



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

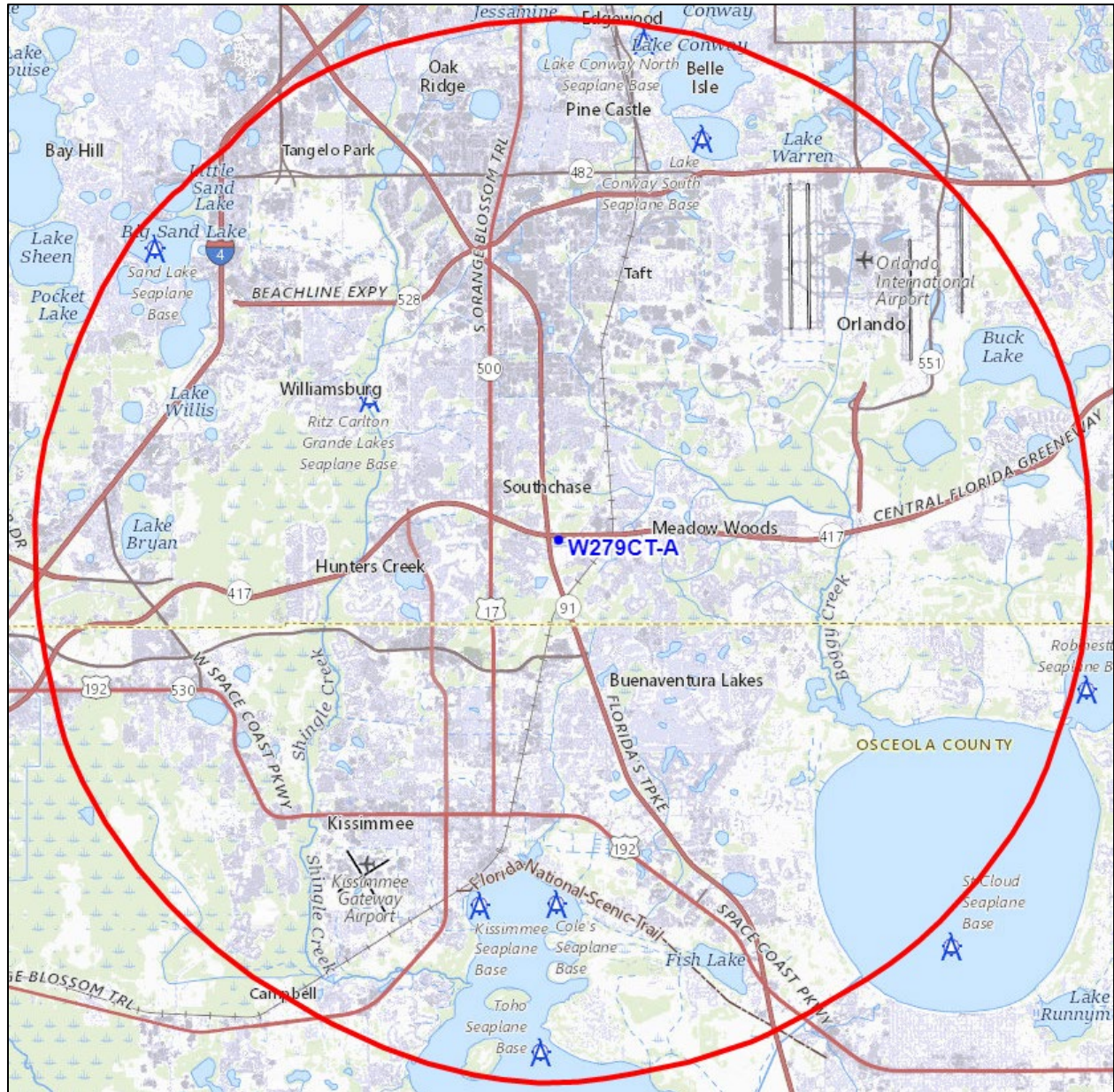
Minor modification Permit for W279CT

CLERMONT, FL

CENTRAL FLORIDA EDUCATIONAL FOUNDATION, INC.

