	DT	44	165.0	40.76306	-84.1831	42.4
15	WTLW	LIC	DT	4	10.0	40.76306	-84.1836	42.4

[6] Definitions of service and status codes:
DC – Class A digital television broadcast station
DT – Digital television broadcast station
LD – Low power digital television broadcast station
LIC – Licensed and operational station

[7] ERP = Transmit Effective Radiated Power

ID	Call Sign	Status	Service[6]	Channel	Transmit ERP[7] (kW)	Latitude (NAD 83)	Longitude (NAD 83)	Distance to Trans. Line (km)
16	WOIW-LD	LIC	LD	17	15.0	40.76306	-84.1836	42.4
22	WBGU-TV	LIC	DT	22	137.0	41.13667	-83.9067	62.8
38	WBNS-TV	LIC	DT	21	1000.0	39.97111	-83.0278	89.7
52	WHIO-TV	LIC	DT	41	1000.0	39.73389	-84.2481	100.1
57	WRGT-TV	LIC	DT	30	498.0	39.72461	-84.2549	101.3

Table 4: Licensed Off-Air TV Stations Covering Project Area

Since EMI signals are amplitude-modulated and often overlaps with AM frequencies, devices that are most susceptible to EMI from transmission lines are AM radio receivers. By definition, these AM devices rely on amplitude-modulated signals which are broadcasted in the AM frequency band between 0.5 and 1.6 MHz. Therefore, the degree of degradation to AM signal reception becomes a function of the distance that separates the AM radio and transmission line conductors as well as the strength of the AM radio signal. This degradation would be similar to what occurs whenever a car radio that is tuned to an AM radio station approaches to within a few hundred feet from an existing transmission line that interconnect utility companies and their substations throughout the state.

4. Recommendations

There should be an effective quality control maintenance program in effect for the useful life period of the operation of the transmission line. The goal is to prevent corona and arcing that could cause noise and interference to broadcast radio reception, especially to AM radio devices in the homes near the transmission line. If the transmission line is properly maintained, no interference is anticipated for AM and FM radio and therefore no other recommendations or mitigation techniques are required.

In the unlikely event that interference is observed in the nearby homes for TV stations listed in Table 5, a high-gain directional antenna may be employed, preferably outdoors, and oriented towards the signal origin in order to mitigate the interference.

Both cable service and direct broadcast satellite service will be unaffected by the presence of the transmission line and may be offered to those residents who can show that their OTA TV reception has been disrupted by the presence of the transmission line after it is installed.

5. Contact

For questions or information regarding the AM, FM and TV Impact Study, please contact:

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Web site: www.comsearch.com

Appendix

ID	Call Sign	Status	Service[1]	Chan	Transmit ERP[2] (kW)	Latitude (NAD 83)	Longitude (NAD 83)	Dist to Trans. Line (km)
1	WPNM-LP	CP	TX	25	7.5	40.74756	-84.1318	37.8
2	WPNM-LP	CP	TX	25	7.5	40.74756	-84.1318	37.8
3	WPNM-LP	CP	TX	25	7.5	40.74756	-84.1318	37.8
4	WPNM-LP	CP	TX	25	7.5	40.74756	-84.1318	37.8
5	WPNM-LP	CP	TX	25	7.5	40.74756	-84.1318	37.8
6	WPNM-LP	CP	TX	25	7.5	40.74756	-84.1318	37.8
7	WAMS-LP	CP	TX	38	5.3	40.74756	-84.1318	37.8
8	WAMS-LP	CP	TX	38	5.3	40.74756	-84.1318	37.8
9	WAMS-LP	CP	TX	38	5.3	40.74756	-84.1318	37.8
10	WAMS-LP	CP	TX	38	5.3	40.74756	-84.1318	37.8
11	WAMS-LP	CP	TX	38	5.3	40.74756	-84.1318	37.8
12	WOHL-CD	LIC	DC	15	11.5	40.77544	-84.1206	38.6
13	WOIW-LD	CP	LD	43	7.85	40.63419	-84.208	39.1
14	WTLW	LIC	DT	44	165.0	40.76306	-84.1831	42.4
15	WTLW	LIC	DT	4	10.0	40.76306	-84.1836	42.4
16	WOIW-LD	LIC	LD	17	15.0	40.76306	-84.1836	42.4
17	WXCB-CD	CP MOD	DC	25	15.0	40.61278	-83.13	51.0
18	WXCB-CD	LIC	DC	45	15.0	40.61278	-83.13	51.0
19	WCBZ-CD	LIC	DC	28	7.5	40.62756	-83.1299	51.1
20	WAMS-LP	CP	LD	29	15.0	40.38867	-84.3573	54.0
21	WFND-LD	LIC	LD	19	15.0	41.11142	-83.648	58.6
22	WBGU-TV	LIC	DT	22	137.0	41.13667	-83.9067	62.8
23	WBGU-TV	LIC	DX	22	137.0	41.13667	-83.9067	62.8
24	WPNM-LP	CP	LD	27	15.0	41.13667	-83.9067	62.8
25	WOCB-CD	LIC	DC	22	15.0	40.31306	-83.0511	65.3
26	WOCB-CD	LIC	DC	39	2.4	40.31306	-83.0511	65.3
27	-	CP	TX	3	0.03	40.14056	-83.1411	69.7
28	WOHW-LD	CP	LD	16	0.5	40.87281	-84.588	78.4
29	WCBZ-CD	LIC	DC	18	15.0	40.11494	-82.982	82.0
30	WOSU-TV	CP MOD	DT	16	1000.0	40.15917	-82.9231	83.4
31	WCPX-LP	CP MOD	LD	25	15.0	40.02517	-83.0292	85.4
32	WCPX-LP	CP	TX	25	15.0	40.02517	-83.0292	85.4
33	WCSN-LD	CP	LD	26	15.0	40.01722	-83.0197	86.6

