

Consolidated Engineering Report

Proposed New FM Translator
Auction 100 – AM Revitalization

To be paired with:
WOKR-AM (Facility 88676)

95.5 MHz
Canandaigua, NY

Genesee Media Corporation
("Applicant")

May 24, 2018

Prepared by:

Brian P. McGlynn
Genesee Media Corporation

16 West Main Street, Suite 741
Rochester, NY 14614
585-698-2757

Table of Contents

PROPOSED FACILITY INFORMATION.....	3
FREQUENCY STUDY	4
PROTECTIONS.....	6
DIRECTIONAL ANTENNA PATTERN	7
CONTOUR DISTANCES FOR PROPOSED FACILITY	10
APPLICATION MINOR CHANGE SHOWING	12
25 MILE ENCOMPASSMENT OF WOKR-AM AND PROPOSED FACILITY	13
CO-CHANNEL CLEARANCE WITH WFIZ AND BNPFT-20180125AEC.....	14
FIRST ADJACENT CHANNEL CLEARANCE WITH W239BF	15
SECOND ADJACENT CHANNEL CLEARANCE WITH WAOI	16
CANADIAN CONSIDERATION - 47 CFR § 74.1235(d)(3).....	17
ENVIRONMENTAL COMPLIANCE.	18
CERTIFICATION	22

Proposed Facility Information

Coordinates:	42-53-20 N 77-19-09 W (NAD27)
Antenna Structure Registration Number:	1025934
Channel:	238 (95.5 MHz)
Site Height Above Sea Level:	268.2 m
Height of Radiation Center Above Ground Level:	37.0 m (H/V)
Center Radiation Above Sea Level AMSL:	305.0 m
Antenna Height Above Average Terrain (HAAT):	49.4 m
Effective Radiated Power:	0.250 kW (H/V)
Antenna ID:	SCA Model CA2-FM

Translator is to be a fill-in translator, fed over the air, and to rebroadcast WOKR-AM (Class B), facility number 88676.

Applicant has coordinated with owner of W283BF and will use the existing broadband antenna mounted on the WOKR-AM tower. No changes will be made to the WOKR-AM antenna system in building this proposed facility. Owner of W283BF will have ceased using this site upon building construction permit from application BPFT-20170410AAI.

Frequency Study

According to CFR 47 §74.1204(a), translators are required to protect all existing FM stations from interference due to overlap of the protected contours of the existing stations with the interfering contours of the new translators.

2018-05-24				Genesee Media Corporation				Page 1	
FM Study for: W283BF				FCC Database Date: 5/24/2018				42-53-20	
Location: CANANDAIGUA, NY				Channel Class:				77-19-09	
[*] by HAAT indicates calculated as missing in database.									
Call	City, State	Chan	Cl.	Freq	kW	Latitude	Dist.	Required	
Status	Proponent	File Number		HAAT		Longitude	Azm.	Clear (km)	Site

>>>>>>> Study For Channel				238	95.5 mHz	<<<<<<<			
WAIO	HONEOYE FALLS, NY	236 B	95.1	50.0	43-02-01	18.1	67		
LIC	Fac. No. 24958	BLH-20010530AAW		146	77-25-18	332.6	-48.9		SHORT
CJBC1F	BELLEVILLE, ON	238 C1	95.5	25.0	44-18-45	158.4	182		
	Fac. No. 95393	-		135	77-12-25	3.2	-23.6		SHORT
SPECIAL NEGOTIATED SHORT-SPACED ALLOCATION									
W239BF	ROCHESTER, NY	239 D	95.7	.250+	43-10-37	34.5	32		
LIC	Fac. No. 157394	BLFT-20140606AAH		138	77-28-39	338.1	2.5		CLOSE
NEW	FAIRPORT, NY	241 D	96.1	.250+	43-02-00	18.0	14		
APP	Fac. No. 202662	BNPFT-20180129ABG		116	77-25-11	333.0	4.0		CLOSE
WFIZ	ODESSA, NY	238 A	95.5	.850+	42-23-13	77.1	73		
LIC	Fac. No. 36406	BLH-20080916ABN		265	76-40-11	136.1	4.1		CLOSE
NEW	SPENCERPORT, NY	238 D	95.5	.250+	43-09-50	48.7	44		
APP	Fac. No. 202540	BNPFT-20180419ABQ		89	77-47-02	309.0	4.7		CLOSE
NEW	SPENCERPORT, NY	238 D	95.5	.250+	43-09-50	48.7	44		
APP	Fac. No. 202540	BNPFT-20180125AEC		105	77-47-02	309.0	4.7		CLOSE
W241CN	PENN YAN, NY	241 D	96.1	.190+	42-37-13	30.3	14		
LIC	Fac. No. 138958	BLFT-20171214AAJ		266	77-15-16	169.9	16.3		CLEAR
NEW	ROCHESTER, NY	241 D	96.1	.099+	43-08-06	34.8	14		
APP	Fac. No. 202122	BNPFT-20180130AGL		142	77-35-03	321.8	20.8		CLEAR
W292FG	GENEVA, NY	292 D	106.3	.250	42-51-37	24.9	0		
CP	Fac. No. 200205	BNPFT-20171208AAS		60	77-00-59	97.2	24.9		CLEAR
W240DO	GENEVA, NY	240 D	95.9	.250+	42-48-22	39.7	14		
LIC	Fac. No. 141061	BLFT-20170619AAP		129	76-50-47	103.2	25.7		CLEAR
W239BK	BATH, NY	239 D	95.7	.099+	42-21-17	59.5	32		
LIC	Fac. No. 154350	BLFT-20080324AAK		-39	77-21-50	183.6	27.5		CLEAR
WAQXFM	MANLIUS, NY	239 B1	95.7	25.0	43-00-25	100.9	68		
LIC	Fac. No. 52606	BLH-19880913KC		91	76-05-38	82.1	32.9		CLEAR
WRFZLP	ROCHESTER, NY	292 L1	106.3	.019	43-08-24	36.0	0		
LIC	Fac. No. 192286	BLL-20160531AAE		69	77-35-52	320.9	36.0		CLEAR

ALLOC BELLEVILLE, ON 238 C1 95.5 44-16-04 154.0 117
- 77-30-47 354.2 37.0 CLEAR
specially negotiated short-spaced allotment limited to 100kW ERP and 160m HAAT

1. WAIO is second adjacent, and the 40 dB ratio of desired-to-undesired signal shall be studied in more detail.
2. CJBC1F is Canadian and the 34 dBu interfering contour will be studied to demonstrate that it does not cross Canadian soil.
3. W239BF is first adjacent, and its 60 dBu protected contour shall be studied with respect to the 54 dBu interfering contour of the proposed facility.
4. BNPFT-20180125AEC (Auction 100 for WYSL-AM, Avon, NY) is co-channel adjacent, and its 60 dBu protected contour shall be studied with respect to the 40 dBu interfering contour of the proposed facility.
5. WFIZ is co-channel adjacent, and its 60 dBu protected contour shall be studied with respect to the 40 dBu interfering contour of the proposed facility.
6. BNPFT-20180129ABG is related to this application and is to remediate MX group 46 in Auction 100.

