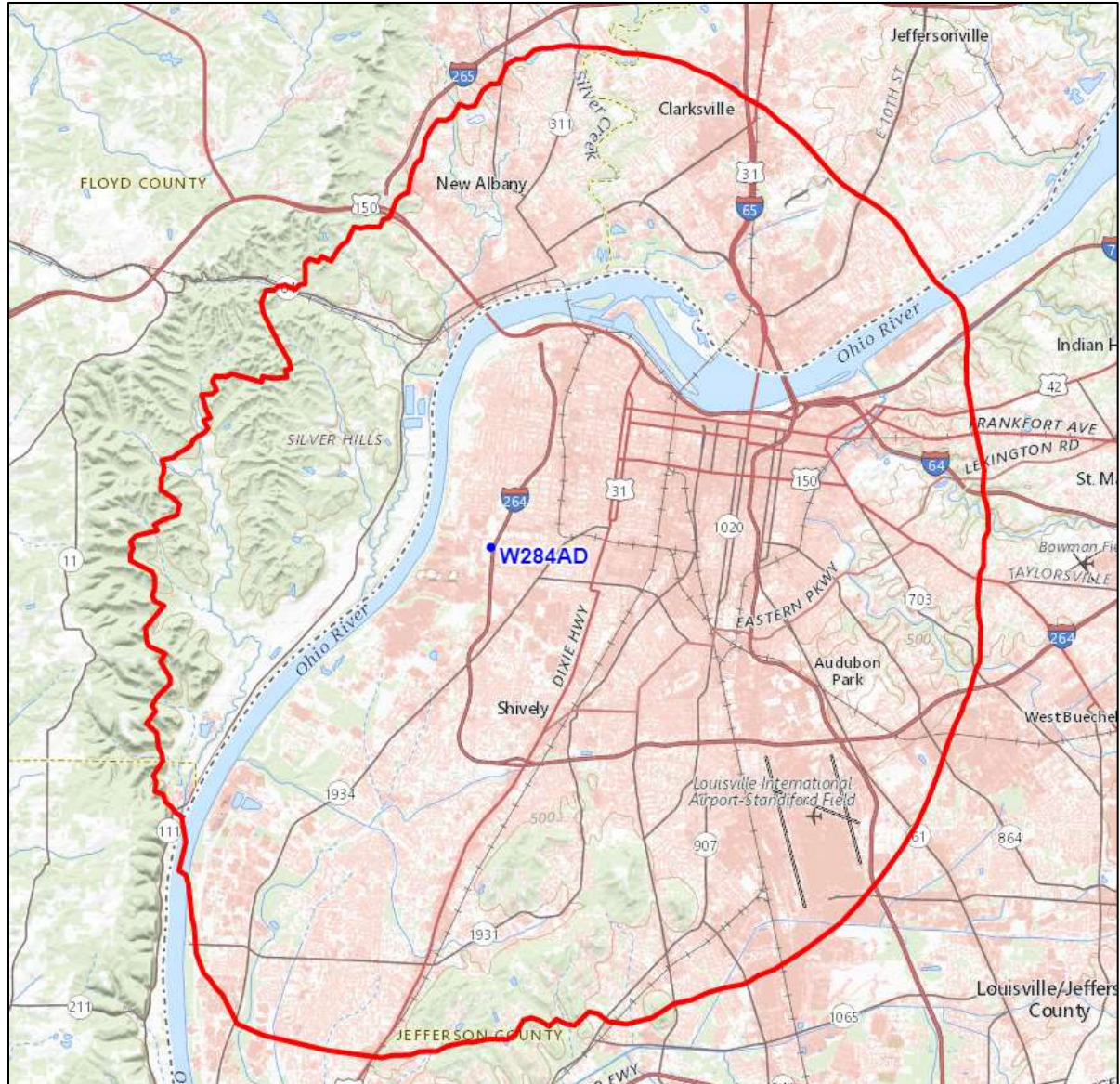




REC Networks/Michelle Bradley, CBT
11541 Riverton Wharf Rd.
Mardela Springs, MD 21837
844.REC.LPFM/202.621.2355
recnet.com