34	W44DC-D	CP	LD	17	15.0	39.97111	-83.0278	89.7
35	WCLL-CD	LIC	DC	19	15.0	39.97111	-83.0278	89.7
36	WCLL-CD	CP	DC	19	15.0	39.97111	-83.0278	89.7
37	WSFJ-TV	CP	DT	19	15.0	39.97111	-83.0278	89.7
38	WBNS-TV	LIC	DT	21	1000.0	39.97111	-83.0278	89.7
39	W44DC-D	LIC	LD	44	15.0	39.97111	-83.0278	89.7
40	WQMC-LD	CP	LD	15	15.0	39.93722	-83.0211	92.8
41	WWHO	CP MOD	DT	23	885.0	39.93722	-83.0211	92.8
42	WDEM-CD	LIC	DC	24	15.0	39.93722	-83.0211	92.8
43	WTTE	CP MOD	DT	27	1000.0	39.93722	-83.0211	92.8
44	WTTE	CP	DT	27	207.5	39.93722	-83.0211	92.8
45	WSYX	CP	DT	28	677.0	39.93722	-83.0211	92.8
46	WTTE	LIC	DT	36	1000.0	39.93722	-83.0211	92.8
47	WQMC-LD	LIC	LD	23	15.0	39.89194	-83.0456	95.3
48	W29EG-D	CP	LD	29	1.39	39.92167	-82.9378	99.0
49	WHIO-TV	CP	DT	33	854.0	39.73389	-84.2481	100.1
50	WHIO-TV	CP	DX	33	1000.0	39.73389	-84.2481	100.1
51	WHIO-TV	LIC	DX	41	1000.0	39.73389	-84.2481	100.1
52	WHIO-TV	LIC	DT	41	1000.0	39.73389	-84.2481	100.1
53	WWRD-LP	CP	LD	10	3.0	39.68	-84.0822	100.8
54	WWRD-LP	LIC	TX	32	13.0	39.68	-84.0822	100.8
55	WLWD-LD	CP	LD	5	3.0	39.72461	-84.2549	101.3
56	WLWD-LD	LIC	LD	20	5.0	39.72461	-84.2549	101.3
57	WRGT-TV	LIC	DT	30	498.0	39.72461	-84.2549	101.3
58	WKEF	CP MOD	DT	34	950.0	39.72461	-84.2549	101.3
59	WRGT-TV	CP MOD	DT	36	1000.0	39.72461	-84.2549	101.3
60	WRCX-LP	CP	LD	9	3.0	39.72444	-84.255	101.3
61	WKEF	APP	DT	18	525.0	39.72444	-84.255	101.3
62	WPTD	CP	DT	16	199.0	39.72111	-84.25	101.5
63	WPTD	CP	DT	35	250.0	39.72111	-84.25	101.5
64	WDTN	CP MOD	DT	31	1000.0	39.71861	-84.2561	102.0
65	WKOI-TV	CP	DT	50	1000.0	39.71861	-84.2561	102.0
66	WDTN	CP	DT	50	1000.0	39.71861	-84.2561	102.0
67	WBDT	CP	DT	50	1000.0	39.71861	-84.2561	102.0
68	WNHO-LP	CP MOD	LD	35	15.0	41.29242	-84.5338	103.3
69	W43CZ-D	CP	LD	18	15.0	40.70922	-82.4863	106.2