Note: Applicant is selecting channel 238 to unilaterally remediate MX group 46 in Auction 100. This is considered a minor change and permitted according to the process set out in PUBLIC NOTICE (DA-18-332).

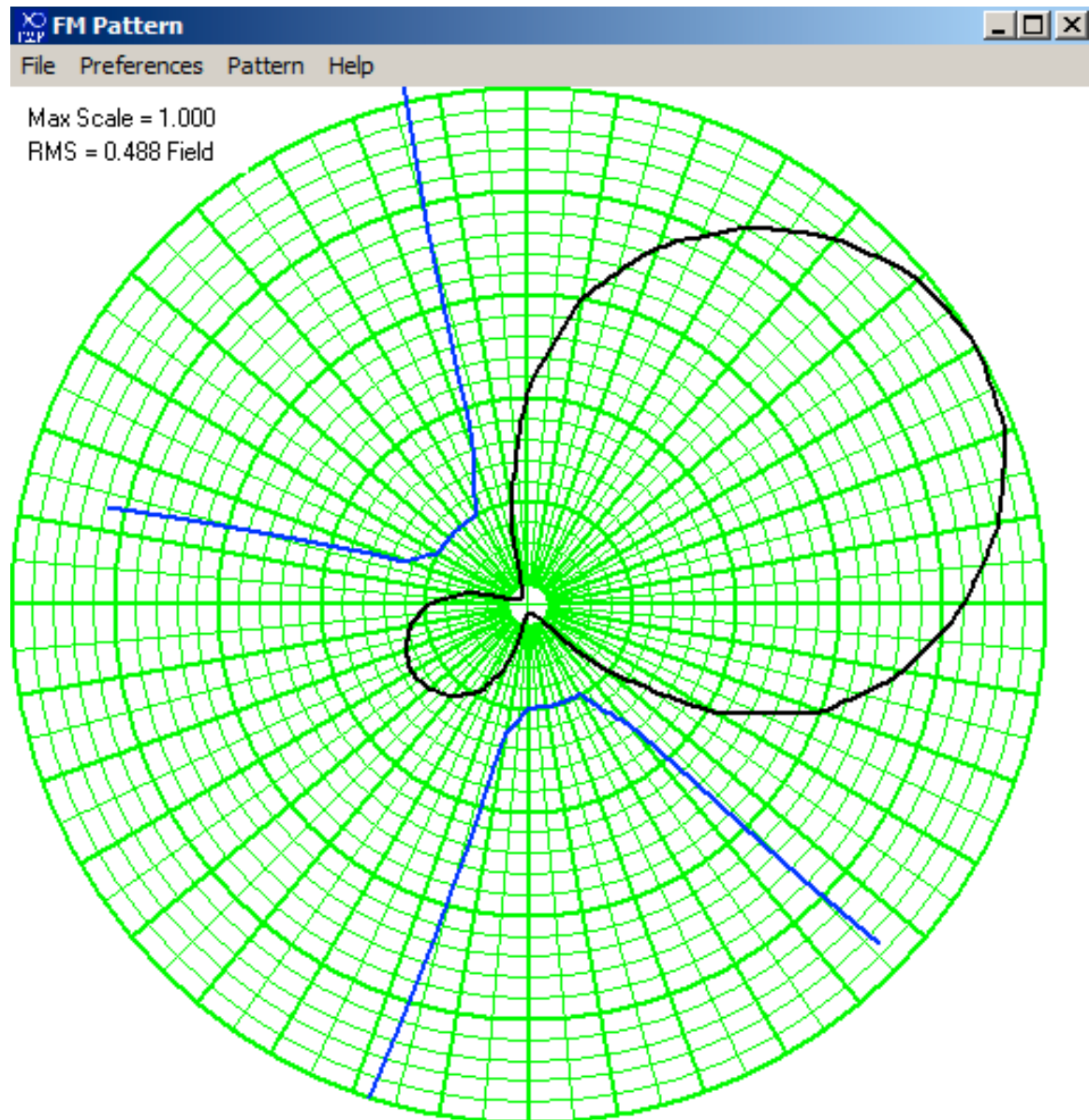
Protections

Genesee Media Corporation
Maximum Effective Radiated Power
For W238NEW at 42-53-20 77-19-09
Rad Ctr: 305 meters AMSL
Based on 1 degree study near direct line between sites
with data stored at nearest 5 degree azimuth.

Azimuth (Deg)	Max ERP (kW)	Station	Contour	W238NEW	Curve
0	0.789	W239BF	60	54	F(50, 50)
120	2.133	WFIZ	60	40	F(50, 50)
125	1.994	WFIZ	60	40	F(50, 50)
130	2.048	WFIZ	60	40	F(50, 50)
135	2.009	WFIZ	60	40	F(50, 50)
140	1.951	WFIZ	60	40	F(50, 50)
145	1.938	WFIZ	60	40	F(50, 50)
150	1.954	WFIZ	60	40	F(50, 50)
155	2.706	WFIZ	60	40	F(50, 50)
160	4.068	WFIZ	60	40	F(50, 50)
305	0.446	WYSL-FMX	60	40	F(50, 50)
310	0.428	WYSL-FMX	60	40	F(50, 50)
315	0.501	WYSL-FMX	60	40	F(50, 50)
320	0.419	WYSL-FMX	60	40	F(50, 50)
325	0.407	W239BF	60	54	F(50, 50)
330	0.448	W239BF	60	54	F(50, 50)
335	0.418	W239BF	60	54	F(50, 50)
340	0.337	W239BF	60	54	F(50, 50)
345	0.339	W239BF	60	54	F(50, 50)
350	0.364	W239BF	60	54	F(50, 50)
355	0.524	W239BF	60	54	F(50, 50)

At no point is a protection required to any critical signal.