BLFT-20140129ALS

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



KISSIMMEE, FL – Channel 279D ~ 103.7 MHz ~ ERP 0.181 kW ~ Nondirectional
Elev: 27.4 meters ~ RCAGL: 126 meters ~ RCAMSL: 153.4 meters
Overall tower height: 140.2 meters – ASR: 1041410
NAD83 Latitude: 28° 22' 2.1" NL – Longitude: 81° 23' 12.1" WL

ABOUT THIS APPLICATION

W279CT
Kissimmee, FL
Channel 279D – 103.7 MHz

This application is part of a coordinated change of three facilities in the Orlando area..

As a part of this coordinated change:

W279DI proposes to change RCAGL and change to Channel 284 at the same site.

W279CT proposes to move to the same site as W279DI and remain on the same channel.

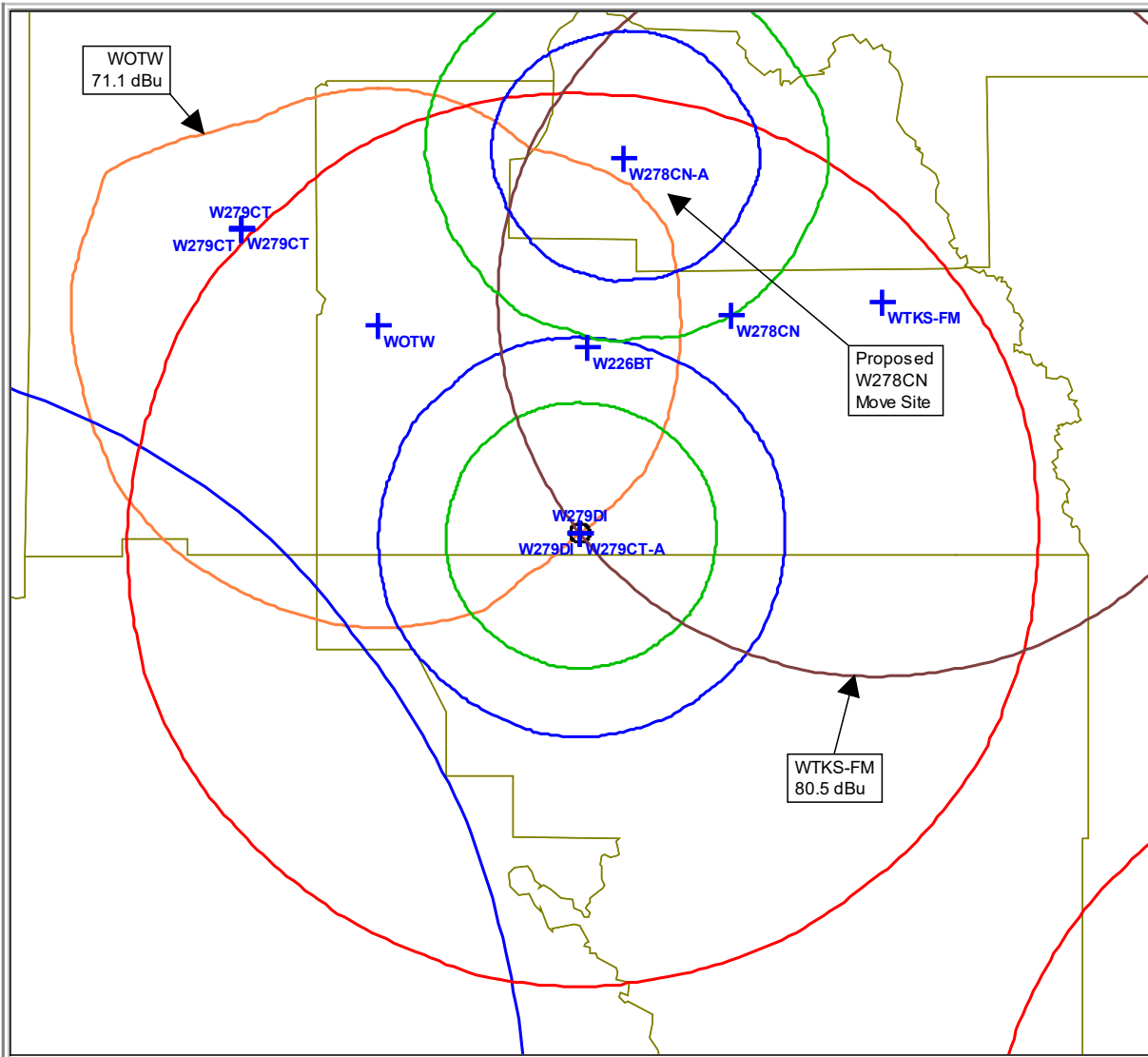
W278CN proposes to move further to the northwest.

