

TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT  
TRANSLATOR STATION W27AU-D  
WAUSAU, WISCONSIN

March 18, 2008

CHANNEL 27 1.1 KW

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Technical Statement

This Technical Exhibit was prepared in support of an application for construction permit for translator station W27AU-D to flash-cut to digital operation at its present transmitter site. The proposed facility will operate with a nominal non-directional effective radiated power of 1.1 kW with an antenna height of 538 m AMSL from its transmitter site on Mosinee Hill near Wausau, Wisconsin. See attached coverage map at Figure 1 herein.

Response to Paragraph 13 (Interference)

The proposed facility complies with the following applicable FCC rule Sections: 74.709, 74.793(e), 74.793(f), 74.793(g), 74.794(b) and 73.1030. See Figure 2 for a summary of the interference analysis conducted pursuant to FCC Office of Engineering and Technology Bulletin No. 69 (OET-69).

Environmental Considerations

With respect to the potential for human exposure to radio frequency (RF) radiation, calculations prepared in accordance with FCC Bulletin OET-65 (Edition 97-01) indicate that the proposal will not result in human exposure to RF radiation at ground level in excess of FCC standards.

Power density calculations were conducted at 2-m above ground based on the following conservative assumptions, with the following results:

Call Sign	Channel	Average ERP (kW)	Distance (m)	Relative Field Factor*	FCC Limit <sup>†</sup> (mW/cm <sup>2</sup> )	Percentage of Limit
W27AU-D	27	1.1	59	0.2	0.452	0.1%

As indicated above, the exposure to RF radiation at 2-m above ground level will not exceed 0.1% of the FCC limit for general population / uncontrolled exposure.

Access to the tower shall be restricted as necessary to prevent exposure to RF energy in excess of FCC requirements. The applicant, in coordination with other users of the transmission facility, shall reduce power or cease operation as necessary to protect persons having access to the tower from radio frequency radiation in excess of the FCC guidelines.



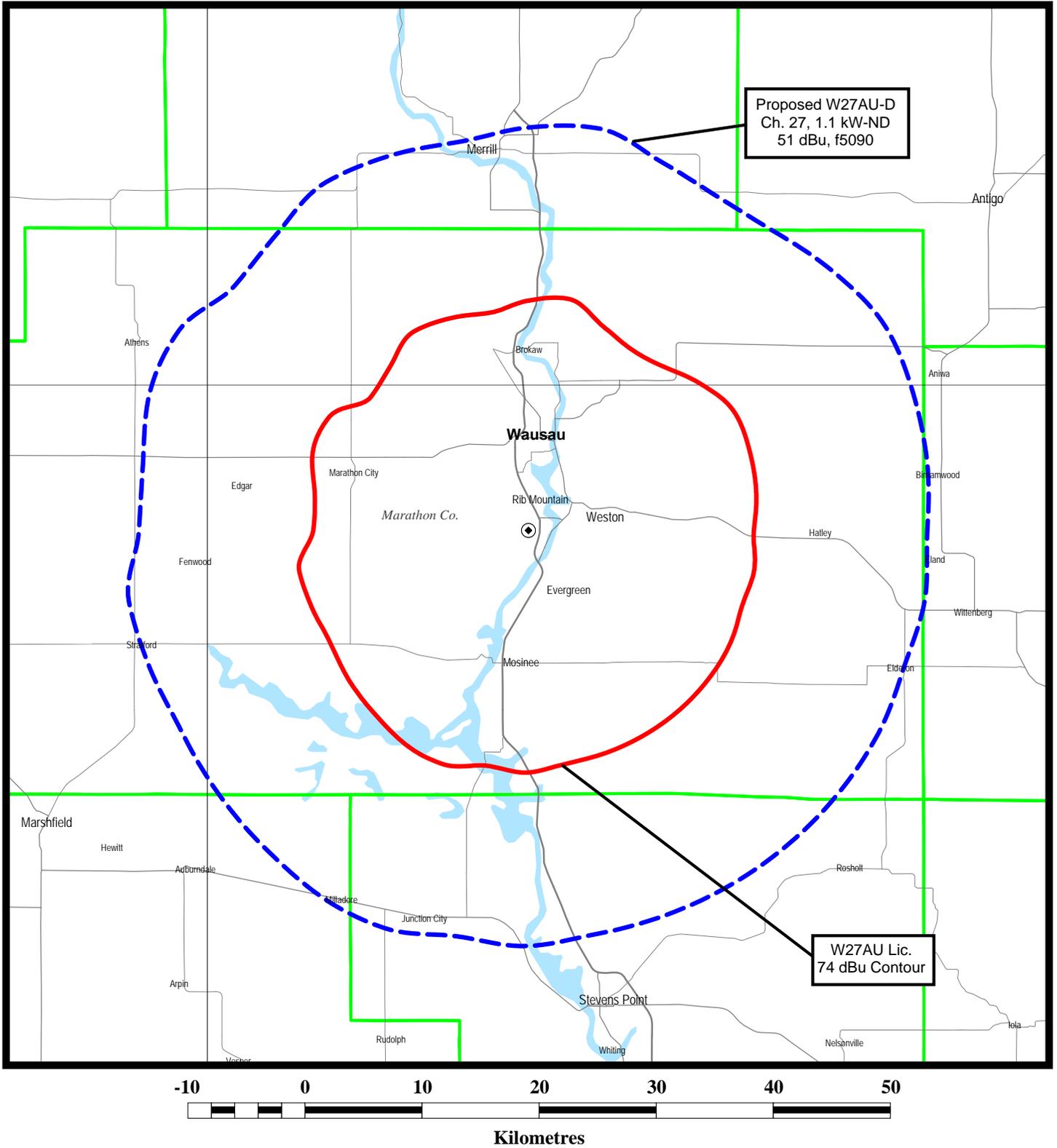
Louis R. du Treil, Jr.