Directional Antenna Pattern



Genesee Media Corporation
FM Contour Distances
W238NEW

Azi. Deg.	ERP kW	HAAT m	118 dBu km	60 dBu km	54 dBu km	40 dBu km
0	0.034	108	0.2	8.2	11.5	27.28
5	0.049	107	0.2	8.9	12.6	29.92
10	0.072	110	0.2	10.0	14.1	33.52
15	0.088	110	0.2	10.5	14.9	35.36
20	0.108	107	0.2	10.9	15.5	36.79
25	0.123	107	0.2	11.2	16.1	38.10
30	0.141	106	0.3	11.5	16.7	39.26
35	0.155	105	0.3	11.8	17.1	40.05
40	0.170	105	0.3	12.0	17.6	41.03
45	0.181	104	0.3	12.2	17.8	41.46
50	0.192	102	0.3	12.2	17.9	41.72
55	0.196	97	0.2	12.0	17.4	40.92
60	0.200	92	0.3	11.7	17.0	40.02
65	0.196	86	0.3	11.3	16.2	38.45
70	0.192	79	0.3	10.8	15.3	36.59
75	0.181	72	0.3	10.2	14.4	34.23
80	0.170	69	0.3	9.8	13.9	32.89
85	0.155	64	0.3	9.3	13.1	30.73
90	0.141	61	0.3	8.8	12.5	29.23
95	0.123	58	0.3	8.3	11.8	27.57
100	0.108	55	0.3	7.8	11.1	25.97
105	0.088	52	0.3	7.2	10.3	24.00
110	0.072	48	0.2	6.5	9.4	21.87
115	0.049	43	0.2	5.6	8.0	18.49
120	0.034	38	0.2	4.8	6.8	15.39
125	0.015	36	0.1	3.8	5.4	12.25
130	0.007	34	0.1	3.1	4.3	9.80
135	0.001	35	0.1	2.0	2.8	6.21
140	0.000	38	0.0	1.3	1.9	4.10
145	0.000	40	0.1	1.3	1.7	3.80
150	0.000	43	0.0	1.2	1.6	3.57
155	0.000	41	0.1	1.2	1.6	3.48
160	0.000	37	0.0	1.1	1.5	3.30
165	0.000	33	0.0	1.0	1.4	3.12
170	0.000	30	0.0	1.0	1.4	2.98
175	0.000	31	0.0	1.0	1.4	3.02

W238NEW Pattern
Horizontal Plane Pattern
Pattern RMS: .4881 Field

Azimuth	Field	dBk	ERP(kW)	Azimuth	Field	dBk	ERP(kW)
0	0.410	-13.76*	0.04	180	0.020	-40.00	0.00
5	0.496	-12.11*	0.06	185	0.022	-39.03	0.00
10	0.600	-10.46*	0.09	190	0.025	-38.06	0.00
15	0.664	-9.58	0.11	195	0.056	-31.07*	0.00
20	0.735	-8.69	0.14	200	0.125	-24.08*	0.00
25	0.786	-8.11	0.15	205	0.156	-22.15*	0.01
30	0.840	-7.54	0.18	210	0.195	-20.22*	0.01
35	0.881	-7.13	0.19	215	0.212	-19.50	0.01
40	0.923	-6.72	0.21	220	0.230	-18.79	0.01
45	0.951	-6.46	0.23	225	0.240	-18.42	0.01
50	0.980	-6.20	0.24	230	0.250	-18.06	0.02
55	0.990	-6.11	0.25	235	0.255	-17.89	0.02
60	1.000	-6.02	0.25	240	0.260	-17.72	0.02
65	0.990	-6.11	0.25	245	0.255	-17.89	0.02
70	0.980	-6.20	0.24	250	0.250	-18.06	0.02
75	0.951	-6.46	0.23	255	0.240	-18.42	0.01
80	0.923	-6.72	0.21	260	0.230	-18.79	0.01
85	0.881	-7.13	0.19	265	0.212	-19.50	0.01
90	0.840	-7.54	0.18	270	0.195	-20.22	0.01
95	0.786	-8.11	0.15	275	0.156	-22.15*	0.01
100	0.735	-8.69	0.14	280	0.125	-24.08*	0.00
105	0.664	-9.58	0.11	285	0.056	-31.07*	0.00
110	0.600	-10.46	0.09	290	0.025	-38.06*	0.00
115	0.496	-12.11*	0.06	295	0.022	-39.03	0.00
120	0.410	-13.76*	0.04	300	0.020	-40.00	0.00
125	0.275	-17.22*	0.02	305	0.020	-40.00	0.00
130	0.185	-20.68*	0.01	310	0.020	-40.00	0.00
135	0.074	-28.58*	0.00	315	0.020	-40.00	0.00
140	0.030	-36.48*	0.00	320	0.020	-40.00	0.00
145	0.024	-38.24*	0.00	325	0.020	-40.00	0.00
150	0.020	-40.00*	0.00	330	0.020	-40.00	0.00
155	0.020	-40.00	0.00	335	0.024	-38.24*	0.00
160	0.020	-40.00	0.00	340	0.030	-36.48*	0.00
165	0.020	-40.00	0.00	345	0.074	-28.58*	0.00
170	0.020	-40.00	0.00	350	0.185	-20.68*	0.01
175	0.020	-40.00	0.00	355	0.275	-17.22*	0.02

