AMENDMENT TO LICENSE MODIFICATION APPLICATION
W256CL, FOREST PARK, IL

MAY, 2018

TECHNICAL STATEMENT

This technical statement and attached exhibits have been prepared on behalf of

Edgewater Broadcasting, Inc. Licensee of translator station W256CL, Facility identifier 152811.

The applicant proposes to modify W256CL to relocate to Chicago, IL, adjust its AGL height

and directional pattern. W256CL is also requesting permission to operate as a fill-in translator

for FM station WTMX, Facility ID 6377 with a directional antenna in compliance with 47CFR

74.1203. The translator Community of License will change to Chicago, IL. This amendment

corrects the antenna type and eliminates the ASR reference.

Facilities Proposed

Location (NAD27)	41° 52' 44" N Latitude, 87° 38' 09" W Longitude
Channel	256D (99.1MHz)
Tower Overall AGL Height-	525m
Tower ASR	NONE (building top)
Proposed Antenna	PSI FMP-1 (DA)
Antenna AGL Height-	448m
Site AMSL Height-	181m
ERP	250w DIRECTIONAL (SEE EXHIBIT A)

Interference Study

ComStudy 2.2 search of channel 256 (99.1 MHz Class D) at 41-52-44.0 N, 87-38-09.0 W.

CALL	CITY	ST	CHN	CL	DIST	SEP	BRNG	CLEARANCE
WFMT	CHICAGO	IL	254	B	0.02	0.00	270.0	-80.70 dB[1]
WUSN	CHICAGO	IL	258	B	2.46	0.00	25.4	-63.95 dB EXHIBIT C1
WHPK	CHICAGO	IL	203	A	10.89	10.00	164.3	0.9 IF OK
WSMK	BUCHANAN	MI	256	A	112.43	0.00	92.7	0.46 dB EXHIBIT C
WJPC-LP	CHICAGO	IL	256	LP100	8.07	24.00	167.9	DNA dB[2]
WZQC-LP	CICERO	IL	256	LP100	11.51	24.00	242.8	0.15 dB EXHIBIT C
W256CA	JOLIET	IL	256	D	50.19	0.00	221.5	0.78 dB EXHIBIT C
WMYX-FM	MILWAUKEE	WI	256	B	123.54	0.00	343.8	2.08 dB EXHIBIT C
W256DC	DEERFIELD	IL	256	D	35.52	0.00	324.6	2.76 dB EXHIBIT C
WZRD	CHICAGO	IL	202	A	13.37	10.00	329.2	3.4 IF OK
WYXY	SAVOY	IL	256	B	192.56	0.00	183.5	7.04 dB EXHIBIT C
WXAV	CHICAGO	IL	202	A	19.85	10.00	199.3	9.8 IF OK
WKVI-FM	KNOX	IN	257	A	105.85	0.00	125.5	14.10 dB
WHSD	HINSDALE	IL	203	A	26.72	10.00	247.9	16.7 IF OK
WJEZ	DWIGHT	IL	255	A	115.13	0.00	215.7	19.95 dB
WMYX-FM	MILWAUKEE	WI	256	B	130.91	0.00	349.8	19.84 dB
WGBK	GLENVIEW	IL	203	A	30.47	10.00	327.9	20.5
WDGC-FM	DOWNERS GROVE	IL	202	A	32.34	10.00	255.3	22.3
W255BH	BREMEN	IN	255	D	121.67	0.00	114.6	23.57 dB
WFMK	EAST LANSING	MI	256	B	273.41	0.00	70.0	24.19 dB
NEW	WHITEHALL	MI	256	D	185.57	0.00	37.7	27.45 dB
WHFH	FLOSSMOOR	IL	203	A	37.32	10.00	187.2	27.3
NEW	WHITEHALL	MI	256	D	185.57	0.00	37.7	27.45 dB
WAJK	LA SALLE	IL	257	B1	146.12	0.00	249.7	29.59 dB
W255BN	DEKALB	IL	255	D	92.75	0.00	274.5	29.81 Db

CDBS AS OF 12/28/2017

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[1] Because the proposed W256CL will be co-located with WFMT (FM), 254B, there is no location where the proposed translator could possibly exceed 40dB above WFMT.

[2] This facility was canceled by the licensee

COMPLIANCE, 74.1201(g), 74.1203(d), 74.1233(a)(1), and 74.1204(d)

As demonstrated in Exhibit B, this application is compliant with FCC rule 74.1233(a)(1) requiring any minor change of a translator's facilities to continue to provide 1mV/m service to some portion of its previously authorized service area.