All three simultaneously-filed applications are contingent on each other.

ComStudy 2.2 search of channel 279 (103.7 MHz Class D) at 28-22-01.1 N, 81-23-12.8 W.

CALL	CITY	ST	CHN	CL	DIST	SEP	BRNG	CLEARANCE
W279CT	CLERMONT	FL	279	D	46.31	0.00	312.7	-31.15 dB
* Currently authorized facility.								
W279CT	CLERMONT	FL	279	D	46.29	0.00	312.7	-31.15 dB
* Currently authorized facility.								
W279DI	KISSIMMEE	FL	279	D	0.00	0.00	90.0	-27.36 dB
* Changing to Ch. 284 as a part of this contingent application.								
W279DI	KISSIMMEE	FL	279	D	0.00	0.00	90.0	-24.93 dB
* Changing to Ch. 284 as a part of this contingent application.								
W279CT	CLERMONT	FL	279	D	46.29	0.00	312.7	-23.65 dB
* Currently authorized facility.								
WTKS-FM	COCOA BEACH	FL	281	C	38.62	0.00	51.9	-21.03 dB
* Waiver of §74.1204 requested. 80.5 dBu at proposed site.								
WOTW	WINDERMERE	FL	276	C2	29.40	0.00	316.5	-11.78 dB
* Waiver of §74.1204 requested. 71.1 dBu at proposed site.								
W278CN	EATONVILLE	FL	278	D	27.01	0.00	34.0	-5.71 dB
* Site change (see W278CN-A) as a part of this contingent application.								
WFUS	GULFPORT	FL	278	C0	105.16	0.00	234.8	1.67 dB
W278CN-A	EATONVILLE	FL	278	D	38.69	0.00	6.4	4.54 dB
* W278CN's new site as a part of this contingent application.								
WQOL	VERO BEACH	FL	279	C2	115.11	0.00	127.4	6.62 dB
WRUF-FM	GAINESVILLE	FL	279	C1	178.24	0.00	327.0	19.82 dB
W278CI	OXFORD	FL	278	D	91.53	0.00	310.7	26.31 dB
W280DW	TAMPA	FL	280	D	106.38	0.00	251.9	28.70 dB
W280DK	SPRING HILL	FL	280	D	110.87	0.00	280.0	31.46 dB
WVYB	HOLLY HILL	FL	277	A	101.12	0.00	17.5	33.63 dB
WXKB	CAPE CORAL	FL	280	C	216.77	0.00	186.4	34.31 dB
W278BP	PALM COAST	FL	278	D	132.11	0.00	7.5	36.64 dB
W282CC	ZEPHYR HILLS	FL	282	D	81.11	0.00	263.5	37.83 dB
W280FD	LARGO	FL	280	D	147.01	0.00	247.2	38.97 dB
W280FD	LARGO	FL	280	D	147.01	0.00	247.2	39.03 dB

Contour Protection



Red=co-channel (40 dBu interfering into 60 dBu protected)

Blue=first-adjacent channel (54 dBu interfering into 60 dBu protected)

Black=second/third-adjacent channel (100 dBu interfering into 60 dBu protected)

MATTOON WAIVER REQUEST

W279CT
Kissimmee, FL
Channel 279D – 103.7 MHz

§74.1233(a)(i)(B) defines a minor change as any change in antenna location where the station would continue to provide 1 mV/m service to some portion of its previously authorized 1 mV/m service area.

In the instant application, the applicant acknowledges that the change in antenna location does not place a 1 mV/m service contour over any portion of the currently authorized 1 mV/m service contour. As such, the applicant is requesting a waiver pursuant to *The Cromwell Group of Illinois*.¹ In *Mattoon*, the Audio Division had found that a waiver in this very narrow situation in order to help revitalize the AM broadcast band is in the public interest.²

In *Mattoon*, the Commission had developed a four prong test in order to qualify for a “Mattoon Waiver”:

No History of Translator “Hops.” – The applicant is currently the licensee of multiple FM translators and at no time has engaged in the behavior of serial filing of multiple modifications in order to move a translator closer to a desired location. While there have been several construction permits for this facility in the past, none of those permits changed the physical location of the transmitting antenna. Therefore, this application meets the first prong.