Minor modification to licensed facility for W284AD
NEW ALBANY, IN
NEW ALBANY BROADCASTING CO, INC.
BLFT-20140221ABH

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



NEW ALBANY, IN – Channel 284D ~ 104.7 MHz ~ ERP 0.099 kW
Elev: 136 meters ~ RCAGL: 140 meters ~ RCAMSL: 276 meters ~ HAAT: 115 meters
Overall tower height: 147 meters – ASR: 1053957
NAD83 Latitude: 38° 13' 50.3" NL – Longitude: 85° 49' 19.9" WL
NAD27 Latitude: 38° 13' 50.0" NL – Longitude: 85° 49' 20.0" WL
Antenna co-located and isocoupled on tower for commonly-owned WLOU(AM).

Site: W284AD
 Coordinates: 38-13-50.0 N, 85-49-20.0 W
 Freq: 104.70000 MHz
 ERP: 99.00 W

Bearing	ERP W	HAAT	DH	Distance	Lat	Lon
0	99.00	125	130	11.43	38.333353	-85.822222
5	99.00	138	30	11.99	38.337997	-85.810238
10	99.00	144	60	12.27	38.339265	-85.797783
15	99.00	148	50	12.46	38.338802	-85.785242
20	99.00	149	80	12.50	38.336229	-85.773183
25	99.00	149	80	12.50	38.332469	-85.761630
30	99.00	147	80	12.41	38.327224	-85.751062
35	99.00	142	80	12.18	38.320261	-85.742137
40	99.00	140	90	12.09	38.313789	-85.733174
45	99.00	142	80	12.18	38.307973	-85.723510
50	99.00	146	80	12.37	38.302000	-85.713649
55	99.00	150	110	12.55	38.295237	-85.704415
60	99.00	152	120	12.64	38.287325	-85.696804
65	99.00	144	90	12.27	38.277139	-85.694779
70	99.00	139	90	12.04	38.267517	-85.692632
75	99.00	136	80	11.91	38.258198	-85.690491
80	99.00	135	80	11.86	38.249008	-85.688418
85	99.00	135	90	11.86	38.239777	-85.686888
90	99.00	133	90	11.78	38.230478	-85.687374
95	99.00	133	90	11.78	38.221247	-85.687904
100	99.00	135	80	11.86	38.211951	-85.688487
105	99.00	134	70	11.82	38.202967	-85.691542
110	99.00	135	70	11.86	38.193993	-85.694645
115	99.00	136	60	11.91	38.185234	-85.698746
120	99.00	140	70	12.09	38.176146	-85.702475
125	99.00	142	60	12.18	38.167669	-85.708089
130	99.00	146	80	12.37	38.159012	-85.713862
135	99.00	146	80	12.37	38.151865	-85.722209
140	99.00	145	60	12.32	38.145641	-85.731660
145	99.00	141	80	12.13	38.141143	-85.742642
150	99.00	137	80	11.95	38.137468	-85.753906
155	99.00	131	80	11.69	38.135248	-85.765728
160	99.00	126	100	11.47	38.133577	-85.777352
165	99.00	125	100	11.43	38.131256	-85.788398
170	99.00	121	80	11.26	38.130859	-85.799874
175	99.00	122	90	11.30	38.129314	-85.810962
180	99.00	126	110	11.47	38.127363	-85.822222
185	99.00	134	90	11.82	38.124645	-85.834001
190	99.00	143	90	12.23	38.122258	-85.846495
195	99.00	151	90	12.59	38.121142	-85.859486
200	99.00	151	90	12.59	38.124109	-85.871467
205	99.00	152	90	12.64	38.127518	-85.883292
210	99.00	150	120	12.55	38.132785	-85.893970
215	99.00	142	120	12.18	38.140796	-85.902110
220	99.00	121	120	11.26	38.152978	-85.904971
225	99.00	103	110	10.44	38.164101	-85.906705
230	99.00	93	90	9.94	38.173073	-85.909314
235	99.00	87	100	9.62	38.180881	-85.912410
240	99.00	85	90	9.52	38.187727	-85.916519
245	99.00	81	60	9.28	38.195233	-85.918498
250	99.00	67	80	8.43	38.204600	-85.912851
255	99.00	64	80	8.23	38.211369	-85.913189
260	99.00	67	110	8.43	38.217357	-85.917218
265	99.00	64	130	8.23	38.224069	-85.916056
270	99.00	66	80	8.36	38.230517	-85.917946
275	99.00	64	60	8.23	38.236967	-85.916073
280	99.00	59	60	7.89	38.242839	-85.911162
285	99.00	60	80	7.95	38.249037	-85.910205
290	99.00	59	80	7.89	38.254784	-85.907101
295	99.00	56	60	7.69	38.259748	-85.902025
300	99.00	56	40	7.69	38.265101	-85.898484
305	99.00	55	50	7.62	38.269845	-85.893732
310	99.00	52	50	7.39	38.273280	-85.887107
315	99.00	60	50	7.95	38.281119	-85.886659
320	99.00	65	50	8.29	38.287686	-85.883314
325	99.00	66	50	8.36	38.292138	-85.877174
330	99.00	64	50	8.23	38.294630	-85.869364
335	99.00	60	60	7.95	38.295380	-85.860742
340	99.00	67	60	8.43	38.301767	-85.855252
345	99.00	77	70	9.05	38.309144	-85.849059
350	99.00	94	90	9.99	38.319008	-85.842102
355	99.00	111	120	10.81	38.327451	-85.833028