Contour Distances for Proposed Facility

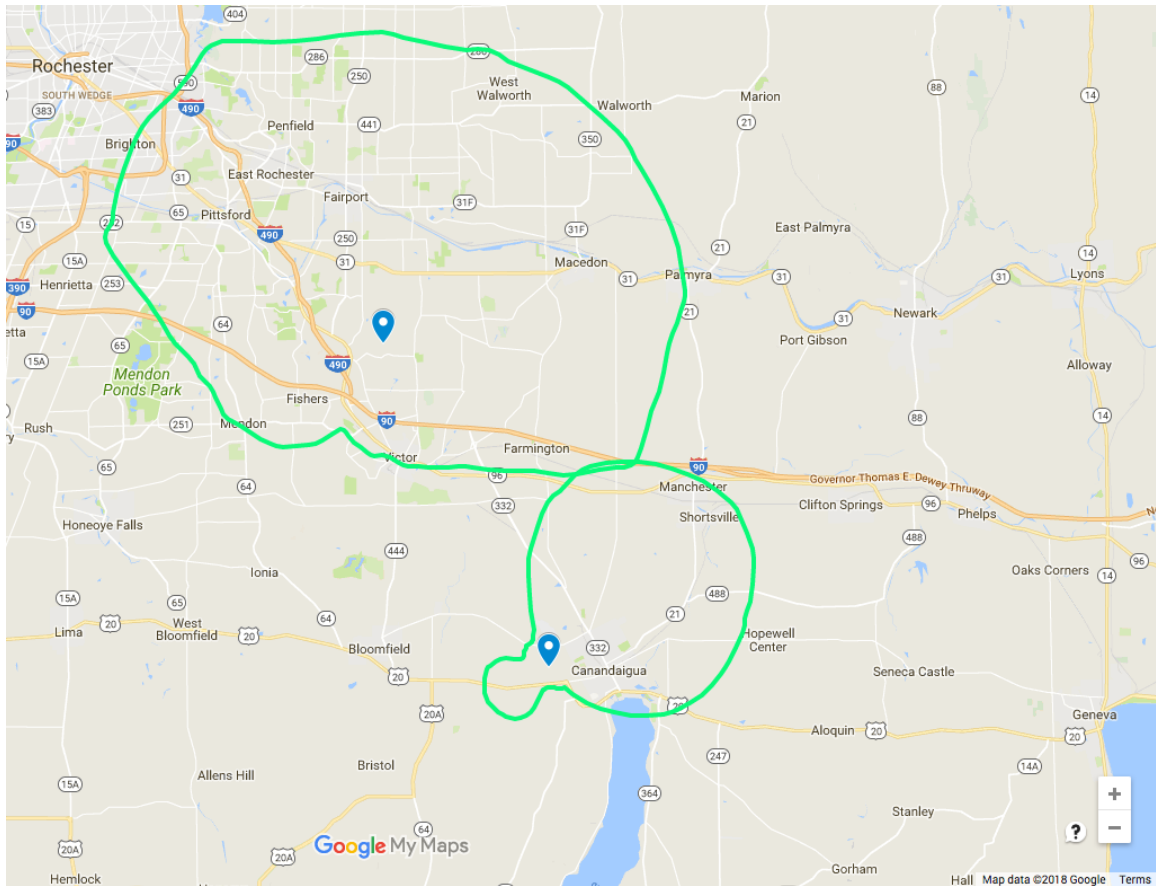
Genesee Media Corporation
FM Contour Distances
W238NEW

Azi. Deg.	ERP kW	HAAT m	118 dBu km	60 dBu km	54 dBu km	40 dBu km
0	0.034	108	0.2	8.2	11.5	27.28
5	0.049	107	0.2	8.9	12.6	29.92
10	0.072	110	0.2	10.0	14.1	33.52
15	0.088	110	0.2	10.5	14.9	35.36
20	0.108	107	0.2	10.9	15.5	36.79
25	0.123	107	0.2	11.2	16.1	38.10
30	0.141	106	0.3	11.5	16.7	39.26
35	0.155	105	0.3	11.8	17.1	40.05
40	0.170	105	0.3	12.0	17.6	41.03
45	0.181	104	0.3	12.2	17.8	41.46
50	0.192	102	0.3	12.2	17.9	41.72
55	0.196	97	0.2	12.0	17.4	40.92
60	0.200	92	0.3	11.7	17.0	40.02
65	0.196	86	0.3	11.3	16.2	38.45
70	0.192	79	0.3	10.8	15.3	36.59
75	0.181	72	0.3	10.2	14.4	34.23
80	0.170	69	0.3	9.8	13.9	32.89
85	0.155	64	0.3	9.3	13.1	30.73
90	0.141	61	0.3	8.8	12.5	29.23
95	0.123	58	0.3	8.3	11.8	27.57
100	0.108	55	0.3	7.8	11.1	25.97
105	0.088	52	0.3	7.2	10.3	24.00
110	0.072	48	0.2	6.5	9.4	21.87
115	0.049	43	0.2	5.6	8.0	18.49
120	0.034	38	0.2	4.8	6.8	15.39
125	0.015	36	0.1	3.8	5.4	12.25
130	0.007	34	0.1	3.1	4.3	9.80
135	0.001	35	0.1	2.0	2.8	6.21
140	0.000	38	0.0	1.3	1.9	4.10
145	0.000	40	0.1	1.3	1.7	3.80
150	0.000	43	0.0	1.2	1.6	3.57
155	0.000	41	0.1	1.2	1.6	3.48
160	0.000	37	0.0	1.1	1.5	3.30
165	0.000	33	0.0	1.0	1.4	3.12
170	0.000	30	0.0	1.0	1.4	2.98
175	0.000	31	0.0	1.0	1.4	3.02