Mutual Exclusivity. In the instant application, there is substantial overlap of the interfering and protected service contours of the currently licensed facility and the proposed facility. Therefore, this application meets the second prong.

Foreclosure of LPFM opportunities. The proposed transmitter site is located within the Orlando market. In the LPFM *Third Further Notice*, the Commission considered Orlando a “spectrum available” market in respect to new LPFM stations.³ Even if Orlando was considered then as “spectrum limited” (it would be so in today’s conditions), an REC Channel Point report based on information last updated on May 11, 2022 shows that on Channels 277 through 281 (co, first and second-adjacent channels), there are no identified LPFM channel points within the Orlando 30x30 minute grid, thus the proposal will not foreclose on any future LPFM opportunities. Therefore, this application meets the third prong.

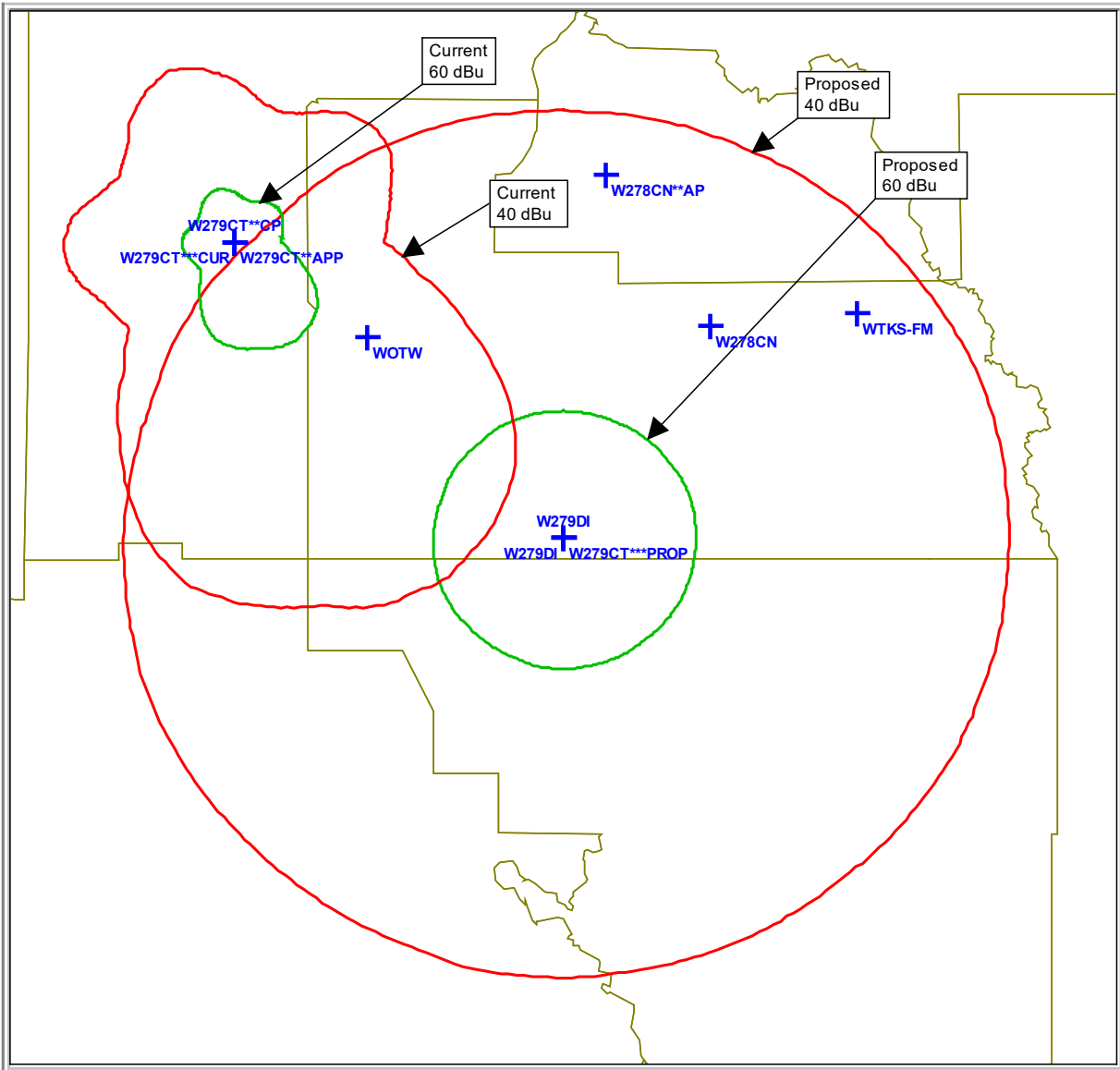
Proposed translator will rebroadcast an AM station. The proposed translator will be used to rebroadcast the signal of WVVO.