ComStudy 2.2 search of channel 284 (104.7 MHz Class D) at 38-13-50.0 N, 85-49-20.0 W.

CALL	CITY	ST	CHN	CL	DIST	SEP	BRNG	CLEARANCE
WLCL	SELLERSBURG	IN	230	A	6.29	10.00	63.2	-3.7
-- Translator limited to 99 watts ERP.								
WCKQ	CAMPBELLSVILLE	KY	281	C3	106.86	0.00	158.4	29.73 dB
WIKY-FM	EVANSVILLE	IN	281	B	157.91	0.00	260.7	28.31 dB
WXBC	HARDINSBURG	KY	282	A	74.20	0.00	226.6	26.00 dB
WAYI	CHARLESTOWN	IN	282	A	32.76	0.00	31.4	3.72 dB
W283AK	ELIZABETHTOWN	KY	283	D	54.21	0.00	186.2	12.27 dB
WJJK	NOBLESVILLE	IN	283	B	181.31	0.00	350.4	27.64 dB
WLKT	LEXINGTON-FAYETTE	KY	283	C2	133.57	0.00	97.3	25.86 dB
WGFX	GALLATIN	TN	283	C1	234.30	0.00	201.8	39.66 dB
WTUE	DAYTON	OH	284	B	216.68	0.00	39.6	23.55 dB
WITZ-FM	JASPER	IN	284	B	98.74	0.00	278.1	0.40 dB
W285ER	MIDDLETOWN	KY	285	D	24.57	0.00	86.9	3.98 dB
WFKY	FRANKFORT	KY	285	A	79.45	0.00	90.4	21.07 dB
WKHG	LEITCHFIELD	KY	285	A	89.74	0.00	207.2	23.41 dB
WJRS	JAMESTOWN	KY	285	A	149.23	0.00	153.6	38.75 dB
WINN	COLUMBUS	IN	285	A	106.72	0.00	353.6	27.98 dB
WGHL	SHEPHERDSVILLE	KY	286	A	16.81	0.00	168.8	-9.82 dB
WUBE-FM	CINCINNATI	OH	286	B	152.05	0.00	48.7	29.57 dB
WMPI	SCOTTSBURG	IN	287	A	54.76	0.00	12.4	13.94 dB
WPTQ	GLASGOW	KY	287	C3	140.93	0.00	190.2	37.18 dB
WJLT	EVANSVILLE	IN	287	B	157.60	0.00	264.4	27.88 dB

NOTE: THIS APPLICATION IS MAKING NO CHANGES TO THE TRANSLATOR FACILITY'S LOCATION OR HEIGHT.
THIS IS MERELY AN ANTENNA CHANGE.