Exhibit D demonstrates compliance with 74.1201(g) governing the use of a translator as a fill-in for an FM station. The 60dBu contour of the proposed W236CF will be completely contained within the 54dBu contour of WTMX (FM).

Because the proposed W256CL will be co-located with WFMT, there will be no location where the signal of W256CL will be in excess of 40dBu above the WFMT 2nd adjacent signal. Exhibit C1 demonstrates that, similar to WFMT, there will be no locations where the proposed translator will exceed the WUSN signal by 40dB.

Exhibit C demonstrates compliance with 74.1204(d). There will be no impermissible contour overlaps to any other facilities following W256CL's relocation.

Environmental Exhibit

The proposed W256CL facility as proposed will utilize a directional antenna located on the roof of the Willis Tower office building. The engineer for Willis Tower has advised the licensee that because the proposed antenna will not be on the main antenna pylons, that the ASR is not relevant. Therefore, the ASR reference has been deleted from this application. The RF density near the tower was calculated using an EPA type 2 antenna setting at 250 watts horizontal and vertical. The antenna will be 6.1 meters above the roof of the building.

Using the FCC program "FM Model for Windows", it was calculated that the proposed antenna contributes approximately 273 µW/cm² or 137% of the total allowable 200 µW/cm²

limit for public exposure. The proposed RF level at roof level is compliant with occupational exposure limits. The maximum was found to be 4.2 meters from the base of the tower. The FM Model output is shown in Exhibit E.

Because the proposed antenna is located on a roof with numerous high-power television and radio transmitters, the entire roof area of the Willis Building is off-limits and locked to public access. There is a tenant policy that requires stations on the roof to reduce power when any personnel are on the roof. It is expected that the proposed translator will reduce power to 99 watts whenever any personnel are in the vicinity of the W256CL antenna.

Respectfully Submitted

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EXHIBIT A- DIRECTIONAL PATTERN

PROP W256CL PATTERN

Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	0.211
10.0	0.283
20.0	0.397
30.0	0.66
40.0	1.0
50.0	1.0
60.0	1.0
70.0	1.0
80.0	1.0
90.0	0.908
100.0	1.0
110.0	1.0
120.0	1.0
130.0	1.0
140.0	1.0
150.0	1.0
160.0	1.0
170.0	1.0
180.0	1.0
190.0	0.899
200.0	0.8
210.0	0.008
220.0	0.006
230.0	0.005
240.0	0.005
250.0	0.005
260.0	0.006
270.0	0.007
280.0	0.01
290.0	0.05
300.0	0.053
310.0	0.062
320.0	0.072
330.0	0.085
340.0	0.114
350.0	0.181

Rotation Angle = 0
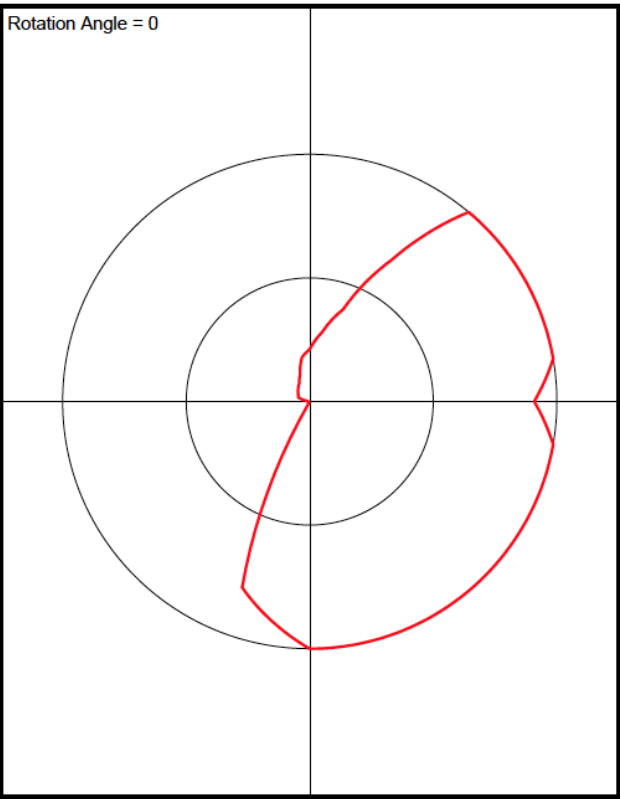
EXHIBIT B- 74.1233(a)(1) Compliance

