



**REC Networks**  
11541 Riverton Wharf Rd.  
Mardela Springs, MD 21837  
844.REC.LPFM/202.621.2355  
recnet.com

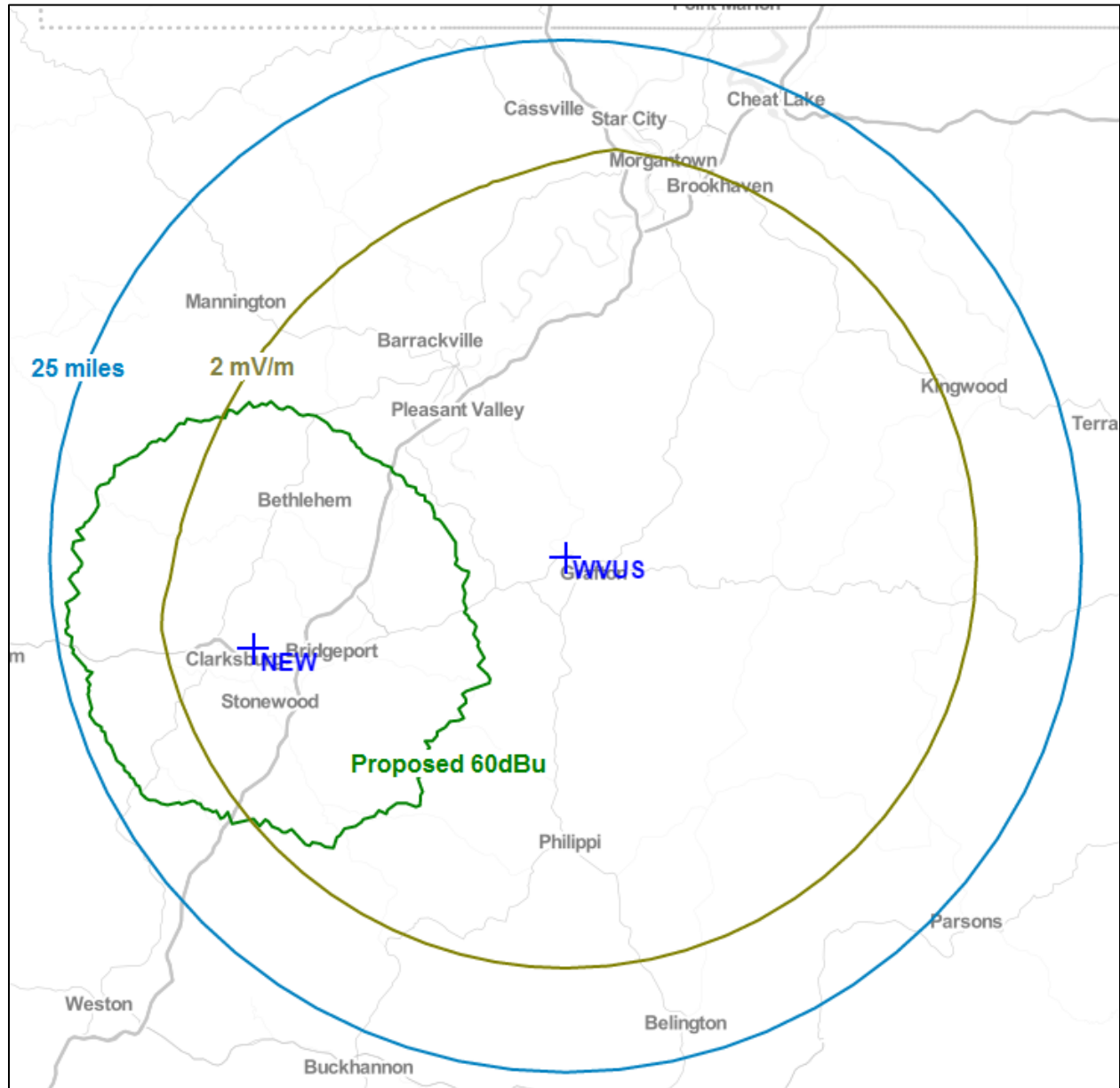
New fill-in FM translator for **WVUS**  
**CLARKSBURG, WV**  
**LIGHT OF LIFE COMMUNITY, INC**

