Comprehensive Engineering Exhibit
Minor Change Application
W275AZ, Facility ID No. 148955

This minor change, fill-in application seeks to modify W275AZ by changing the antenna location, height, ERP and station to be rebroadcast. It is proposed to operate with 165 watts ERP, with a Non-directional antenna mounted 178 meters above ground level, on a tower identified by ASR Number 1027568.

Below as Figure 1 is a spacing/clearance table from which it can be determined that the "Living Way" method is to be utilized to demonstrate no actual interference will be caused to WFUS(FM) or WHPT(FM).

As shown in Figure 2, in the vicinity of the proposed location, WFUS(FM) is predicted to have a signal of 74.8 dBu and WHPT(FM) is predicted to have a signal of 62.4 dBu, thus the respective +40 dB interfering signals are 114.8 and 102.4 dBu. This instant proposal, due to the vertical directivity of the antenna and its height above ground, will not create any actual interference to either station as shown in Figures 3 and 4. Figure 5 is an aerial image allowing determination that no tall buildings are located in the vicinity of the proposed antenna site.

The application seeks a minor change to an existing facility and provides contour overlap as demonstrated by the contour map in Figure 6. From Figure 6 it can also be seen that the entire 60 dBu contour fits within that of the required limits of the primary station for which this translator is to be "fill-in".

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation."

The proposed antenna system is an ERI Model 100A-4F-HW, four-bay, half-wave spaced antenna mounted 178 meters above ground. For purposes of this analysis the FM Model program has been set to calculate values for a worst case "Ring Stub" antenna element, operated with an effective radiated power of 0.165 Kilowatts in both the horizontal and vertical polarizations. At 2 meters above the surface, at 147 meters from the base of the tower, this proposal will contribute worst case, 0.012 microwatts per square centimeter, or 0.001 percent of the allowable ANSI limit for controlled exposure, and 0.006 percent of the allowable limit for uncontrolled exposure. This figure is less the 5% of the applicable FCC limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. It is therefore believed that his proposal is in compliance with OET Bulletin Number 65 as required by the FCC.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, was necessary to limit human exposure to levels less than specified by the FCC should anyone be required to climb the tower for maintenance or inspection.

Figure 1. Spacing/Clearance Table

Callsign	Channel	ERP_w	ARN	Class	Status	Dist_km	Sep	Clr	Clr Notes
W276CX	276	250	BMPFT-20141110ACR	D	CP MOD	19.34	0	-41.80 dB	Note
WFUS	278	66000	BLH-20111004ADI	C0	LIC	45.87	0	-15.55 dB	Living Way
WHPT	273	100000	BMLH-20100212AAW	C	LIC	80.53	0	-3.10 dB	Living Way
WZEU-LP	275	55.4	BMPL-20141223AAG	LP100	CP MOD	56.34	24	0.10 dB	Clear
NEW	276	100	BNPL-20131113BSP	LP100	APP	32.2	13	1.91 dB	Clear
W274BP	274	120	BNPFT-20131017ADZ	D	CP	34.38	0	3.30 dB	Clear
W273CP	273	38	BNPFT-20131021ACK	D	CP	21.16	0	4.77 dB	Clear
W275AX	275	240	BLFT-20130906AAJ	D	LIC	73.91	0	4.41 dB	Clear
W276CR	276	250	BMPFT-20141105ADQ	D	CP MOD	64.07	0	14.06 dB	Clear
WHKQ	276	22000	BLH-20090317ACS	C2	LIC	119.01	0	19.10 dB	Clear
WXIO-LP	274	100	BNPL-20131113BRZ	LP100	CP	70.02	13	19.20 dB	Clear
NEW	275	96.7	BNPL-20131114ACI	LP100	APP	136.63	24	22.81 dB	Clear
WJGO	275	96000	BLH-20071212ABB	C1	LIC	186.32	0	22.33 dB	Clear
WHKQ	276	9500	BXMLH-20090729AEN	C2	LIC	130.98	0	28.82 dB	Clear
WRGO	274	12500	BLH-20001106AAF	C3	LIC	132.45	0	28.35 dB	Clear
WTRS	272	50000	BMLH-20011214AJZ	C2	LIC	129.82	0	28.72 dB	Clear
W274BB	274	10	BLFT-20090730AEI	D	LIC	101.84	0	29.17 dB	Clear

Note: The construction permit issued in December 2014 for FID 156026 (W276CX), File No. BMPFT-20141110ACR, has not been protected by this application insofar as the W276CX applicant did not have the necessary written authorization of the primary station for the submission of the application, as set forth in the Petition for Reconsideration filed by Citicasters Licenses, Inc. requesting the rescission of that construction permit. The construction permit previously issued in January 2014 for FID 156026 (W274BP), File No. BNPFT-20131017ADZ, is protected.