W256CL LIC Vs. PROP 60dBu Contours 74.1233(a)(1) Compliance

W256CL

W256CL

Scale 1:250,000

km

0   4   8   12
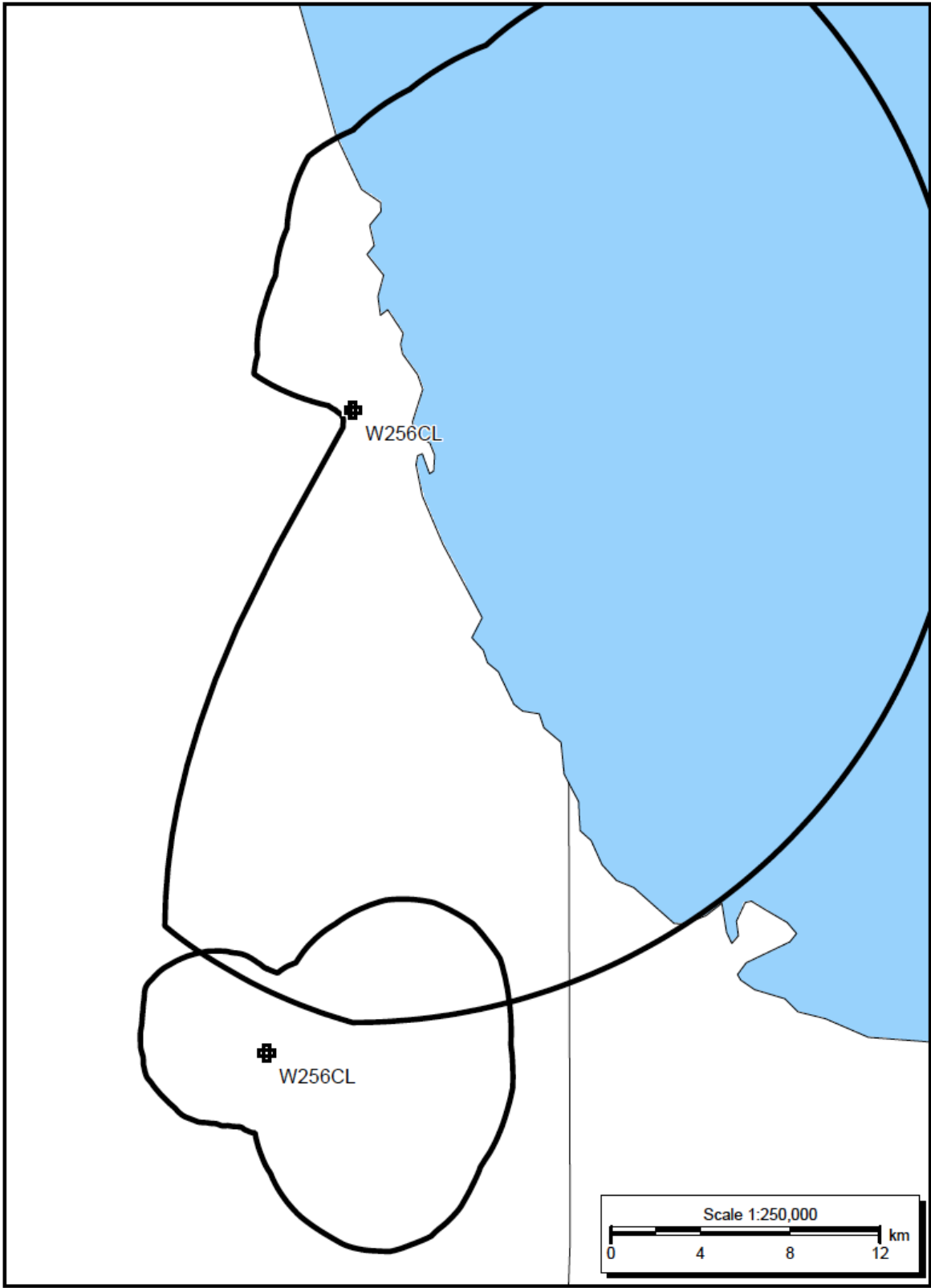
EXHIBIT C- 74.1204(d) Compliance