**PROPOSED 60dBu F(50,50) SERVICE CONTOUR**



CLARKSBURG, WV – Channel 252D (98.3 MHz) ~ ERP 0.250 kW ~ Directional  
Elev: 427 meters ~ RCAGL: 113 meters ~ RCAMSL: 540 meters  
Overall tower height: 146.3 meters – ASR: 1242845 ~ HAAT: 180 meters  
NAD83 Latitude: 39° 17' 11.5" NL – Longitude: 80° 19' 36.4" WL  
NAD27 Latitude: 39° 17' 11.2" NL – Longitude: 80° 19' 37.1" WL

## FILL-IN AREA



Contour: 5050

<b>Azimuth</b>	<b>Field</b>	<b>ERP</b>	<b>HAAT</b>	<b>Contour</b>	<b>Latitude</b>	<b>Longitude</b>
0	0.990	0.245	209.8	18.872	39.45625200	-80.32677800
5	0.988	0.244	216.1	19.132	39.45792500	-80.30735600
10	0.988	0.244	209.9	18.860	39.45355500	-80.28863400
15	0.988	0.244	209.5	18.840	39.45016900	-80.26998900
20	0.986	0.243	194.5	18.149	39.43987700	-80.25449600
25	0.983	0.242	191.8	18.005	39.43324200	-80.23818100
30	0.983	0.242	180.8	17.506	39.42282500	-80.22487700
35	0.983	0.242	182.7	17.594	39.41608100	-80.20930300
40	0.983	0.242	186.2	17.750	39.40873800	-80.19397400
45	0.983	0.242	188.6	17.857	39.39999200	-80.17982400
50	0.983	0.242	188.4	17.851	39.38961300	-80.16765100
55	0.983	0.242	184.4	17.668	39.37754100	-80.15840000
60	0.983	0.242	186.3	17.756	39.36623300	-80.14790100
65	0.983	0.242	178.1	17.374	39.35241600	-80.14365100
70	0.986	0.243	187.7	17.844	39.34125200	-80.13179200
75	0.988	0.244	171.6	17.089	39.32614800	-80.13486900
80	0.988	0.244	164.5	16.689	39.31243400	-80.13573700
85	0.988	0.244	176.8	17.356	39.29995900	-80.12584200
90	0.990	0.245	181.9	17.623	39.28634800	-80.12200700
95	0.992	0.246	188.8	17.951	39.27227300	-80.11903300
100	0.996	0.248	177.2	17.455	39.25909900	-80.12712700
105	1.000	0.250	166.6	16.920	39.24699100	-80.13698800
110	0.996	0.248	157.3	16.321	39.23619000	-80.14870100
115	0.991	0.246	150.1	15.823	39.22627000	-80.16029200
120	0.977	0.239	149.5	15.658	39.21601200	-80.16937200
125	0.963	0.232	164.1	16.433	39.20165600	-80.17055500
130	0.943	0.222	183.5	17.246	39.18673500	-80.17349500
135	0.923	0.213	181.3	16.950	39.17865600	-80.18772700
140	0.893	0.199	174.5	16.309	39.17410600	-80.20516300
145	0.862	0.186	174.2	15.980	39.16875900	-80.22045800
150	0.830	0.172	179.9	15.915	39.16254100	-80.23448100
155	0.797	0.159	189.8	15.991	39.15616400	-80.24839900
160	0.764	0.146	207.8	16.379	39.14809100	-80.26181400
165	0.731	0.134	201.8	15.741	39.14978200	-80.27953300
170	0.704	0.124	177.4	14.490	39.15819100	-80.29759500
175	0.676	0.114	160.3	13.465	39.16589400	-80.31316500