¹ See *Cromwell Group of Illinois*, Letter, 26 FCC Rcd. 12685 (“Mattoon”).

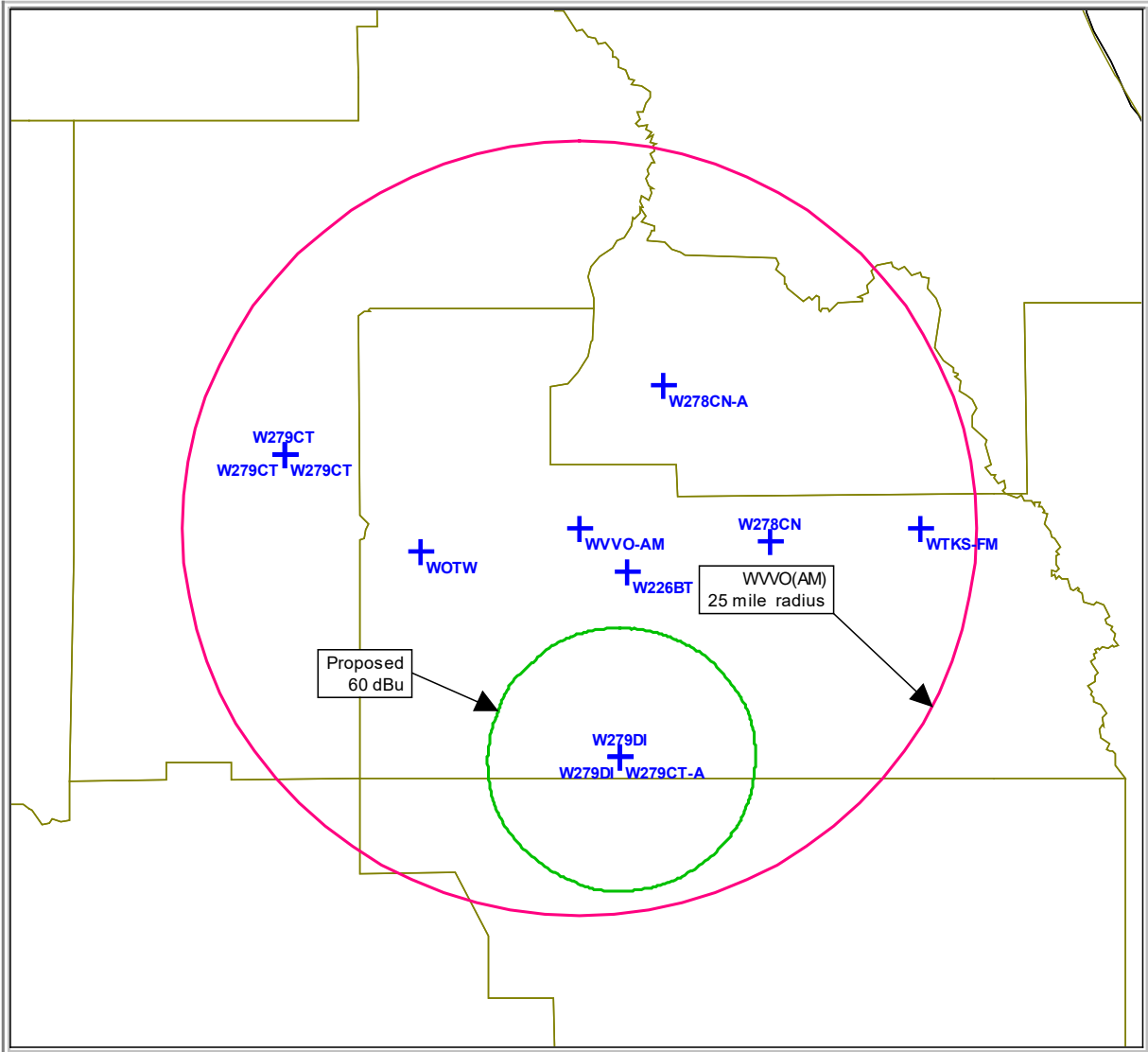
² Id. at 2.