Genesee Media Corporation
FM Contour Distances
W238NEW

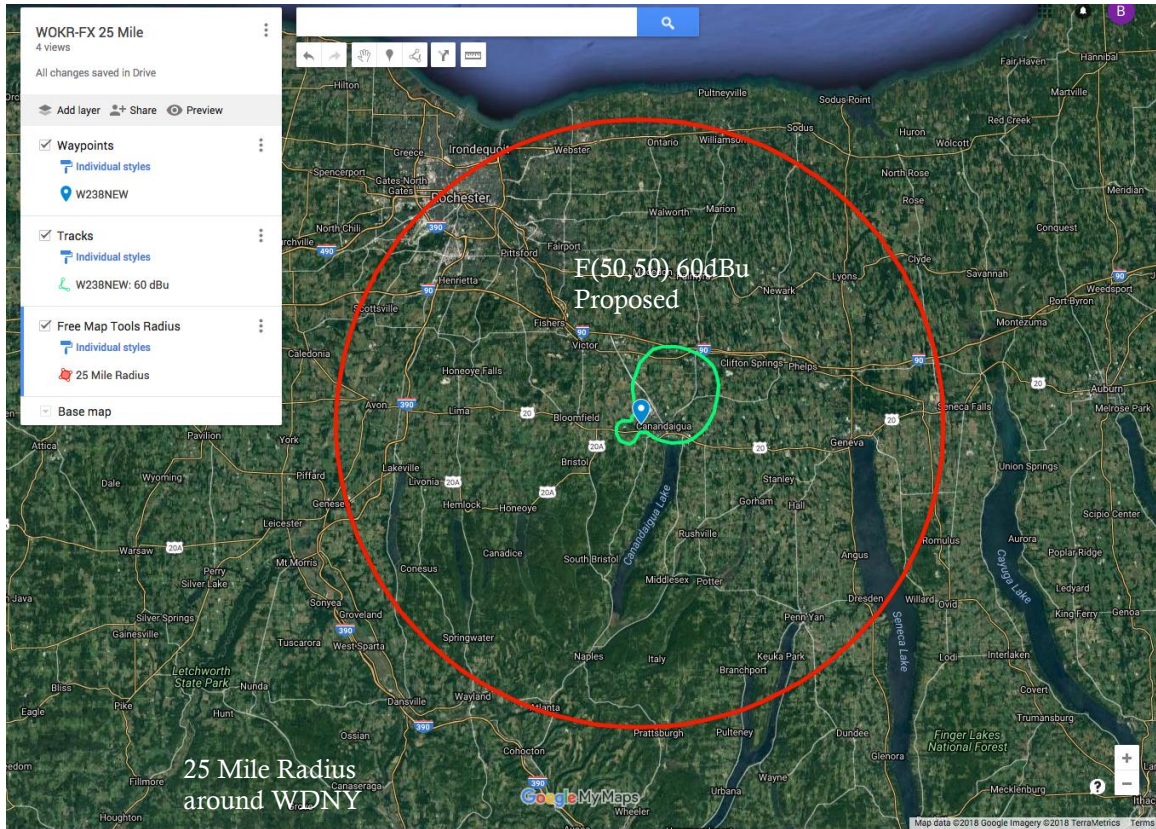
Azi. Deg.	ERP kW	HAAT m	118 dBu km	60 dBu km	54 dBu km	40 dBu km
180	0.000	30	0.0	1.0	1.4	2.98
185	0.000	30	0.0	1.1	1.5	3.14
190	0.000	30	0.0	1.1	1.6	3.32
195	0.001	30	0.1	1.6	2.3	4.99
200	0.003	30	0.1	2.4	3.3	7.51
205	0.005	30	0.1	2.7	3.7	8.44
210	0.008	30	0.1	2.9	4.1	9.48
215	0.009	30	0.1	3.1	4.3	9.89
220	0.011	30	0.1	3.2	4.5	10.30
225	0.011	30	0.1	3.3	4.6	10.51
230	0.012	30	0.1	3.3	4.7	10.72
235	0.013	30	0.1	3.4	4.8	10.82
240	0.014	30	0.1	3.4	4.8	10.93
245	0.013	30	0.1	3.4	4.8	10.82
250	0.012	30	0.1	3.3	4.7	10.72
255	0.011	30	0.1	3.3	4.6	10.51
260	0.011	30	0.1	3.2	4.5	10.30
265	0.009	30	0.1	3.1	4.3	9.89
270	0.008	30	0.1	2.9	4.1	9.48
275	0.005	30	0.1	2.7	3.7	8.44
280	0.003	30	0.1	2.4	3.3	7.51
285	0.001	30	0.1	1.6	2.3	4.99
290	0.000	42	0.1	1.3	1.8	3.94
295	0.000	47	0.0	1.3	1.8	3.97
300	0.000	51	0.1	1.3	1.8	3.93
305	0.000	64	0.1	1.4	2.0	4.40
310	0.000	71	0.0	1.4	2.0	4.63
315	0.000	81	0.0	1.5	2.1	4.95
320	0.000	95	0.0	1.5	2.3	5.37
325	0.000	95	0.0	1.5	2.3	5.37
330	0.000	93	0.0	1.5	2.2	5.32
335	0.000	99	0.0	1.7	2.6	6.08
340	0.000	102	0.0	2.0	2.9	6.80
345	0.001	103	0.1	3.3	4.8	10.75
350	0.007	105	0.1	5.4	7.6	17.60
355	0.015	106	0.1	6.7	9.4	22.08

Application Minor Change Showing



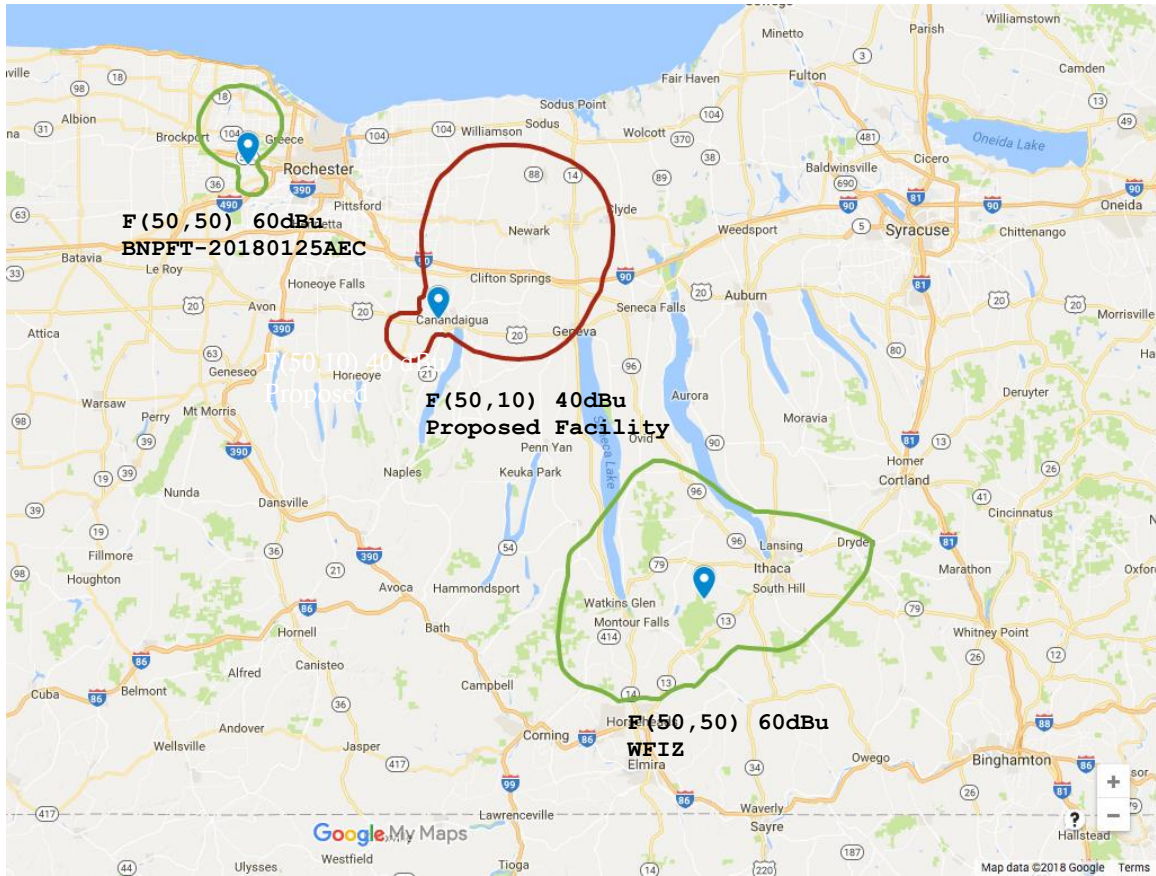
The above map shows the overlap of the original, MX'ed application and the proposed modification to the application to eliminate the mutual exclusivity of group 46. The new application meets the requirements of a minor change in that the 60 dBu contours overlap and the frequencies are within 600 kHz of each other.