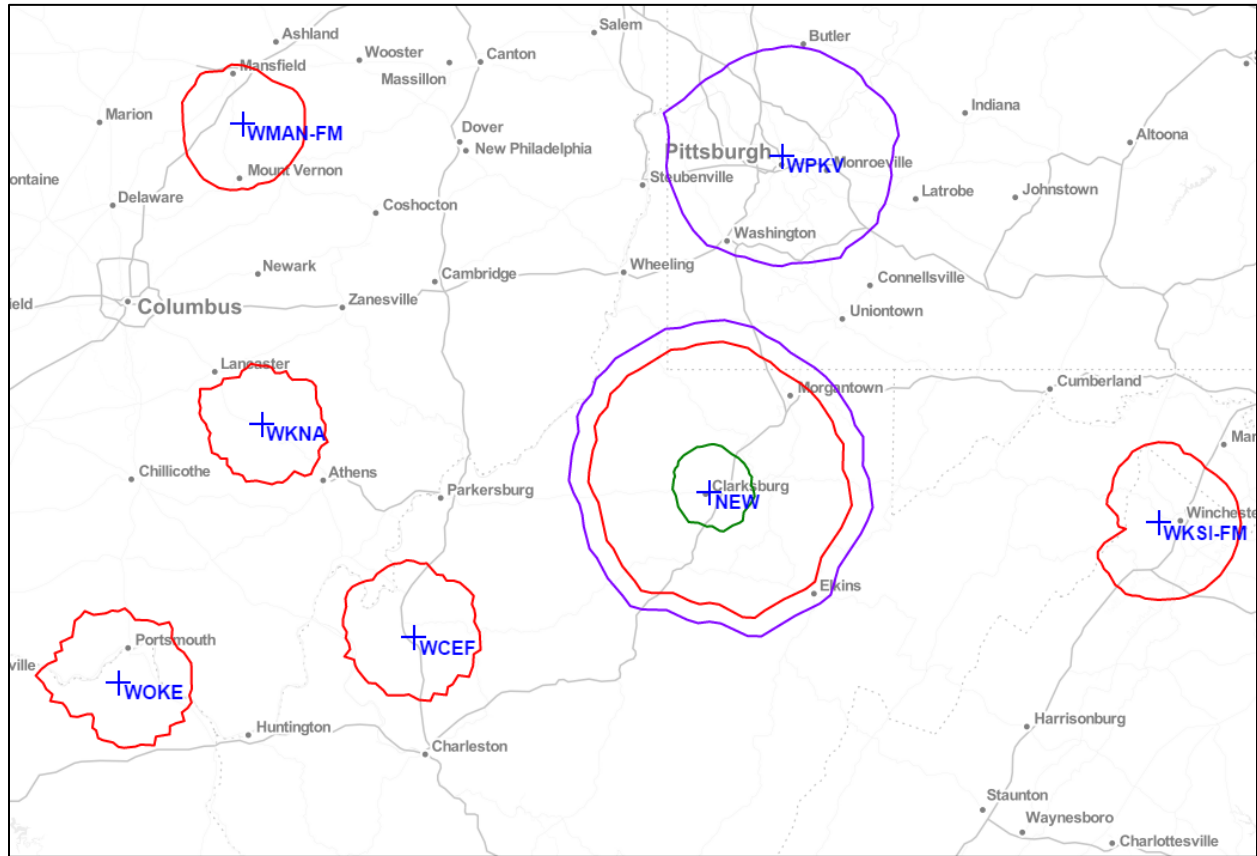
<b>Azimuth</b>	<b>Field</b>	<b>ERP</b>	<b>HAAT</b>	<b>Contour</b>	<b>Latitude</b>	<b>Longitude</b>
180	0.652	0.106	159.6	13.200	39.16781300	-80.32677800
185	0.628	0.099	172.3	13.493	39.16564100	-80.34041900
190	0.611	0.093	171.0	13.266	39.16903400	-80.35349900
195	0.594	0.088	168.8	12.997	39.17362400	-80.36579900
200	0.583	0.085	166.7	12.791	39.17841900	-80.37753300
205	0.571	0.082	184.6	13.317	39.17797000	-80.39206900
210	0.565	0.080	205.0	13.902	39.17822600	-80.40741900
215	0.558	0.078	220.0	14.307	39.18109300	-80.42198300
220	0.556	0.077	208.2	13.895	39.19075900	-80.43041100
225	0.553	0.076	203.3	13.708	39.19930500	-80.43926000
230	0.556	0.077	201.6	13.685	39.20735800	-80.44844500
235	0.558	0.078	195.9	13.530	39.21666600	-80.45542600
240	0.565	0.080	188.5	13.369	39.22633400	-80.46119300
245	0.571	0.082	193.9	13.616	39.23469100	-80.47005500
250	0.583	0.085	183.9	13.423	39.24514900	-80.47325100
255	0.594	0.088	178.7	13.374	39.25530200	-80.47681000
260	0.611	0.093	169.8	13.219	39.26578700	-80.47799300
265	0.628	0.099	169.0	13.365	39.27595000	-80.48145300
270	0.652	0.106	179.6	14.030	39.28641400	-80.48980100
275	0.676	0.114	189.6	14.653	39.29789000	-80.49641200
280	0.704	0.124	184.1	14.748	39.30943700	-80.49559200
285	0.731	0.134	179.1	14.850	39.32097300	-80.49352400
290	0.764	0.146	174.9	15.007	39.33257200	-80.49074000
295	0.797	0.159	168.1	15.021	39.34351100	-80.48508800
300	0.830	0.172	186.7	16.217	39.35933600	-80.49013600
305	0.862	0.186	184.9	16.486	39.37146100	-80.48387900
310	0.893	0.199	175.1	16.345	39.38092000	-80.47245500
315	0.923	0.213	190.3	17.351	39.39677600	-80.46955700
320	0.943	0.222	185.8	17.349	39.40597400	-80.45657200
325	0.963	0.232	191.6	17.803	39.41761900	-80.44565000
330	0.977	0.239	185.1	17.646	39.42391200	-80.42949400
335	0.991	0.246	187.1	17.868	39.43213000	-80.41470200
340	0.996	0.248	191.3	18.098	39.43944600	-80.39885600
345	1.000	0.250	201.4	18.596	39.44805500	-80.38283100
350	0.996	0.248	195.3	18.285	39.44846800	-80.36375700
355	0.992	0.246	204.7	18.668	39.45376800	-80.34572700