³ 26 FCC Rcd. 9986, *et seq.*

Demonstrating mutual exclusivity for Mattoon Waiver.



Fill In Area - WVVO(AM)



REQUEST FOR WAIVER OF §74.1204

W279CT
Kissimmee, FL
Channel 279D – 103.7 MHz

The proposed facility is located within the 60 dBu protected service contours of third-adjacent channel facility WOTW, Windemere, Florida and second-adjacent channel facility WTKS-FM, Cocoa Beach, Florida.

WOTW operates 22 kW effective radiated power (ERP) into a directional antenna at 227 meters height above average terrain (HAAT) on Channel 276C2. WOTW places a 71.1 dBu service contour at the proposed site.

WTKS-FM operates 94 kW ERP into a nondirectional antenna at 482 meters HAAT on Channel 281C. WTKS-FM places an 80.5 dBu service contour at the proposed site.

When evaluating multiple overlapping stations, we further review the weaker of the two stations as the interfering contour of the stronger station would be fully contained inside the weaker station. In this case, we will further evaluate WOTW.

Using the U/D method⁴, the proposed translator is predicted to produce an undesired interfering contour overlap in respect to WOTW to the proposed translator station's 111.1 dBu interfering contour (overlap zone). At 181 watts ERP, the overlap zone extends to 263 meters. As the proposed radiation center is 126 meters above ground level, the interference will reach the ground. In addition, the tower is adjacent to an interstate grade signed state highway that would be subject to protection for potential listeners. Along the highway within the overlap zone, we were able to identify locations that are at elevations of up to 7 meters higher than the base of the tower due to highway infrastructure. To address this interference, the applicant is proposing to operate a 1-bay Nicom BKG-77 circular polarized antenna. Based on the manufacturer's specifications, at 9 meters above ground level (taking human height into consideration), the interfering contour along the -40 degree depression angle will not exceed 111.08 dBu. This higher artificial floor takes the highway infrastructure into consideration.

Based on these findings, the proposed FM translator will not create any interference to listeners or potential listeners of WOTW nor WTKS-FM. The applicant is requesting a waiver of §74.1204(a) in respect to second and third adjacent channel short spaced stations WOTW, Windemere, Florida and WTKS-FM, Cocoa Beach, Florida.

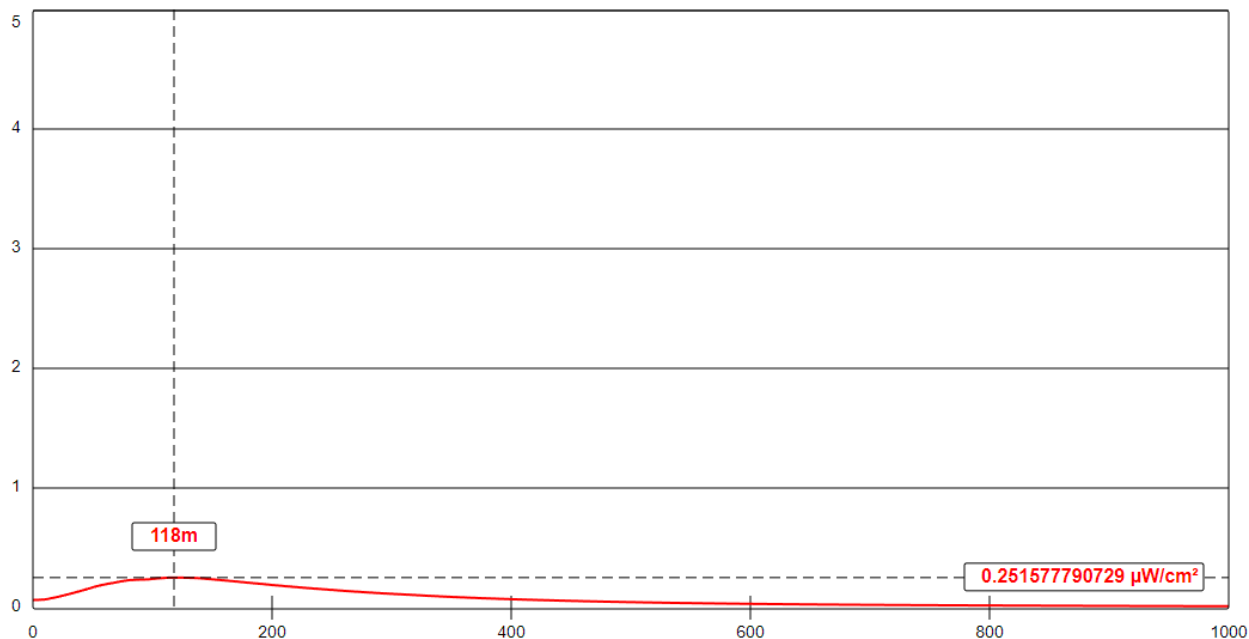
Prepared by,
Michelle Bradley, CBT
REC Networks
May 23, 2022