du Treil, Lundin & Rackley, Inc.  
201 Fletcher Ave.  
Sarasota, FL 34237

March 18, 2008

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\* This is a conservative estimate of the relative field factor at steep elevation angles.  
† for general population/uncontrolled environments



## PREDICTED COVERAGE CONTOURS

duTreil, Lundin & Rackley, Inc. Sarasota, Florida

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Summary of OET-69 Interference Analysis

Channel	Callsign	File Number	Status	City	State	Baseline	Net Change	Percent Change
20	WHRM-TV	BLET-20010813ABC	LIC	WAUSAU	WI	--	0	0
24	W24BV	BLTTL-20001207ABS	LIC	WHITING	WI	--	0	0
26	WGBA	BLCT-19990602KG	LIC	GREEN BAY	WI	--	0	0
26	W26DI-D	BDCCDTL-20061030AQE	CP	LA CROSSE	WI	--	0	0
26	WKOW-TV	BPCDT-20000501AEY	CP	MADISON	WI	--	0	0
26	WKOW-TV	BLCDT-19981104KG	LIC	MADISON	WI	--	0	0
27	KFXA	BLCDT-20050713ABD	LIC	CEDAR RAPIDS	IA	--	0	0
27	WCIU-TV	BMPCDT-20021202ABR	CP MOD	CHICAGO	IL	--	0	0
27	WCMV	BLET-19841002KF	LIC	CADILLAC	MI	--	0	0
27	WOLP-CA	BLTTL-19980626JE	LIC	GRAND RAPIDS	MI	--	0	0
27	W27CQ	BLTT-20050420ABB	LIC	HOUGHTON	MI	--	0	0
27	KCWV	BMPCDT-20080221ACC	CP MOD	DULUTH	MN	--	0	0
27	KCWV	BNPCT-20060421ABZ	CP	DULUTH	MN	--	0	0
27	960920LP	BPCT-19960920LP	APP	DULUTH	MN	--	0	0
27	K27FI	BLTTL-19950314IJ	LIC	FROST	MN	--	0	0
27	WACY-TV	BPRM-20020208ABN	LIC	APPLETON	WI	835922	22	0.003
27	WACY	BMPCDT-20061114ABU	CP MOD	APPLETON	WI	835922	109	0.013
27	WKOW-TV	BLCT-20000306AAW	LIC	MADISON	WI	917282	0	0.000
27	WHWC-TV	BLEDT-20040824AAF	LIC	MENOMONIE	WI	341406	0	0.000
28	WYOW	BMPCDT-20041001ANY	CP MOD	EAGLE RIVER	WI	70636	0	0.000
28	WHWC-TV	BMLET-20021118ACH	LIC	MENOMONIE	WI	--	0	0
28	WHWC-TV	BSTA-20070412AAG	APP	MENOMONIE	WI	--	0	0
28	960722KR	BPCT-19960722KR	APP	SHEBOYGAN	WI	--	0	0
31	W31BA	BLTTL-20001012ABM	LIC	MINOCQUA	WI	--	0	0
34	WYOW	BLCT-20001221ABO	LIC	EAGLE RIVER	WI	--	0	0

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(one sheet follows)

### ELEVATION PATTERN

Type:	AL8		Channel:	27
Directivity:	Numeric	dBd	Location:	
Main Lobe:	8.68	9.39	Beam Tilt:	-1.75
Horizontal:	7.30	8.63	Polarization:	Horizontal