R E C NETWORKS  
CHANNEL REPORT

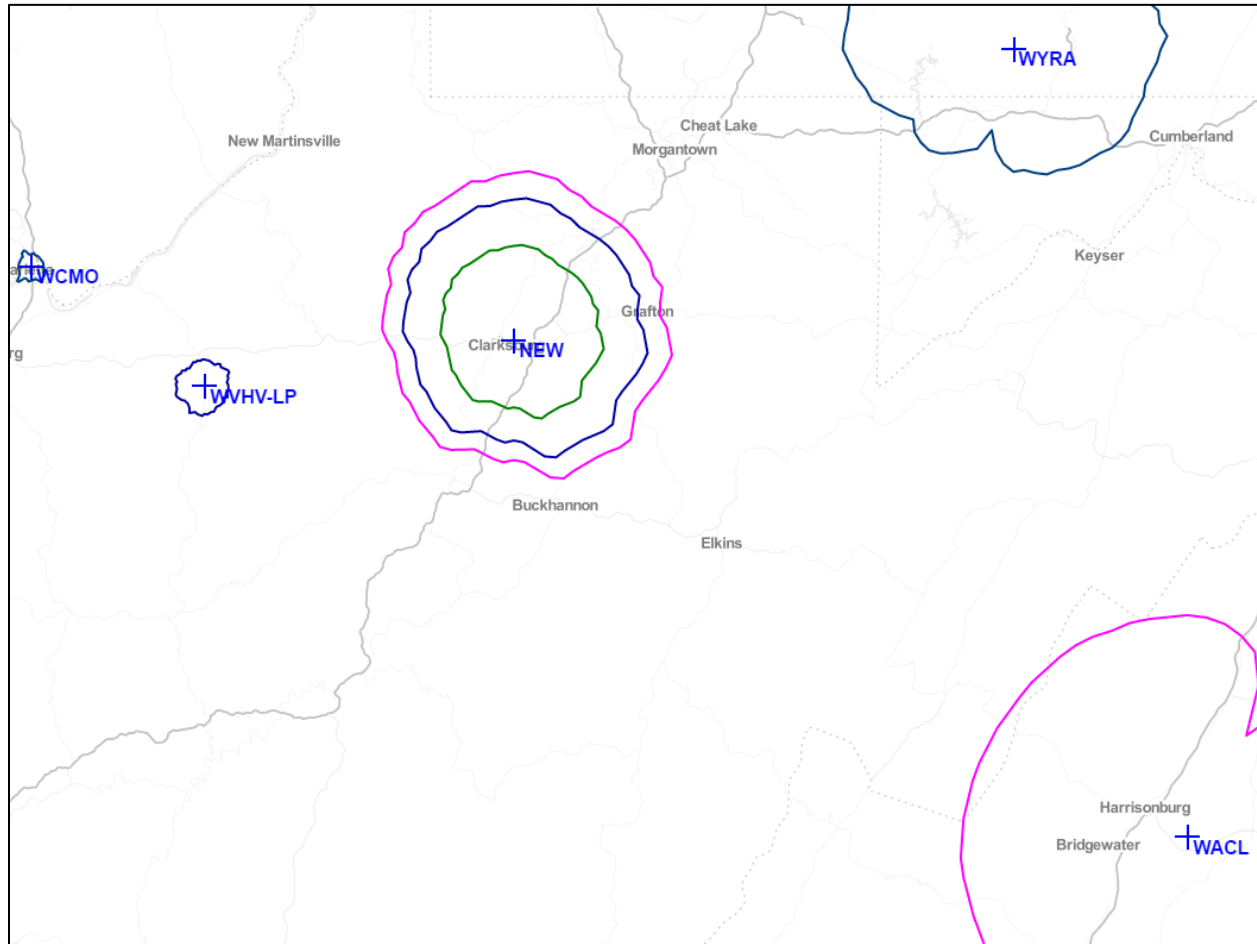
NAD27 LATITUDE: 39 - 17' 11.2" - LONGITUDE: 80 - 19' 37.1"  
CHANNEL: 252 - CLASS: D