⁴ See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd. 17054, 17056 (2002). *Recon denied*, 23 FCC Rcd. 15070 (2008).

Proposed Power:				0.181 kW				
Antenna Height AGL:				126 m				
Interference Contour:				111.1 dBu				
Artificial RX Antenna Height:				8 m				
Antenna Type:				Nicom BKG77 - 1 bay 0 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	0.999	0.181	-7.43	262.67	1353.90	96.86	1445.69	96.29
10	0.982	0.175	-7.58	258.20	679.53	102.69	725.61	102.13
15	0.954	0.165	-7.83	250.83	455.92	105.91	486.83	105.34
20	0.918	0.153	-8.17	241.37	345.01	108.00	368.40	107.43
25	0.872	0.138	-8.61	229.27	279.21	109.39	298.14	108.82
30	0.818	0.121	-9.17	215.08	236.00	110.29	252.00	109.72
35	0.758	0.104	-9.83	199.30	205.73	110.82	219.67	110.25
40	0.691	0.086	-10.63	181.68	183.58	111.01	196.02	110.44
45	0.616	0.069	-11.63	161.96	166.88	110.84	178.19	110.27
50	0.538	0.052	-12.81	141.46	154.04	110.36	164.48	109.79
55	0.465	0.039	-14.07	122.26	144.05	109.68	153.82	109.11
60	0.391	0.028	-15.58	102.81	136.25	108.65	145.49	108.08
65	0.313	0.018	-17.51	82.30	130.20	107.12	139.03	106.55
70	0.239	0.010	-19.86	62.84	125.57	105.09	134.09	104.52
75	0.176	0.006	-22.51	46.28	122.16	102.67	130.44	102.10
80	0.129	0.003	-25.21	33.92	119.82	100.14	127.94	99.57
85	0.103	0.002	-27.17	27.08	118.45	98.28	126.48	97.71
90	0.105	0.002	-27.00	27.61	118.00	98.48	126.00	97.91

NEPA COMPLIANCE

W279CT
Kissimmee, FL
Channel 279D – 103.7 MHz



The addition of the proposed facility to the Kissimmee Tower will only contribute an insignificant power density of just over 0.25 $\mu\text{W}/\text{cm}^2$ within 1 kilometer of the tower.

This study is based on 181 watts vertical and 181 watts horizontal ERP with a single-bay EPA-2 antenna (Nicom BKG-77) at 117 meters from the nearest occupation.

Other tower occupants include:

Call	kW	Type	Above occupation	Power Density
W279DI(prop.)	0.250-H 0.250-V	EPA-2	114m	0.3535
W246CK	0.250-H 0.250-V	EPA-4	93m	0.1034
W241BP	0.019-H 0.019-V	EPA-2	91m	0.0441
W264DV	0.081-H 0.081-V	EPA-1	75m	0.6112
W NKQ-LP	0.022-H 0.022-V	EPA-2	54m	0.1496
Proposed	0.181-H 0.181-V	EPA-2	117m	0.2516

Using the Commission's FM MODEL software, 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.

Prepared by,

/S/

Michelle Bradley, CBT
REC Networks

May 23, 2022