W256CL LIC Vs. PROP 60dBu Contour Protection Compliance

WMYX 256B
54dBu f50,50

PROP 256D
34dBu f50,10

WSMK 256A
60dBu f50,50

W256DC

W256DC
60dBu f50,50

W256CL-P

WZQC-LP

WSMK

WZQC-LP 256D
60dBu f50,50

W256CA

W256CA
60dBu f50,50

PROP 256D
40dBu f50,10

Scale 1:1,000,000

km

0   12   24   36
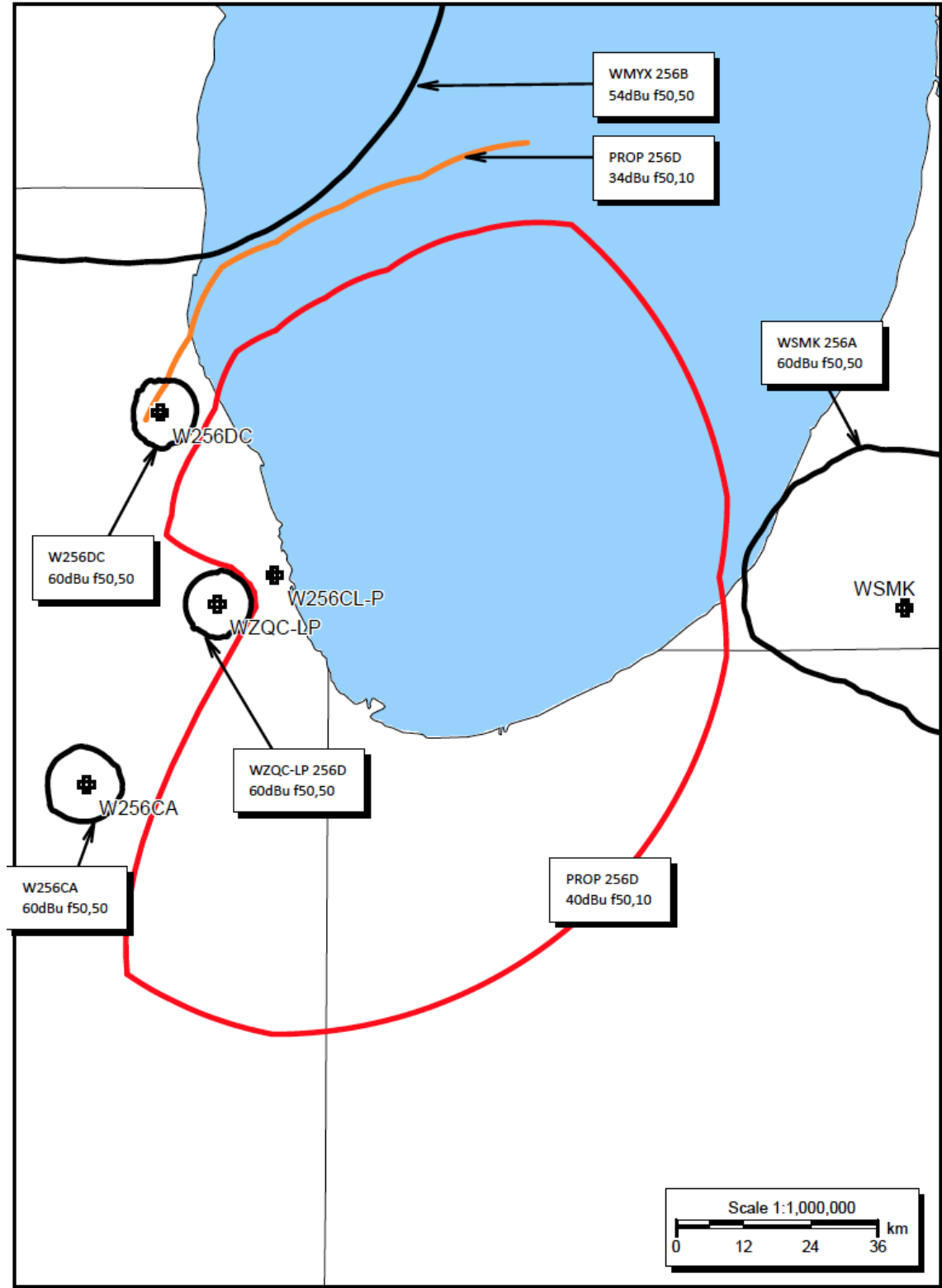
EXHIBIT C1 2nd Adjacent Interference Compliance to WUSN

W256CL-P Chicago, IL, Showing Protection to WUSN
74.1204(d) Study - Using FCC 30 SEC Terrain Database
Translator or LPFM Maximum Licensed ERP = 0.25
Translator or LPFM Antenna Height AG = 20 Meters
W256CL-P Antenna Model = SHPX2F

Protected Station's Contour = 106.0177 dBu
Translator's or LPFM's full Interference contour 146.0177