CHAN	FREQ	CALL	LOCATION	CLS	DIST	INTF	SERV	CLEAR	BEAR
249	97.7	WSPW-LP : WOOD COUNTY BOARD OF EDUCATION	PARKERSBURG	WV L1	104.2	0.7	5.3	98.2	270.0
250	97.9	WKWK : AJG CORPORATION	FAIRMONT	WV B	27.1	1.8	66.8	-41.5	57.0
252	98.3	WKSI-FM : AMFM RADIO LICENSES, L.L.C.	STEPHENS CITY	VA A	178.5	57.6	15.2	105.7	93.0
252	98.3	WMAN-FM : CAPSTAR TX, LLC	FREDERICKTOWN	OH A	233.2	52.4	23.9	156.9	309.0
252	98.3	WKNA : WLGK, LLC	LOGAN	OH A	179.3	47.7	24.5	107.1	279.0
252	98.3	WCEF : BIG RIVER RADIO, INC.	RIPLEY	WV A	131.0	43.9	27.5	59.6	244.0
252	98.3	WOKE : EXPRESSION PRODUCTION GROUP LLC	GARRISON	KY A	247.2	44.3	28.4	174.5	253.0
252	98.3	WPKV : EDUCATIONAL MEDIA FOUNDATION	DUQUESNE	PA B1	134.7	59.0	42.7	33.0	12.0
253	98.5	WCMD : MARIETTA COLLEGE	MARIETTA	OH D	97.2	22.1	2.6	72.5	279.0
253	98.5	WACL : CAPSTAR TX, LLC	ELKTON	VA B1	167.6	24.2	43.7	99.7	126.0
253	98.5	WYRA : EDUCATIONAL MEDIA FOUNDATION	CONFLUENCE	PA A	114.8	25.8	27.0	62.0	59.0
253	98.5	WVHV-LP : RITCHIE PROGRESS ALLIANCE, INC.	HARRISVILLE	WV L1	62.3	19.7	4.6	38.0	262.0
254	98.7	WOVK : CAPSTAR TX, LLC	WHEELING	WV B	96.3	1.9	76.9	17.5	337.0
255	98.9	WDNE-FM : WEST VIRGINIA RADIO CORPORATION OF ELKINS	ELKINS	WV B1	62.6	1.1	54.0	7.5	132.0