25 Mile Encompassment of WOKR-AM and Proposed Facility



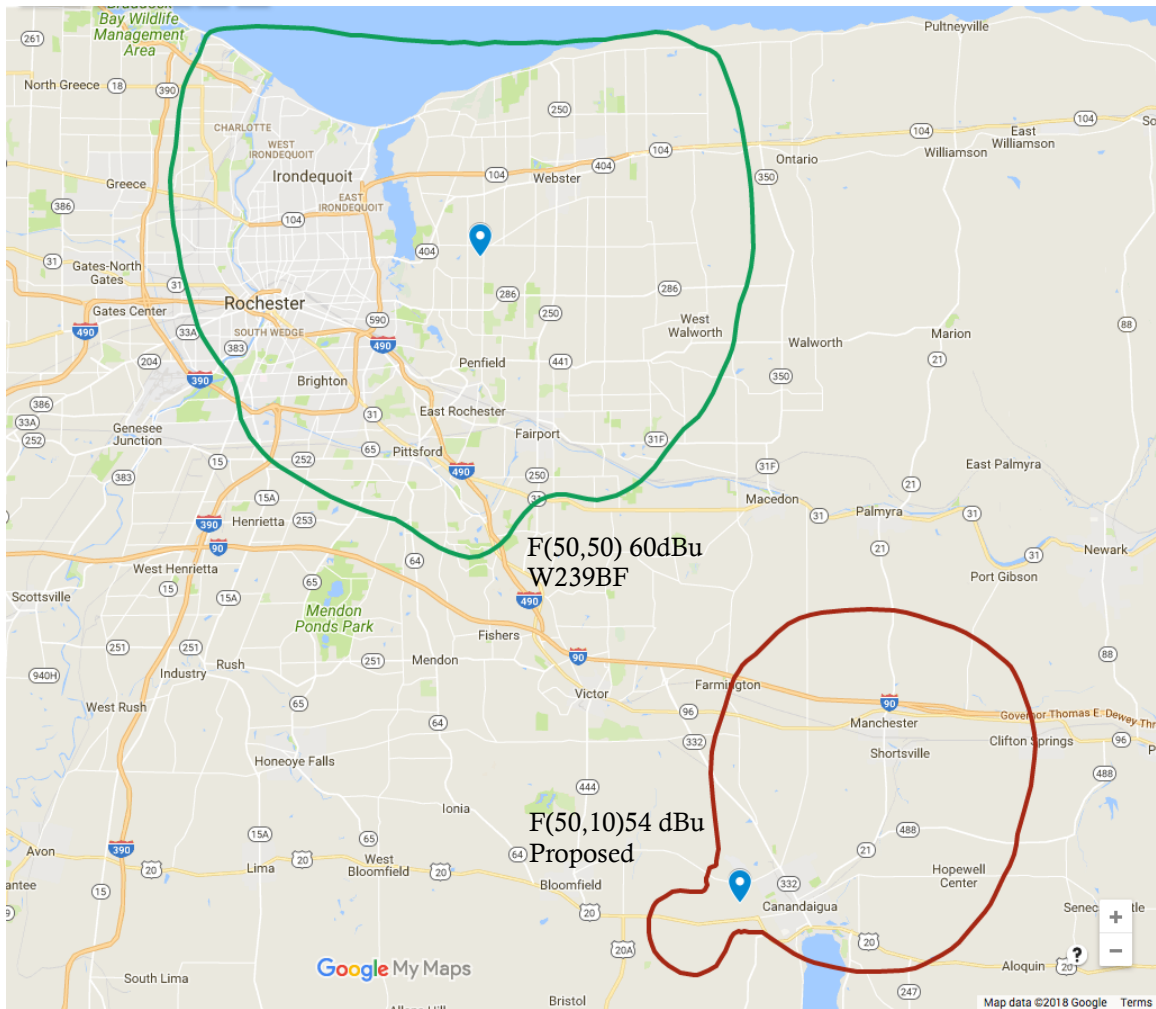
This map shows that the proposed translator's entire 60 dBu contour is contained within the greater of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site.

Co-Channel Clearance with WFIZ and BNPFT-20180125AEC



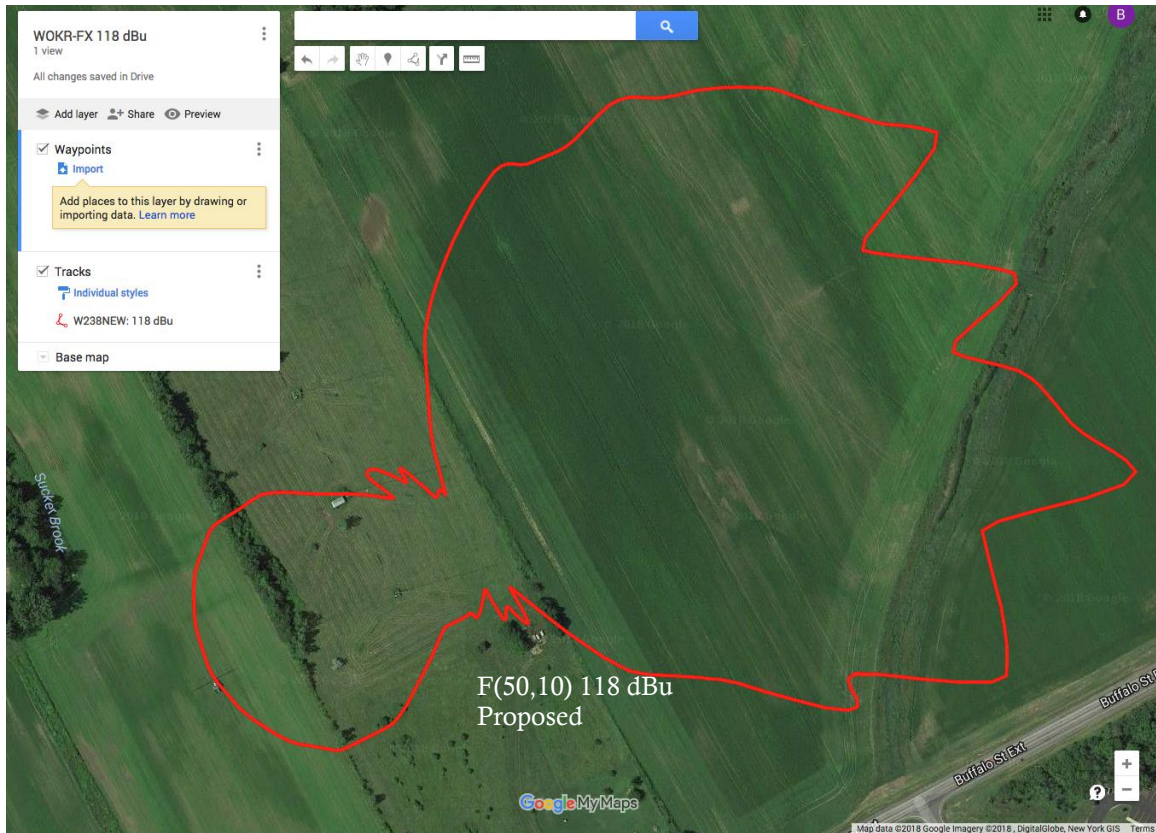
The above map shows zero overlap between the interfering F(50,10) 40 dBu contour of the proposed facility and the protected F(50,50) 60 dBu contour of the both WFIZ and BNPFT-20180125AEC.