Figure 2 - Contour Map

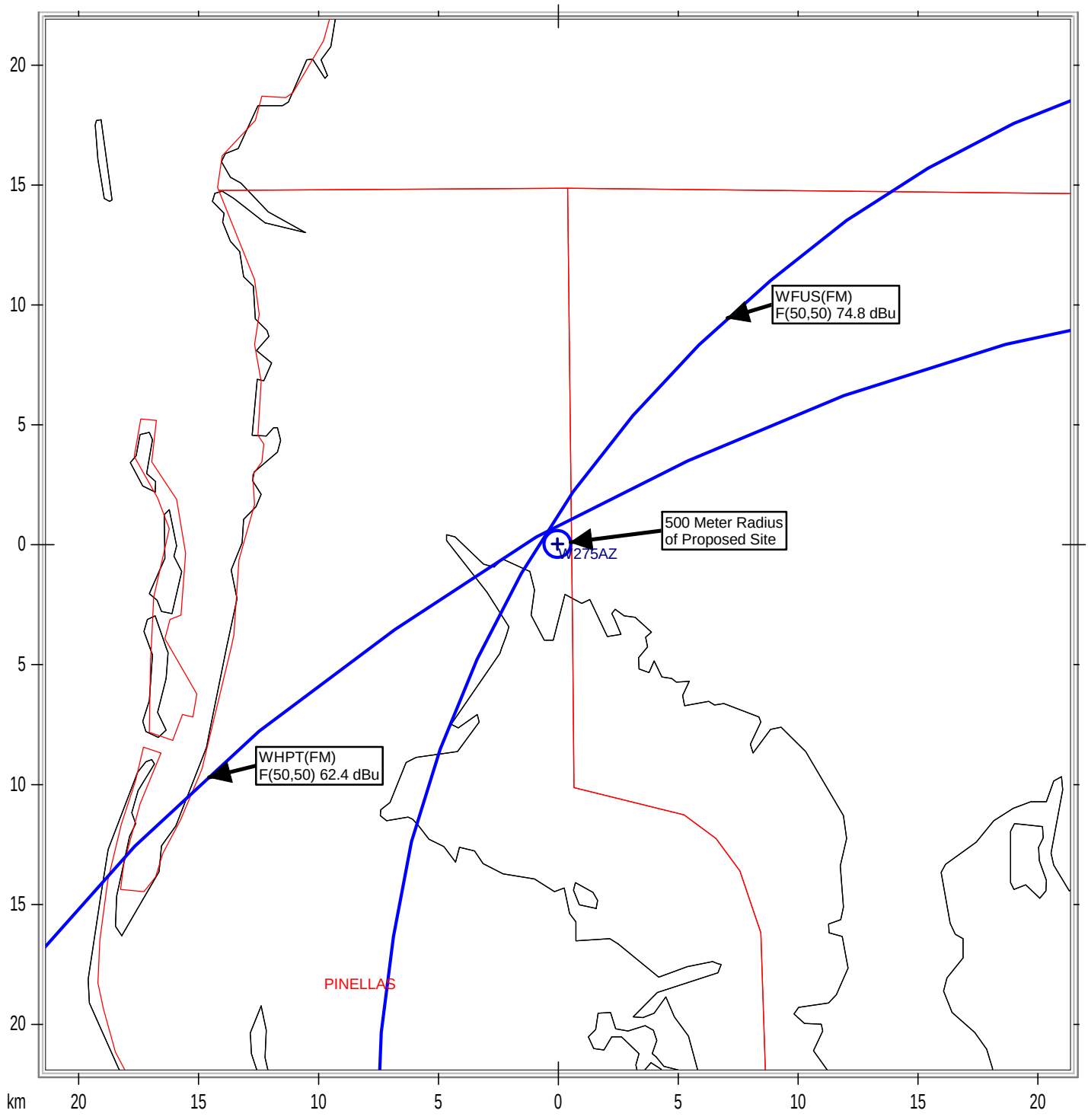

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Figure 3. Distance to Signal Contour WFUS(FM)