## WVUS(APP) vs. CO-CHANNEL FACILITIES

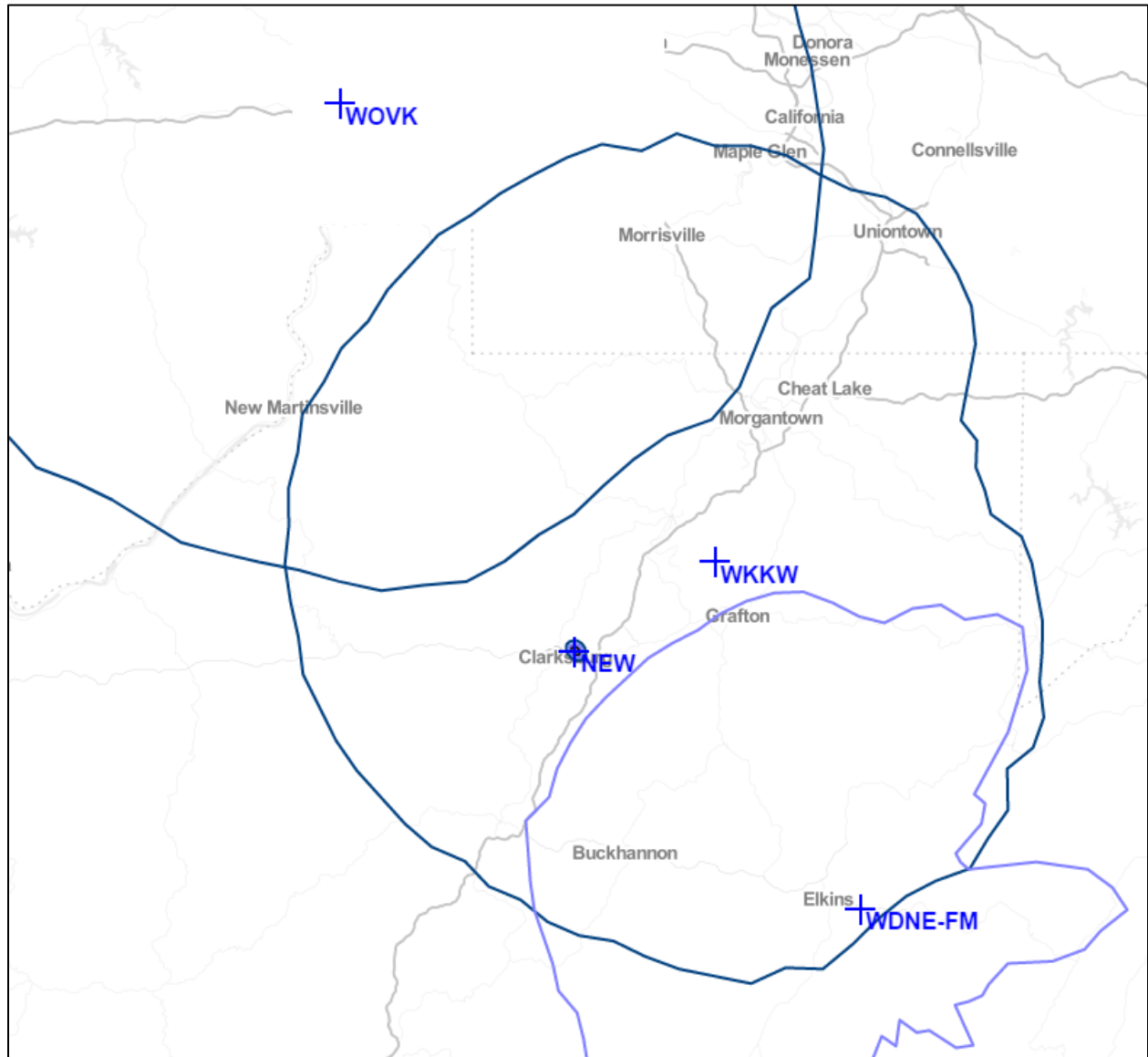


## WLDX(APP) vs. FIRST-ADJACENT CHANNEL FACILITIES





## WLDX(APP) VS. SECOND AND THIRD-ADJACENT CHANNEL FACILITIES





**REQUEST FOR WAIVER OF §74.1204(a)**  
**SECOND OR THIRD ADJACENT CHANNEL**

NEW-FX  
Clarksburg, West Virginia  
Channel 252D (98.3 MHz)

The proposed translator is located inside the protected service contour of second-adjacent channel station WKKW, Fairmount, West Virginia (Facility ID # 15253).