First Adjacent Channel Clearance with W239BF



The above map shows zero overlap between the interfering F(50,10) 54 dBu contour of the proposed facility and the protected F(50,50) 60 dBu contour of W239BF.

Second Adjacent Channel Clearance with WAOI

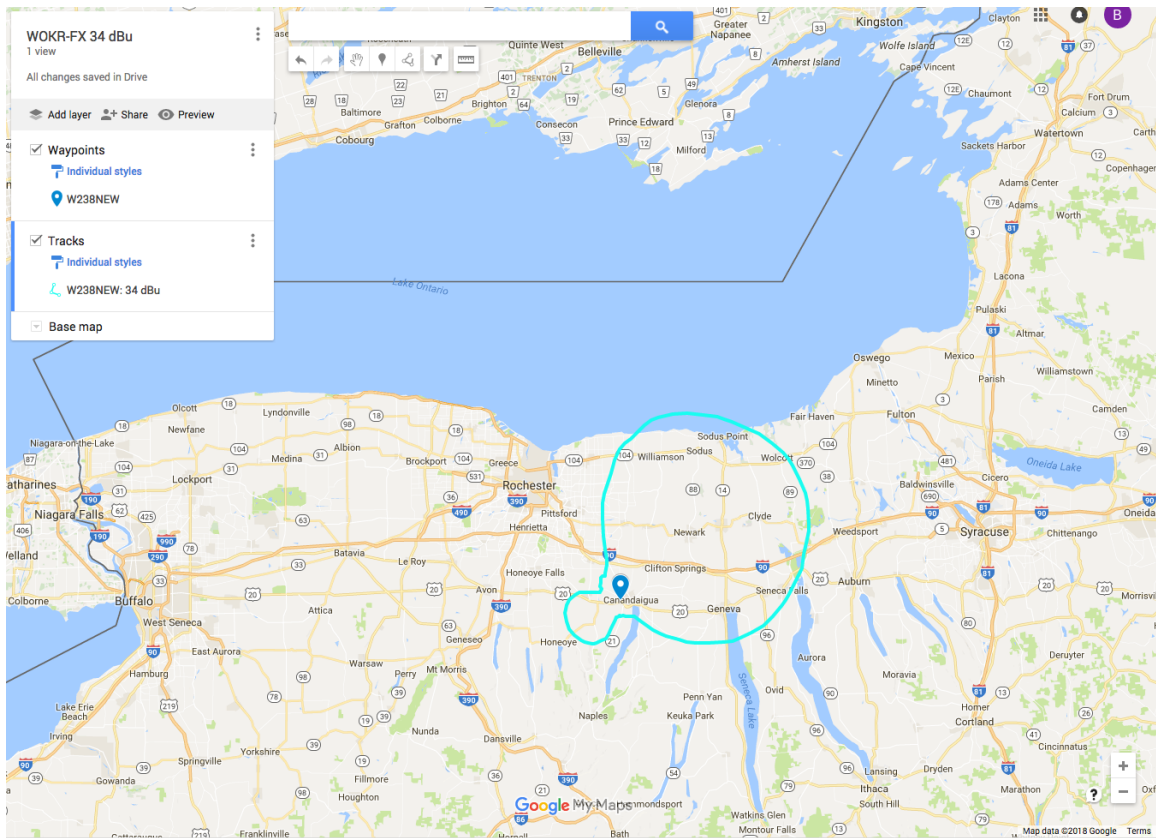


WAOI is a Class B radio station licensed to Honeoye Falls NY. The F(50,50) 54 dBu protected contour shall at no time receive an interfering contour that is 40 dB greater.

WAOI is 18.12 km from the proposed facility heading 152.52 degrees. The 150 degree radial of WAOI is 117m HAAT. Using FM propagation curves, at 50KW, the expected signal strength at the proposed facility is 78.807 dBu. With a 40 dB protection ratio for second and third adjacent channels, the critical contour for the proposed facility would be at: 118 dBu.

The F(50,10) 118 dBu contour of the proposed facility against the WAOI protected 54 dBu contour is shown on a satellite map. Assuming equal, or lower, vertical radiation to the zero-degree vertical radiation plane, this satellite map with the 110 dBu contour superimposed shows that no population will receive objectionable interference.

Canadian Consideration - 47 CFR § 74.1235(d)(3)



The proposed facility's 34dBu F(50,10) interfering contour is completely within US boundaries. Since the interfering contour is completely contained within US boundaries, conditions in 47 CFR § 74.1235(d)(3) are met.

Environmental Compliance.

The proposed antenna is a circularly polarized, one bay FM antenna mounted in a secure location 37m ground on a secure tower. Access to the tower is controlled by a locked fence with warning placards clearly stating the danger of RF exposure.

The antenna's radiation pattern was utilized to determine the effective gain along the ground at 5 degree intervals towards the center of radiation of the antenna. Power Density equations from OET Bulletin 65, Edition 97-01 were used as follows to determine power density:

$$S = \frac{PG}{4\pi R^2} \quad 3)$$

where: S = power density (in appropriate units, e.g. mW/cm²)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

or:

$$S = \frac{EIRP}{4\pi R^2} \quad (4)$$

where: EIRP = equivalent (or effective) isotropically radiated power

Based on section 1.1310 of the FCC rules for Occupational/Controlled Exposure, the MPE (Maximum Permissible Exposure) for 95.5 MHz is 1,000 uW/cm². Calculations were performed for to determine RF power density at a level 2m above the ground area supporting the antenna structure. Since the antenna is circularly, RF power was doubled in the calculations to reflect cross-polarization effects.