SECOND ADJACENT CHANNEL SHOWING

W284AD
New Albany, Indiana
Channel 284D – 104.7 MHz

W284AD is currently inside the 60 dBu protected service contour of second-adjacent channel station WGHL, Sheperdsville, Kentucky for which W284AD has already been granted a waiver of §74.1204(a).

This instant application is to change the antenna from an ERI LPX-1E non-directional antenna to a Nicom BKG-77, 2-bay, 0.85 wave spaced non-directional antenna. Radiation center and location remain the same.

In the ongoing interest of assuring compliance with the waiver of §74.1204(a), we will demonstrate that the antenna change will continue protection of WGHL.

Using the U/D method¹, WGHL places a 68.8 dBu contour at the W284AD transmitter site. At 99 watts ERP, this creates a 108.8 dBu interfering contour of 253 meters, which reaches the ground. Within 253 meters of the tower, there is an interstate highway. Based on the manufacturer's specifications, the 108.8 dBu contour does not reach any point lower than 67 meters above ground level. Therefore, it can be demonstrated that the installation of the 2-bay Nicom BKG-77 will not result in any interference to listeners or potential listeners of WGHL.

Applicant requests that the waiver of §74.1204(a) in respect to WHGL continue with the installation of this antenna.

Prepared by

/S/

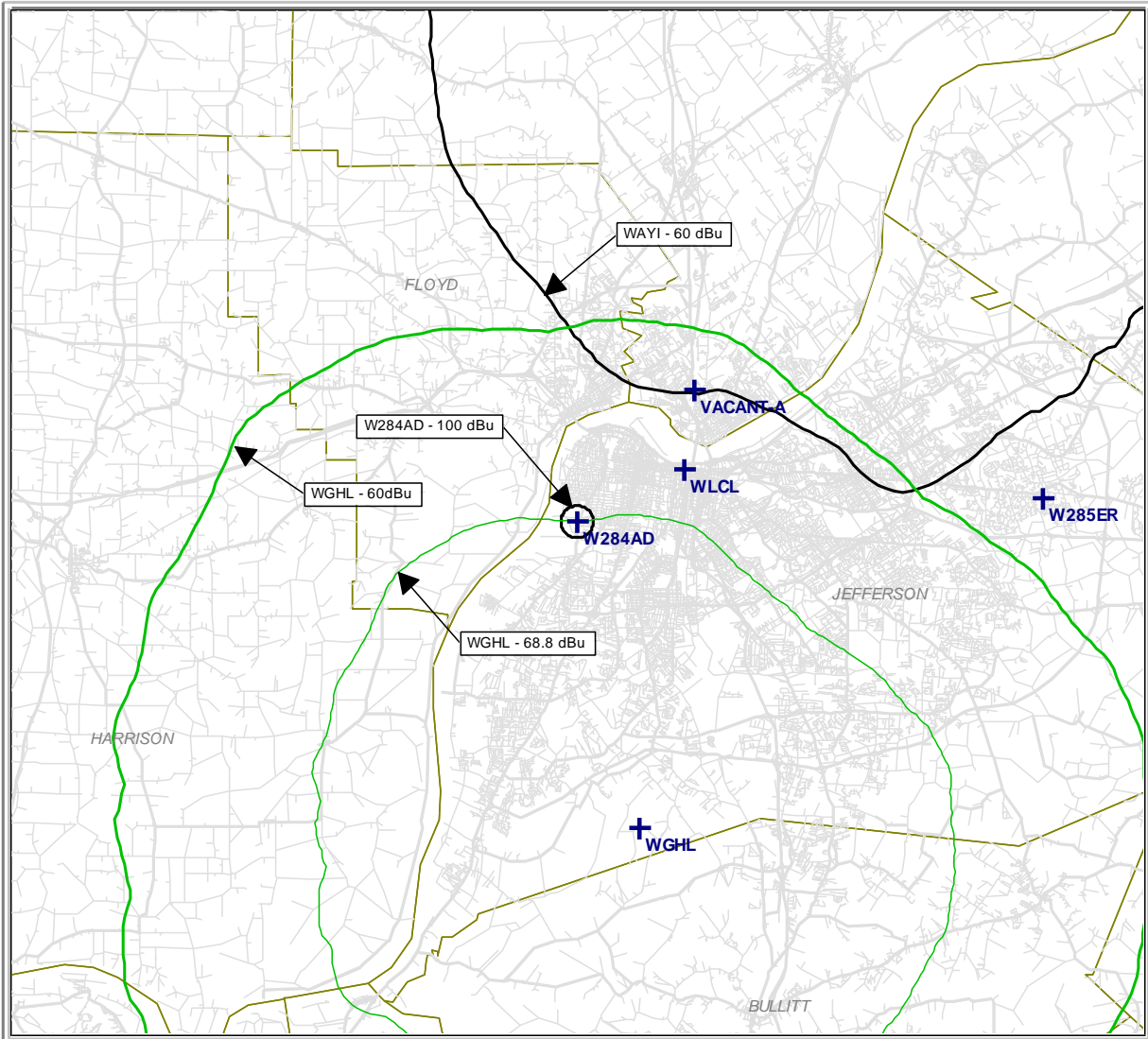