WKKW operates 29 kW at 195 meters height above average terrain into a non-directional antenna and places a 74.3 dBu F(50, 50) service contour at the proposed translator site.

The translator is proposing to operate 250 watts ERP with a Nicom BKG-77 circular polarized antenna utilizing the manufacturer's supplied vertical pattern.

Using the U/D method<sup>1</sup>, the proposed FM translator is predicted to produce an undesired interference overlap in respect to WKKW to the proposed translator station's 114.3 dBu interference contour ("overlap zone"). At 250 watts ERP, the overlap zone extends to 214 meters from the radiation center at the farthest lobe.

As demonstrated in the following satellite photograph, the 114.3 dBu interfering contour from the proposed translator does not reach any occupied structures. The only structure within the contour is the communications building used for the transmitter site. Even if that building had to be protected, we can demonstrate that using a worst case, single-bay Nicom BKG-77 antenna at 113 meters above ground level, interference will not reach any point lower than 18 meters above ground level.

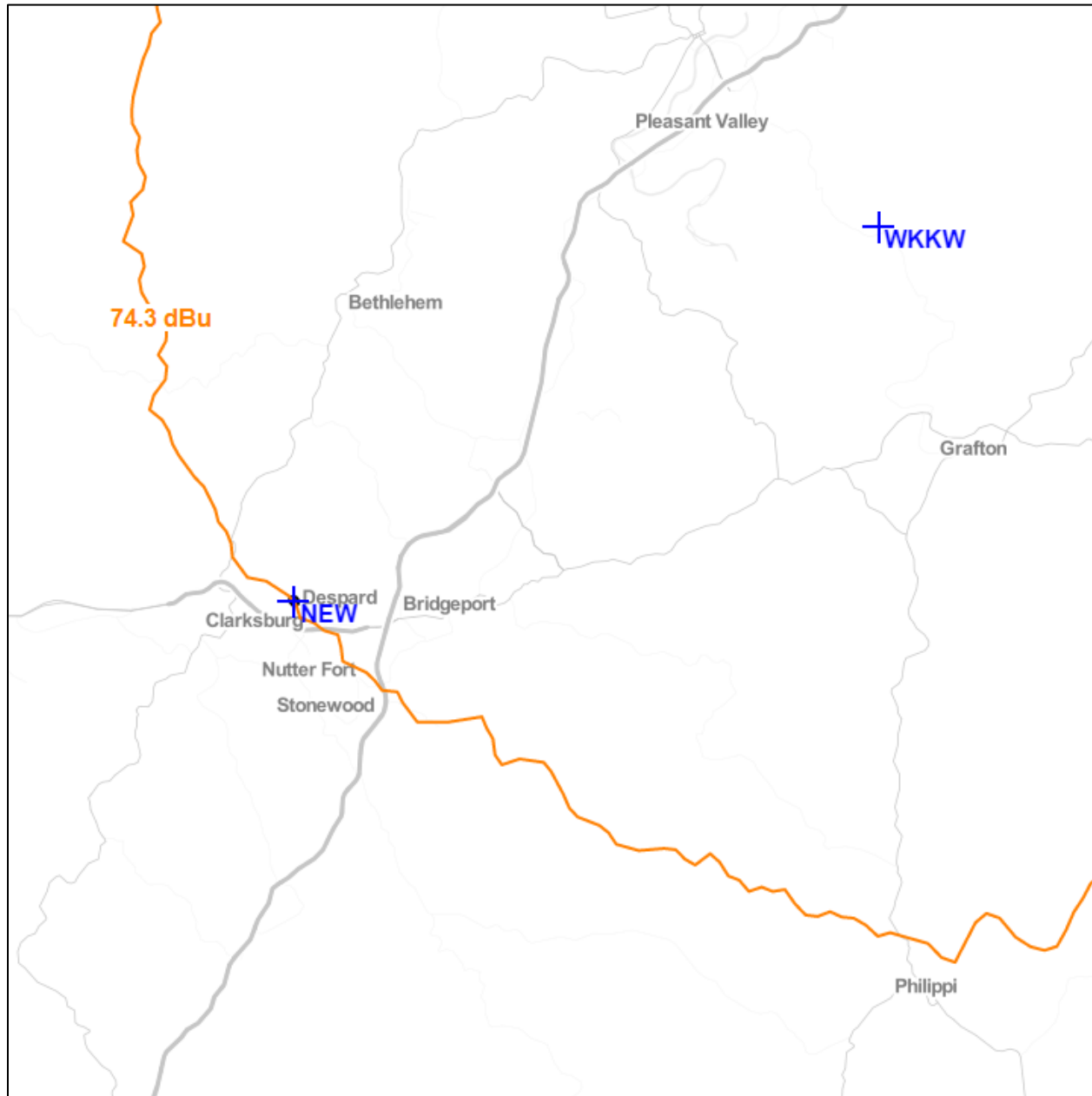
Based on these findings, the proposed FM translator station will not create any interference to listeners or potential listeners of WKKW. Therefore, the applicant is requesting a waiver of §74.1204(a) in respect to second-adjacent channel short-spaced station WKKW.