Review Azimuth = 0 Degrees True
Relative Field on the horizon at Review Azimuth = 0.695
Translator/LPFM ERP on the horizon at Review Azimuth = 0.121 kW
Distance between stations = 2.5 km
Protected Station= WUSN, 5.7 kW, 606 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw) 	Dist to IX IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height Above Roof(m)
00.00	1.0	0.7	0.1737	004.6246	004.6246	020.000
05.00	0.96	0.7	0.1601	004.4396	004.4228	019.613
10.00	0.845	0.7	0.1241	003.9078	003.8484	019.321
15.00	0.669	0.7	0.0778	003.0939	002.9885	019.199
20.00	0.455	0.7	0.0360	002.1042	001.9773	019.280
25.00	0.226	0.7	0.0089	001.0452	000.9472	019.558
30.00	0.006	0.7	0.0000	000.0277	000.0240	019.986
35.00	0.187	0.7	0.0061	000.8648	000.7084	019.504
40.00	0.339	0.7	0.0200	001.5678	001.2010	018.992
45.00	0.445	0.7	0.0344	002.0580	001.4552	018.545
50.00	0.506	0.7	0.0445	002.3401	001.5042	018.207
55.00	0.525	0.7	0.0479	002.4279	001.3926	018.011
60.00	0.511	0.7	0.0454	002.3632	001.1816	017.953
65.00	0.472	0.7	0.0387	002.1828	000.9225	018.022
70.00	0.416	0.7	0.0301	001.9238	000.6580	018.192
75.00	0.35	0.7	0.0213	001.6186	000.4189	018.437
80.00	0.277	0.7	0.0133	001.2810	000.2224	018.738
85.00	0.202	0.7	0.0071	000.9342	000.0814	019.069
90.00	0.126	0.7	0.0028	000.5827	000.0000	019.417