Proposed Antenna:	ERI 100A-4F-HW	
Proposed Power:	0.165	kW
Antenna Height AGL:	178	meters
Interference Contour:	114.8	dBu
Artificial Rcv Antenna Height:	2	meters

Fill in "yellow" cells

Distance (Free Space) Equation: =(10^((106.92-[desired dBu]+[ERP in dBk])/20))*1000

Field Strength (dBu) Equation "=106.92-(20*(LOG10[DistMeters]/1000)))+[ERPin dBk]

Depression Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant. to Interf 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
0°	1.000	0.165	-7.83	163.96 m	infinite	---	infinite	---
-5°	0.951	0.149	-8.26	155.93 m	2019.37 m	92.55 dBu	2042.32 m	92.46 dBu
-10°	0.841	0.117	-9.33	137.89 m	1013.54 m	97.47 dBu	1025.06 m	97.38 dBu
-15°	0.615	0.062	-12.05	100.84 m	680.01 m	98.22 dBu	687.74 m	98.12 dBu
-20°	0.391	0.025	-15.98	64.11 m	514.59 m	96.71 dBu	520.44 m	96.61 dBu
-25°	0.178	0.005	-22.82	29.19 m	416.45 m	91.71 dBu	421.18 m	91.61 dBu
-30°	0.004	0.000	-55.78	0.66 m	352.00 m	60.21 dBu	356.00 m	60.11 dBu
-35°	0.117	0.002	-26.46	19.18 m	306.85 m	90.72 dBu	310.33 m	90.62 dBu
-40°	0.182	0.005	-22.62	29.84 m	273.81 m	95.55 dBu	276.92 m	95.45 dBu
-45°	0.200	0.007	-21.80	32.79 m	248.90 m	97.19 dBu	251.73 m	97.10 dBu
-50°	0.184	0.006	-22.53	30.17 m	229.75 m	97.17 dBu	232.36 m	97.07 dBu
-55°	0.150	0.004	-24.30	24.59 m	214.86 m	95.97 dBu	217.30 m	95.88 dBu
-60°	0.110	0.002	-27.00	18.04 m	203.23 m	93.76 dBu	205.54 m	93.66 dBu
-65°	0.072	0.001	-30.68	11.81 m	194.19 m	90.48 dBu	196.40 m	90.38 dBu
-70°	0.042	0.000	-35.36	6.89 m	187.30 m	86.11 dBu	189.42 m	86.01 dBu
-75°	0.021	0.000	-41.38	3.44 m	182.21 m	80.33 dBu	184.28 m	80.23 dBu
-80°	0.008	0.000	-49.76	1.31 m	178.72 m	72.11 dBu	180.75 m	72.02 dBu
-85°	0.002	0.000	-61.80	0.33 m	176.67 m	60.17 dBu	178.68 m	60.07 dBu
-90°	0.001	0.000	-67.83	0.16 m	176.00 m	54.18 dBu	178.00 m	54.09 dBu

Figure 4. Distance to Signal Contour WHPT(FM)

Proposed Antenna:	ERI 100A-4F-HW	
Proposed Power:	0.165	kW
Antenna Height AGL:	178	meters
Interference Contour:	102.4	dBu
Artificial Rcv Antenna Height:	2	meters

Fill in "yellow" cells

Distance (Free Space) Equation: =(10^((106.92-[desired dBu]+[ERP in dBk])/20))*1000

Field Strength (dBu) Equation "=106.92-(20*(LOG10[DistMeters]/1000)))+[ERPin dBk]