Prepared by  
Michelle Bradley  
REC Networks  
June 22, 2017

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<sup>1</sup> - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).

**74.3 dBu PROTECTED CONTOUR TOWARDS PROPOSED TRANSLATOR SITE**



**114.3 dBu INTERFERING CONTOUR FROM PROPOSED TRANSLATOR SITE**



Proposed Power:				<b>0.25 kW</b>				
Antenna Height AGL:				<b>113 m</b>				
Interference Contour:				<b>114.3 dBu</b>				
Artificial RX Antenna Height:				<b>18 m</b>				
Antenna Type:				Nicom BKG77 - 1 bay				
Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant to Interference Contour	Distance from Ant to Artificial Plane	Field Strength in dBu @ Artificial Plane	Distance from Ant to Ground Level	Field Strength in dBu @ Ground Level
5	<b>0.999</b>	0.250	-6.03	213.57	1090.00	100.14	1296.53	98.64
10	<b>0.982</b>	0.241	-6.18	209.93	547.08	105.98	650.74	104.47
15	<b>0.954</b>	0.228	-6.43	203.95	367.05	109.20	436.60	107.69
20	<b>0.918</b>	0.211	-6.76	196.25	277.76	111.28	330.39	109.78
25	<b>0.872</b>	0.190	-7.21	186.42	224.79	112.67	267.38	111.17
30	<b>0.818</b>	0.167	-7.77	174.87	190.00	113.58	226.00	112.07
35	<b>0.758</b>	0.144	-8.43	162.05	165.63	114.11	197.01	112.60
40	<b>0.691</b>	0.119	-9.23	147.72	147.79	114.30	175.80	112.79
45	<b>0.616</b>	0.095	-10.23	131.69	134.35	114.13	159.81	112.62
50	<b>0.538</b>	0.072	-11.40	115.01	124.01	113.65	147.51	112.14
55	<b>0.465</b>	0.054	-12.67	99.41	115.97	112.96	137.95	111.45
60	<b>0.391</b>	0.038	-14.18	83.59	109.70	111.94	130.48	110.43
65	<b>0.313</b>	0.024	-16.11	66.91	104.82	110.40	124.68	108.89
70	<b>0.239</b>	0.014	-18.45	51.09	101.10	108.37	120.25	106.87
75	<b>0.176</b>	0.008	-21.11	37.63	98.35	105.95	116.99	104.45
80	<b>0.129</b>	0.004	-23.81	27.58	96.47	103.42	114.74	101.92
85	<b>0.103</b>	0.003	-25.76	22.02	95.36	101.57	113.43	100.06
90	<b>0.105</b>	0.003	-25.60	22.45	95.00	101.77	113.00	100.26

## HORIZONTAL PATTERN OF NICOM BKG-77