PROP W256CL and WTMX 54dBu Contours
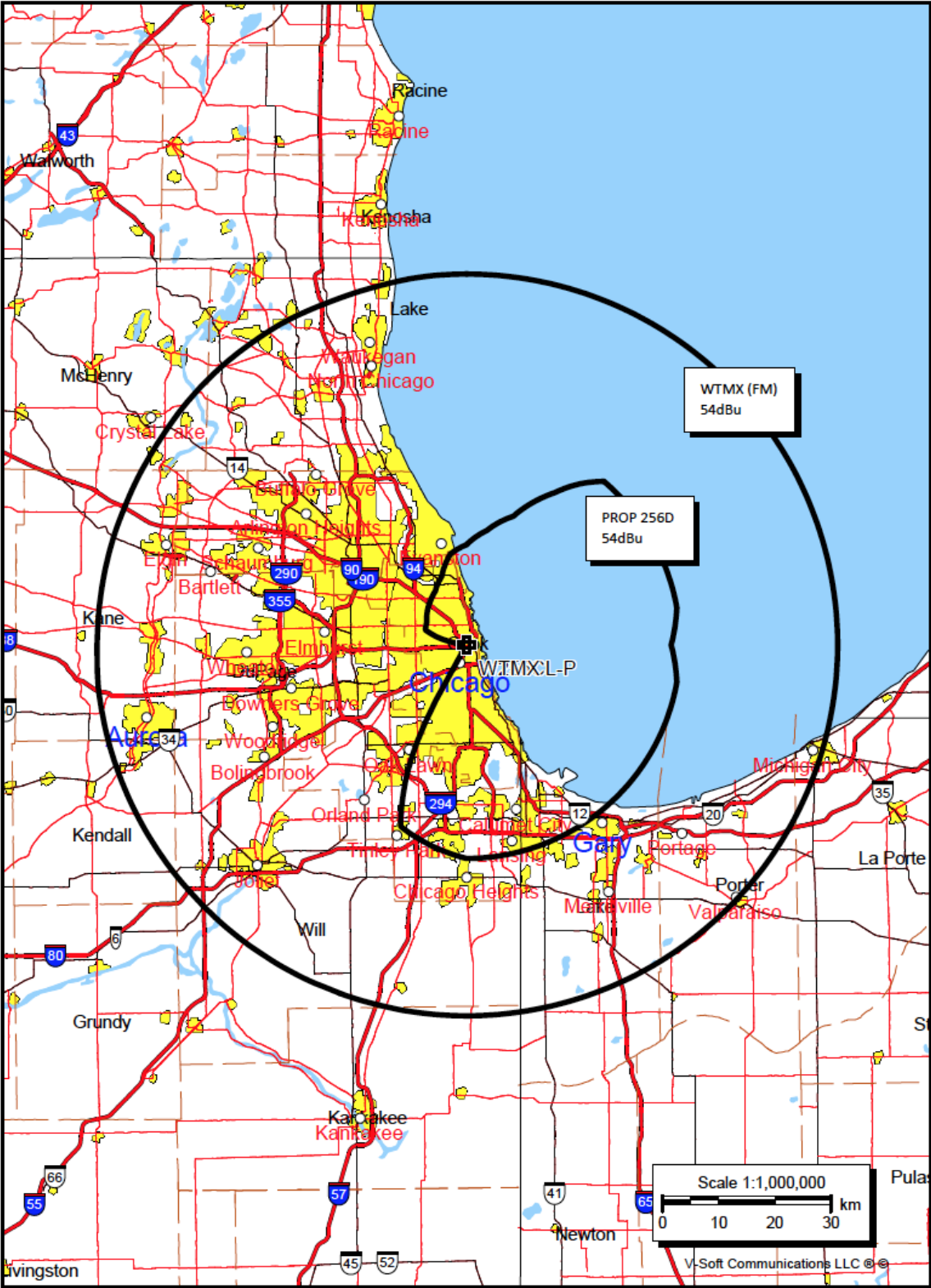
EXHIBIT E- RFR COMPLIANCE
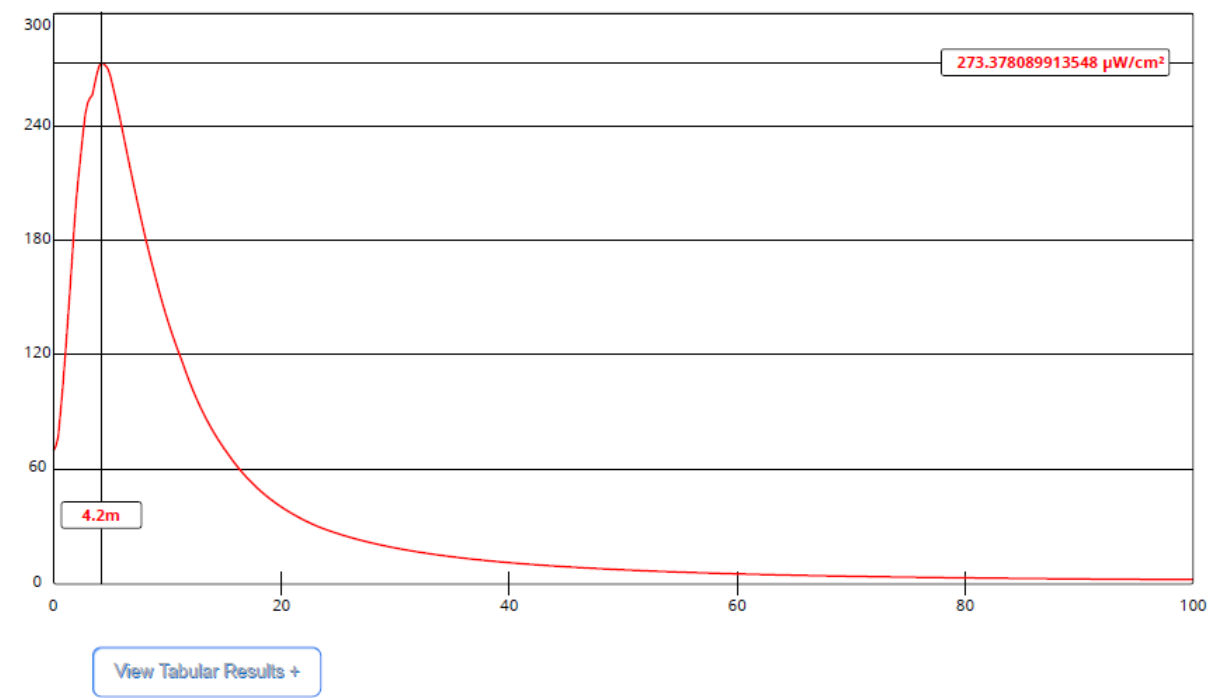
Channel Selection	Channel 256 (99.1 MHz) ▾		
Antenna Type +	EPA Type 2: Opposed V Dipole ▾		
Height (m)	6.1	Distance (m)	100
ERP-H (W)	250	ERP-V (W)	250
Num of Elements	1	Element Spacing (λ)	1
Num of Points	500	Apply	