Depression Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant. to Interf 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
0°	1.000	0.165	-7.83	683.51 m	infinite	---	infinite	---
-5°	0.951	0.149	-8.26	650.01 m	2019.37 m	92.55 dBu	2042.32 m	92.46 dBu
-10°	0.841	0.117	-9.33	574.83 m	1013.54 m	97.47 dBu	1025.06 m	97.38 dBu
-15°	0.615	0.062	-12.05	420.36 m	680.01 m	98.22 dBu	687.74 m	98.12 dBu
-20°	0.391	0.025	-15.98	267.25 m	514.59 m	96.71 dBu	520.44 m	96.61 dBu
-25°	0.178	0.005	-22.82	121.66 m	416.45 m	91.71 dBu	421.18 m	91.61 dBu
-30°	0.004	0.000	-55.78	2.73 m	352.00 m	60.21 dBu	356.00 m	60.11 dBu
-35°	0.117	0.002	-26.46	79.97 m	306.85 m	90.72 dBu	310.33 m	90.62 dBu
-40°	0.182	0.005	-22.62	124.40 m	273.81 m	95.55 dBu	276.92 m	95.45 dBu
-45°	0.200	0.007	-21.80	136.70 m	248.90 m	97.19 dBu	251.73 m	97.10 dBu
-50°	0.184	0.006	-22.53	125.76 m	229.75 m	97.17 dBu	232.36 m	97.07 dBu
-55°	0.150	0.004	-24.30	102.53 m	214.86 m	95.97 dBu	217.30 m	95.88 dBu
-60°	0.110	0.002	-27.00	75.19 m	203.23 m	93.76 dBu	205.54 m	93.66 dBu
-65°	0.072	0.001	-30.68	49.21 m	194.19 m	90.48 dBu	196.40 m	90.38 dBu
-70°	0.042	0.000	-35.36	28.71 m	187.30 m	86.11 dBu	189.42 m	86.01 dBu
-75°	0.021	0.000	-41.38	14.35 m	182.21 m	80.33 dBu	184.28 m	80.23 dBu
-80°	0.008	0.000	-49.76	5.47 m	178.72 m	72.11 dBu	180.75 m	72.02 dBu
-85°	0.002	0.000	-61.80	1.37 m	176.67 m	60.17 dBu	178.68 m	60.07 dBu
-90°	0.001	0.000	-67.83	0.68 m	176.00 m	54.18 dBu	178.00 m	54.09 dBu