Michelle Bradley, CBT
REC Networks

May 24, 2021

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

Proposed Power:				0.099 kW				
Antenna Height AGL:				140 m				
Interference Contour:				108.8 dBu				
Artificial RX Antenna Height:				67 m				
Antenna Type:				Nicom BKG77 - 2 bay 0.85 wave spacing				
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	0.967	0.093	-10.34	245.04	837.58	98.12	1606.32	92.47
10	0.871	0.075	-11.24	220.72	420.39	103.20	806.23	97.55
15	0.711	0.050	-13.01	180.17	282.05	104.91	540.92	99.25
20	0.518	0.027	-15.76	131.26	213.44	104.58	409.33	98.92
25	0.310	0.010	-20.22	78.56	172.73	101.96	331.27	96.30
30	0.112	0.001	-29.06	28.38	146.00	94.57	280.00	88.92
35	0.062	0.000	-34.20	15.71	127.27	90.63	244.08	84.97
40	0.198	0.004	-24.11	50.17	113.57	101.70	217.80	96.05
45	0.288	0.008	-20.86	72.98	103.24	105.79	197.99	100.13
50	0.336	0.011	-19.52	85.14	95.29	107.82	182.76	102.17
55	0.349	0.012	-19.19	88.44	89.12	108.73	170.91	103.08
60	0.331	0.011	-19.65	83.88	84.29	108.76	161.66	103.10
65	0.295	0.009	-20.65	74.75	80.55	108.15	154.47	102.50
70	0.246	0.006	-22.22	62.34	77.68	106.89	148.98	101.23
75	0.197	0.004	-24.15	49.92	75.58	105.20	144.94	99.54
80	0.151	0.002	-26.46	38.26	74.13	103.06	142.16	97.40
85	0.122	0.001	-28.32	30.92	73.28	101.30	140.53	95.65
90	0.117	0.001	-28.68	29.65	73.00	100.97	140.00	95.32