W238NEW Radiation Showing							
Proposed Antenna							
Proposed Power:			0.5 kW				
Antenna COR at Ground Level			37 meters				
OET-65 Power Equation			$(PWR * GAIN) / (4 * \pi * DIST^2)$				
Exposure Limit			1000 uW/cm ²				
Depression Angle	Relative Field	ERK (in kW)	ERP (in dBk)	Distance from COR to Roof	Distance from Tower Base to Ground Intersection	Power Density (uW/cm ²)	Result
0	1.000	0.500	-3.010				
-5	0.996	0.498	-3.028	424.53	422.91	0.02	CLEAR
-10	0.985	0.493	-3.076	213.07	209.84	0.09	CLEAR
-15	0.966	0.483	-3.161	142.96	138.09	0.19	CLEAR
-20	0.940	0.470	-3.279	108.18	101.66	0.32	CLEAR
-25	0.906	0.453	-3.439	87.55	79.35	0.47	CLEAR
-30	0.866	0.433	-3.635	74.00	64.09	0.63	CLEAR
-35	0.819	0.410	-3.877	64.51	52.84	0.78	CLEAR
-40	0.766	0.383	-4.168	57.56	44.09	0.92	CLEAR
-45	0.707	0.354	-4.516	52.33	37.00	1.03	CLEAR
-50	0.643	0.322	-4.928	48.30	31.05	1.10	CLEAR
-55	0.574	0.287	-5.421	45.17	25.91	1.12	CLEAR
-60	0.500	0.250	-6.021	42.72	21.36	1.09	CLEAR
-65	0.423	0.212	-6.747	40.82	17.25	1.01	CLEAR
-70	0.342	0.171	-7.670	39.37	13.47	0.88	CLEAR
-75	0.259	0.130	-8.877	38.31	9.91	0.70	CLEAR
-80	0.174	0.087	-10.605	37.57	6.52	0.49	CLEAR
-85	0.087	0.044	-13.615	37.14	3.24	0.25	CLEAR
-90	0.000	0.000	-43.010	37.00	-	0.00	CLEAR

Based on section 1.310 of the FCC Rules for General Population Exposure, the MPE is 200 $\mu\text{W}/\text{cm}^2$. Calculations were performed to determine the RF power density 2 meters above ground surrounding all areas of the tower supporting the transmitter antenna. Since the antenna is circularly polarized, RF power was doubled in the calculations to reflect cross-polarization effects.

W238NEW Radiation Showing							
Proposed Antenna							
Proposed Power:			0.5 kW				
Antenna COR at Ground Level			37 meters				
OET-65 Power Equation			$(\text{PWR} * \text{GAIN}) / (4 * \text{Pi} * \text{DIST}^2)$				
Exposure Limit			200 $\mu\text{W}/\text{cm}^2$				
Depression Angle	Relative Field	ERK (in kW)	ERP (in dBk)	Distance from COR to Roof	Distance from Tower Base to Ground Intersection	Power Density ($\mu\text{W}/\text{cm}^2$)	Result
0	1.000	0.500	-3.010				
-5	0.996	0.498	-3.028	424.53	422.91	0.02	CLEAR
-10	0.985	0.493	-3.076	213.07	209.84	0.09	CLEAR
-15	0.966	0.483	-3.161	142.96	138.09	0.19	CLEAR
-20	0.940	0.470	-3.279	108.18	101.66	0.32	CLEAR
-25	0.906	0.453	-3.439	87.55	79.35	0.47	CLEAR
-30	0.866	0.433	-3.635	74.00	64.09	0.63	CLEAR
-35	0.819	0.410	-3.877	64.51	52.84	0.78	CLEAR
-40	0.766	0.383	-4.168	57.56	44.09	0.92	CLEAR
-45	0.707	0.354	-4.516	52.33	37.00	1.03	CLEAR
-50	0.643	0.322	-4.928	48.30	31.05	1.10	CLEAR
-55	0.574	0.287	-5.421	45.17	25.91	1.12	CLEAR
-60	0.500	0.250	-6.021	42.72	21.36	1.09	CLEAR
-65	0.423	0.212	-6.747	40.82	17.25	1.01	CLEAR
-70	0.342	0.171	-7.670	39.37	13.47	0.88	CLEAR
-75	0.259	0.130	-8.877	38.31	9.91	0.70	CLEAR
-80	0.174	0.087	-10.605	37.57	6.52	0.49	CLEAR
-85	0.087	0.044	-13.615	37.14	3.24	0.25	CLEAR
-90	0.000	0.000	-43.010	37.00	-	0.00	CLEAR

At a distance of 2m above the ground, the proposed facility will not cause an RF field that is equal or greater than $1,000 \mu\text{W}/\text{cm}^2$ limit for controlled exposure at any point. Additionally, the proposed facility will not cause an RF field equal or greater than the $200 \mu\text{W}/\text{cm}^2$ limit at any location accessible to the general public around the area supporting the radiating antenna. Hence, the proposed facility complies with the requirements of OET 65.

According to OET 65, *“Applicants and licensees should be able to calculate, based on considerations of frequency, power and antenna characteristics the distance from their transmitter where their signal produces an RF field equal to, or greater than, the 5% threshold limit. The applicant or licensee then shares responsibility for compliance in any accessible area or areas within this 5% ‘contour’ where the appropriate limits are found to be exceeded.”*

Only professionals, certified by American Tower, the owner of the tower structure, are permitted access to the tower. A warning sign is clearly posted on the fencing of the structure stating the danger of RF exposure with a phone number to call to the facility operator.

Applicant certifies it, in coordination with other users of the site, will reduce power or cease operations, as necessary, to protect persons needing access to the site, tower, or antenna from RF exposure.

Certification

This Consolidated Engineering report, relative to an application to for a new facility at 95.5 MHz has been prepared by the undersigned. Applicant confirms that WOKR-AM is a class B radio station and has been invited to submit a long form application following resolution of a MX group in the AM Revitalization Auction 100 filing window. It is submitted that this statement, the amendments contained within, and all supporting exhibits, comply with the Rules and Regulations of the Federal Communications Commission and all representations contained herein are true to the best of my knowledge.

A handwritten signature in black ink, appearing to read 'Brian P. McGlynn', with a stylized, flowing script.

Brian P. McGlynn

Genesee Media Corporation

May 24, 2018