

## 1. Purpose of Application

This engineering report is part of an application for facilities changes for FM station WDRV at Chicago, Illinois. The proposed operation will be on FM Channel 246B (97.1 MHz) with a maximum lobe effective radiated power of 7.9 kw (8.98 dBk) at an antenna height above average terrain of 370 meters. The ERP specified is the maximum for Class B facilities at this height as calculated in accordance with the Commission's rules.

## 2. Allocation Considerations

During the preparation of this application, a careful examination of the USGS 7.5 minute "Chicago Loop" quadrangle (1997 revision) revealed that the historical licensed coordinates of WDRV, which date back over thirty years, are incorrect. The coordinates specified in this application differ from the licensed coordinates of WDRV by two seconds of latitude and three seconds of longitude. The change is due to a coordinate correction only, the actual location of WDRV is not being changed. Therefore there will be no change in the short spacing status of WDRV resulting from the grant of this application.

The attached spacing study shows that the proposed operation meets the co-channel and adjacent channel spacing requirements for Class B stations as prescribed in §73.207 of the Commission's Rules, with the exception of grandfathered short-spacings to stations WLLI Joliet, IL; WTNX Zion, IL; and WLTQ Milwaukee, WI.

WLLI 244A Joliet

WDRV will continue to be 16 km short-spaced to the licensed operation of WLLI, per the terms of §73.207. However, these two stations operate as "pre 1964" grandfathered short-spaced stations. Since WDRV and WLLI operate on second-adjacent channels, per §73.213(a)(4) there is no distance separation or interference protection requirement between these two stations.

WTNX 245B Zion

WLTQ 247B Milwaukee

WDRV operates as a "pre 1964" grandfathered short-spaced station with respect to WTNX and WLTQ. The proposed WDRV facility is at the same site as the licensed WDRV facility. Therefore, the existing short-spacings to WTNX and WLTQ will not be exacerbated. Furthermore, this application proposes operation with a directional antenna envelope pattern which will not cause any increased contour overlap with WTNX and WLTQ over land areas. Specifically, the table and maps included as Exhibit 25 demonstrate that the distances to the WDRV 54 dBu F(50,50) and 48 dBu F(50,10) contours will not be increased along the arc between 300 and 350 degrees True, which is the direction towards the existing overlap with WTNX and WLTQ.



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Channel: 246B 97.1 MHz Page 3

Longitude: 87 37 18

**Safety Zone: 100 km**

Job Title: WDRV

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
NEW-T APP	MADISON WI	BPFT-970827TC	247D 97.3	0.010 146.0	43-03-09 089-28-42	311.1	200.34 0.00	0 TRANS
WLTV LIC	MILWAUKEE WI	BLH-840925DP	247B 97.3	15.500 278.0	43-06-41 087-55-38	349.7	138.53 -30.47	169 SHORT
ABSOLUTE MINIMUM 73.215 SPACING = 145 KM								
NEW APP	CHICAGO IL	BNPL-000831AAB	248L1 97.5	0.000 0.0	41-46-37 087-42-11	209.3	13.77 -53.23	67 SHORT
WZOK LIC	ROCKFORD IL	BLH-851008KC	248B 97.5	50.000 131.0	42-16-50 089-02-16	291.1	125.14 51.14	74 CLEAR
WVTZ LIC	BRIDGMAN MI	BLH-930402KB	248A 97.5	3.800 126.0	41-59-19 086-31-46	82.4	91.31 22.31	69 CLEAR
WSTQ LIC	STREATOR IL	BMH-000927ABY	249A 97.7	6.000 100.0	41-10-49 088-52-06	233.4	130.20 61.20	69 CLEAR
WZOW LIC	GOSHEN IN	BLH-930406KD	249A 97.7	2.900 147.0	41-36-04 085-55-41	102.1	144.37 75.37	69 CLEAR
WLQI LIC	RENSSELAER IN	BMH-900111KD	249A 97.7	3.300 91.0	40-58-14 087-09-10	158.8	108.86 39.86	69 CLEAR
WLEY-FM LIC	AURORA IL	BLH-910827KB	300B 107.9	21.000 232.0	DA 41-56-01 088-04-23	278.4	37.84 17.84	20 CLEAR
WLEYaux CP	AURORA IL	BPH-981021IE	300B 107.9	10.500 134.0	41-51-30 087-57-16	264.0	27.79 0.00	0 AUX
WLEY-FM CP	CHICAGO IL	BPFT-990610TH	300D 107.9	0.080 0.0	DA 41-52-13 087-40-22	248.9	4.55 0.00	0 BOOST
NEW APP	LAKEVIEW MI	BNPL-000830ABD	300L1 107.9	0.000 0.0	41-50-32 086-40-24	93.1	78.88 66.88	12 CLEAR
NEW APP	SAWYER MI	BNPL-000831AAS	300L1 107.9	0.000 0.0	41-52-05 086-36-44	91.0	83.82 71.82	12 CLEAR
NEW APP	UNION PIER MI	BNPL-000830AAZ	300L1 107.9	0.000 0.0	41-50-22 086-40-42	93.4	78.49 66.49	12 CLEAR

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