W284AD - Second Adjacent Channel



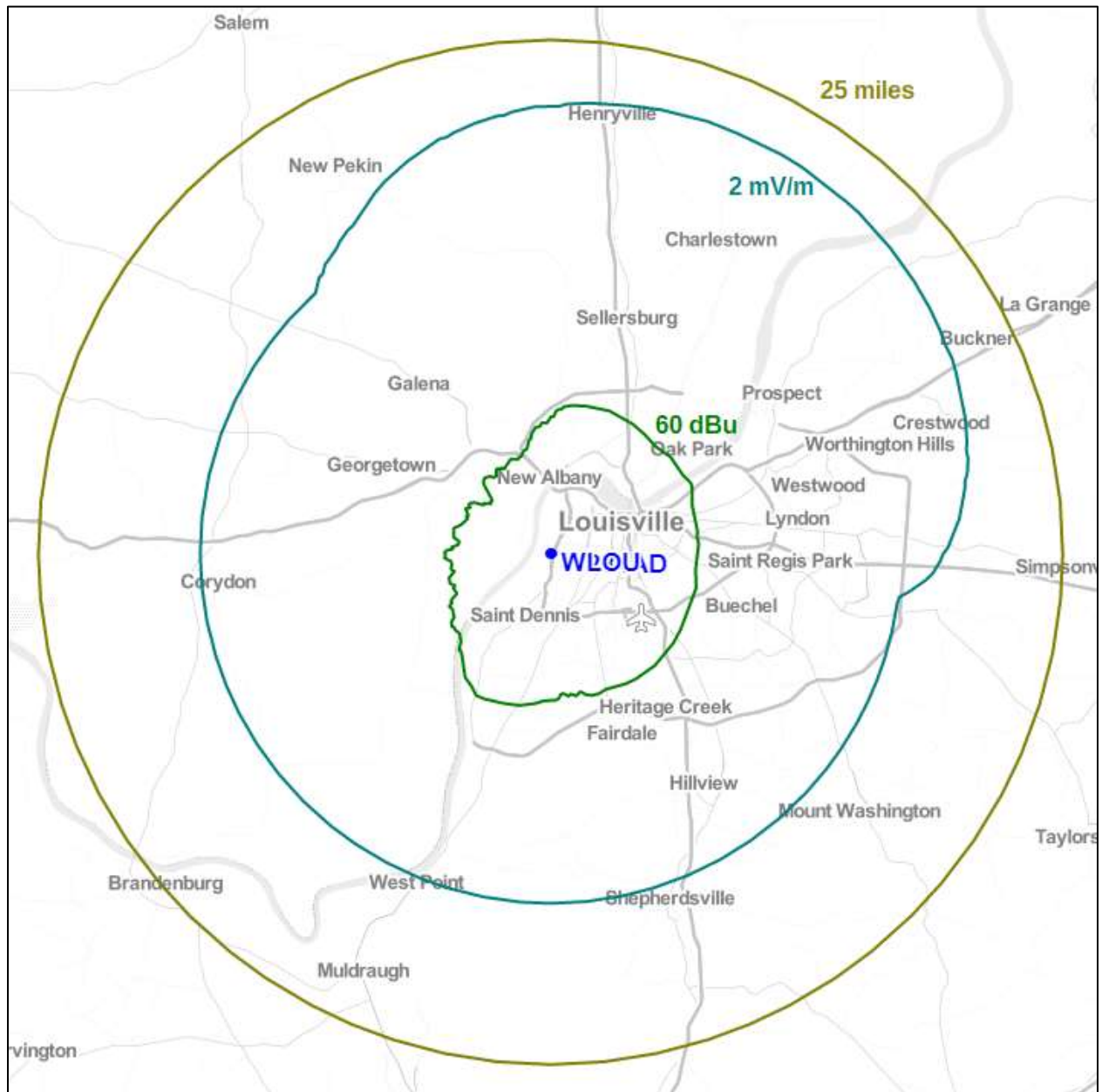
CROSS-SERVICE FILL-IN COVERAGE

W284AD

New Albany, Indiana

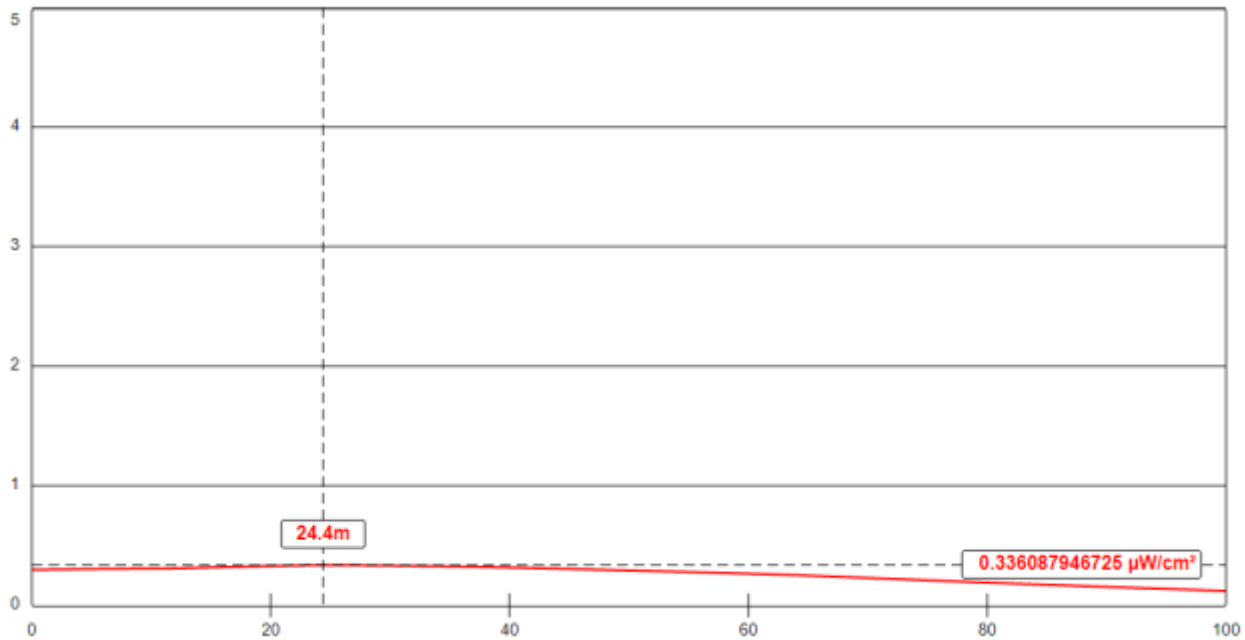
Channel 284D – 104.7 MHz

Primary station: WLOU(AM)



NEPA COMPLIANCE

W284AD
New Albany, Indiana
Channel 284D – 104.7 MHz



The instant application is proposed for 99 watts vertical and 99 watts horizontal. Operation will be using a two bay Nicom BKG-77 circular polarized antenna. This will be a combined antenna shared with W270CR, which is proposed to be modified to this location on a simultaneously filed application. W270CR operates 114 watts vertical and horizontal on Channel 270D. Using the Commission's FM MODEL software based on 213 watts vertical and 213 watts horizontal, it has been determined that there is no point that will exceed the general population/controlled exposure guideline of 200 $\mu\text{W}/\text{cm}^2$.

In the instant application, the applicant is certifying that the RF exposure in all occupied areas is well within the guidelines in accordance with OET Bulletin No. 65, Edition 97-01, August, 1997.

Report prepared by:

Michelle Bradley, CBT
REC Networks

May 24, 2021

PART 1 – SUBPART BB
INSTALLATION ON AM TOWER

W284AD

New Albany, Indiana

Channel 284D – 104.7 MHz

The proposed antenna will be mounted on an existing nighttime tower for WLOU(AM), 1350 kHz, a 1 tower day, 3 tower directional antenna system. §1.30004 requires notification of WLOU(AM) of the construction. As WLOU(AM) is a commonly owned facility, the AM station has been notified and consents to the construction.

Another tower on the site is also used for WLLV(AM), 1240 kHz, a one-tower, nondirectional antenna system. As WLLV(AM) is also commonly owned, the WLLV(AM) is considered notified and consents to the construction.

This also replaces an existing isocoupled FM antenna already in place for W284AD. Once completed, W270CR and W284AD will operate on a combined antenna.

There is no change to the electrical height of the AM tower.

Applicant will accept a condition to the construction permit as it would relate to installation on a “hot” tower.

There are no other AM facilities within 3 km of the proposed facility.

Report prepared by:

Michelle Bradley, CBT
REC Networks

May 25, 2021