Figure 5. Proposed Location Aerial Image

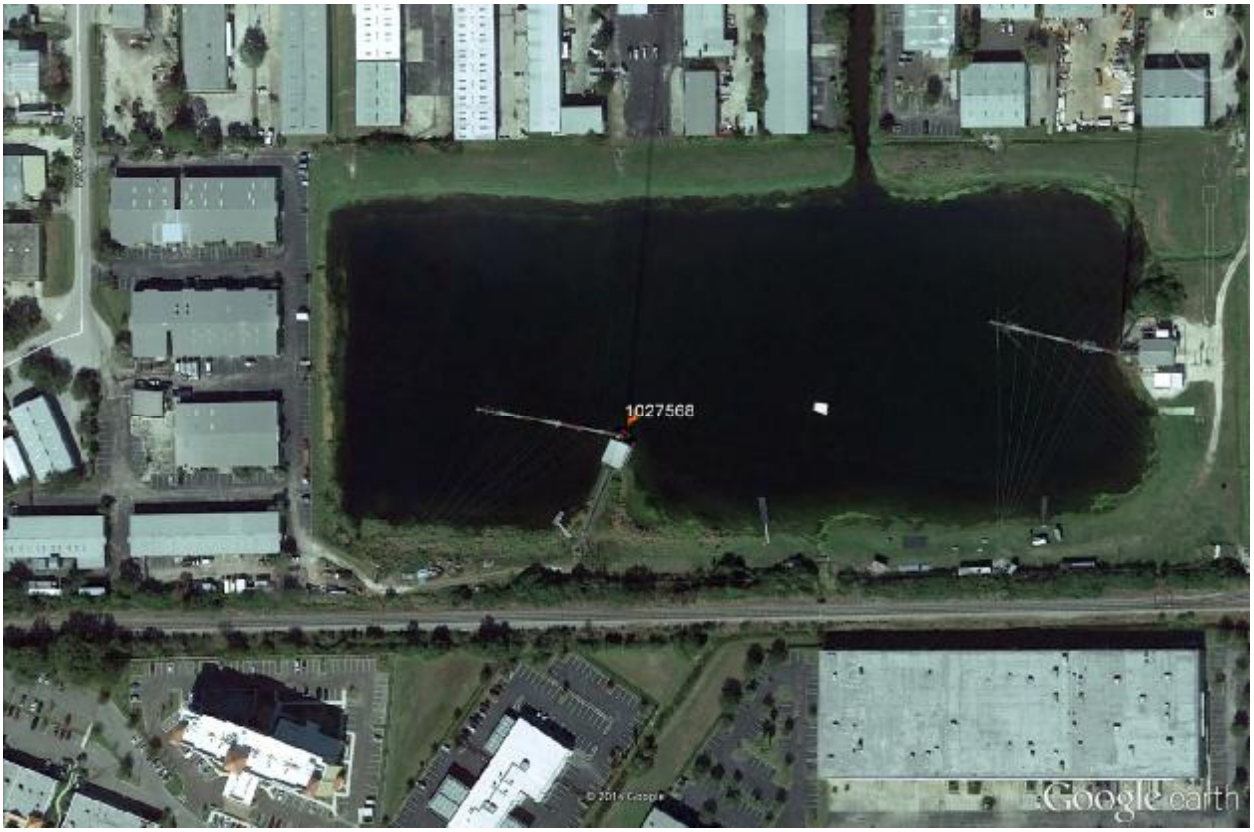
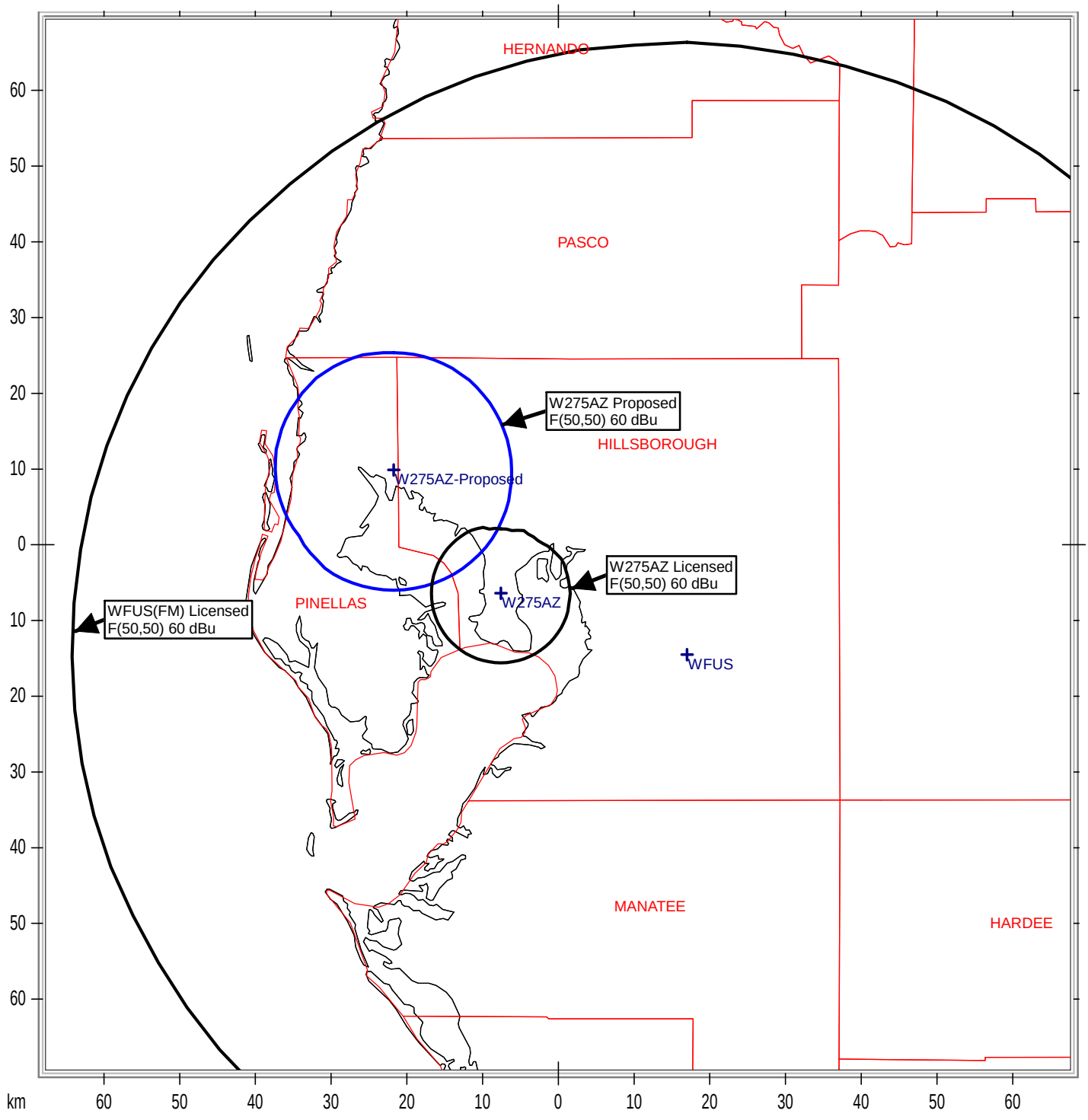


Figure 6 - 60 dBu Contours



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