70	W43CZ-D	LIC	LD	43	11.0	40.70922	-82.4863	106.2
71	WGCT-CD	CP	DC	8	1.45	39.86333	-82.7992	112.0
72	WCUH-LD	LIC	LD	16	5.0	40.97725	-84.9661	112.2
73	W41DS-D	CP MOD	LD	41	6.0	40.97725	-84.9661	112.2
74	W41DS-D	LIC	LD	41	6.0	40.97725	-84.9661	112.2
75	WEDX-LD	CP MOD	LD	29	2.0	40.97722	-84.9661	112.2
76	W43DI-D	LIC	LD	43	6.0	40.97722	-84.9661	112.2
77	WODP-LD	LIC	LD	49	6.0	40.97722	-84.9661	112.2
78	WDMY-LP	CP	TX	6	2.9	41.64686	-83.6049	118.2
79	WDTJ-LD	LIC	LD	18	4.0	41.65336	-83.548	119.4
80	WDTJ-LP	LIC	TX	68	6.6	41.65336	-83.548	119.4
81	WMNT-CD	LIC	DC	36	15.0	41.65336	-83.5306	119.6
82	WGGN-TV	CP	DT	3	10.0	41.07508	-82.4511	120.8
83	WGGN-TV	LIC	DT	42	450.0	41.07508	-82.4511	120.8
84	WUPW	CP MOD	DT	26	65.0	41.65611	-83.4447	121.1
85	WUPW	LIC	DT	46	110.0	41.65611	-83.4447	121.1
86	WUPW	CP	DT	46	200.0	41.65611	-83.4447	121.1
87	W22DV-D	CP MOD	LD	22	3.0	40.74636	-85.1732	121.6
88	W02CX-D	CP	LD	2	3.0	41.02394	-85.0641	121.9
89	W14DS-D	CP	LD	14	15.0	41.02394	-85.0641	121.9
90	W21DJ-D	CP	LD	21	15.0	41.02394	-85.0641	121.9
91	W28EY-D	CP	LD	28	15.0	41.02394	-85.0641	121.9
92	NEW	CP	LD	35	3.0	41.07122	-85.041	122.3
93	WNWO-TV	CP MOD	DT	23	275.0	41.6675	-83.3561	124.1
94	WNWO-TV	CP	DT	23	105.0	41.6675	-83.3561	124.1
95	WNWO-TV	LIC	DT	49	105.0	41.6675	-83.3561	124.1
96	WTOL	APP	DT	11	26.0	41.67278	-83.3797	124.1
97	WTVG	APP	DT	13	20.1	41.68333	-83.4136	124.6
98	WNWO-TV	CP	DT	23	120.0	41.68333	-83.4136	124.6
99	W29EG-D	LIC	LD	29	15.0	39.95228	-82.5068	125.7
100	WIVX-LD	LIC	LD	51	1.1	40.63306	-82.1961	130.0
101	WLMB	APP	DT	5	10.0	41.74472	-84.0183	130.8
102	WFWC-CD	CP	DC	16	0.876	41.09914	-85.145	131.6
103	WCUH-LD	CP	LD	23	5.0	41.09914	-85.145	131.6
104	W43DI-D	CP	LD	25	15.0	41.09914	-85.145	131.6
105	W41DS-D	CP	LD	30	5.0	41.09914	-85.145	131.6

106	WODP-LD	CP	LD	36	15.0	41.09914	-85.145	131.6
107	WFWC-CD	LIC	DC	45	1.62	41.09914	-85.145	131.6
108	WINM	LIC	DT	12	16.5	41.45417	-84.8028	131.7
109	WANE-TV	CP MOD	DT	32	1000.0	41.09389	-85.18	134.0
110	WPTA	LIC	DT	24	444.0	41.10211	-85.1843	134.7
111	WISE-TV	LIC	DT	34	456.0	41.10211	-85.1843	134.7
112	WISE-TV	LIC	DT	18	320.0	41.10222	-85.1847	134.7
113	WPTA	LIC	DT	24	335.0	41.10222	-85.1847	134.7
114	WEIJ-LD	CP	LD	17	15.0	41.10361	-85.1911	135.3
115	WFWA	LIC	DT	18	350.0	41.10361	-85.1911	135.3
116	WFWA	LIC	DX	18	350.0	41.10361	-85.1911	135.3
117	WEIJ-LD	LIC	LD	38	15.0	41.10361	-85.1911	135.3
118	WFFT-TV	CP MOD	DT	20	550.0	41.10928	-85.1951	135.8
119	W07CL	LIC	TX	7	0.032	41.33364	-85.0522	138.4
120	WIPB	CP	DT	19	228.0	40.09361	-85.3922	148.0
121	WIPB	LIC	DT	23	250.0	40.09361	-85.3922	148.0

Table 5: Over-the-Air (OTA) TV Stations Within 150 km of Transmission Line

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[1] Definitions of service and status codes:

DT – Digital television broadcast station

LD – Low-power digital television broadcast station

TX – Translator station

DC – Class A digital television broadcast station

DX – Digital auxiliary (backup) facility

LIC – Licensed and operational station

CP – Construction permit granted

CP MOD – Modification of construction permit

APP – Application for construction permit, not yet operational

[2] ERP = Transmit Effective Radiated Power

Summary: Application to Amend Certificate (Appendix C) electronically filed by Mr. Michael J. Settineri on behalf of Hardin Wind LLC