

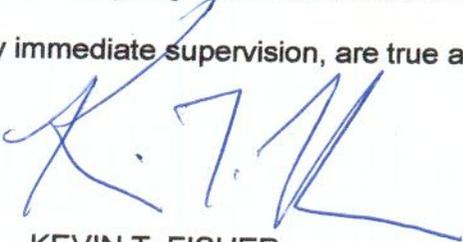
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of television translator W66DC in Waupaca, Wisconsin, in support of this application for modification of Construction Permit BPTT-20050506ACU (a Channel 36 displacement authorization) to specify a different antenna and offset, as well as a reduction in effective radiated power. No change in site location or antenna height is proposed herein.

It is proposed to mount a standard ERI omnidirectional antenna at the authorized height on the side of the existing 156-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 74 dBu contour encompasses a significant portion of that which obtains from the licensed W66DC facility. Operating parameters for the proposed facility are tabulated in Exhibit C. A contour overlap analysis and interference study are provided in Exhibit D, and a power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1034826 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



KEVIN T. FISHER

March 15, 2006

CONTOUR POPULATION
GRADE A (74 DBU) : 38,705
GRADE B (64 DBU) : 81,740

SMITH and FISHER

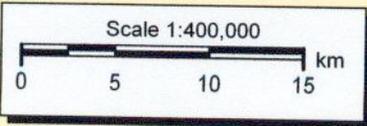
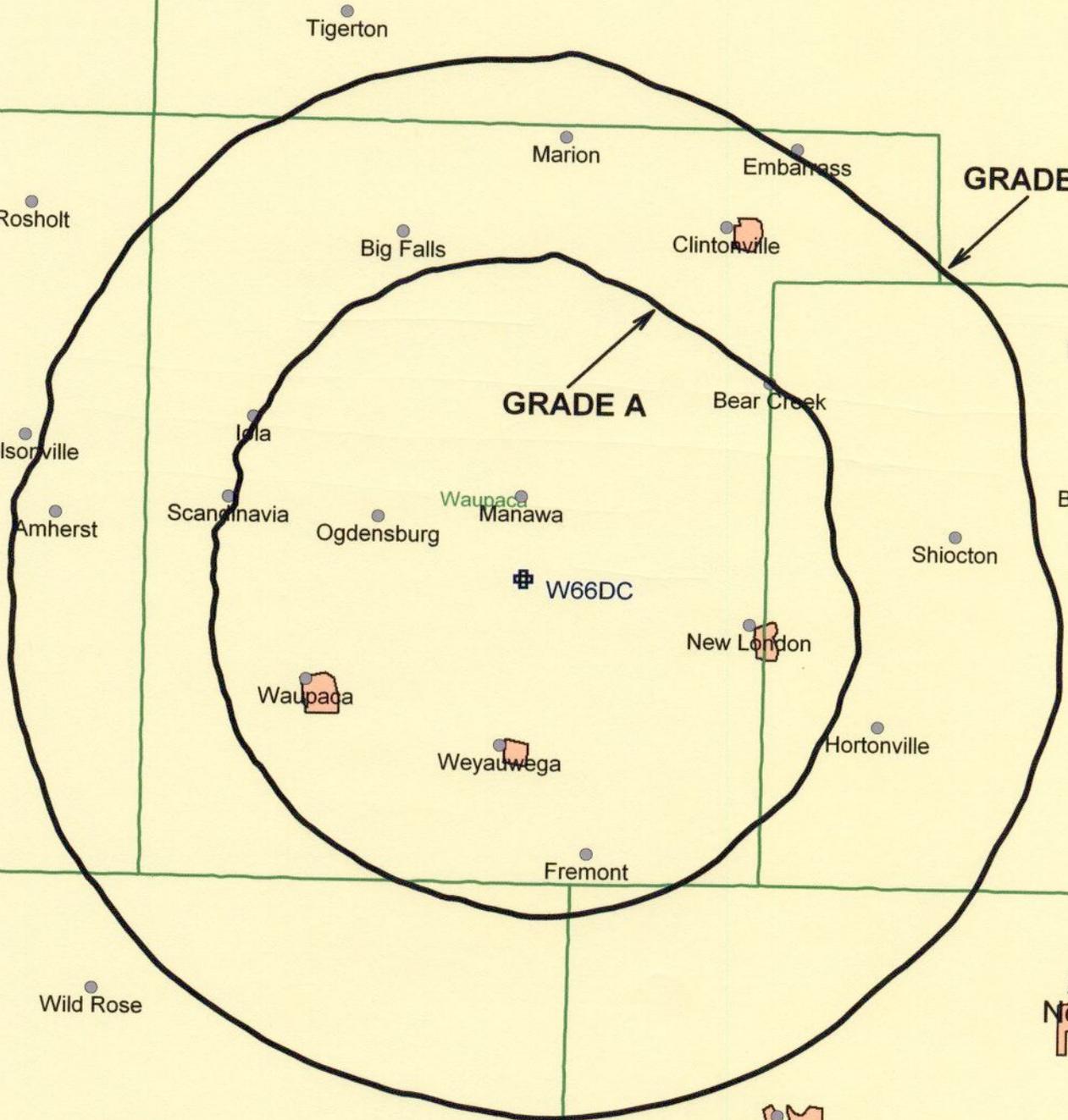


EXHIBIT B

PROPOSED OPERATING PARAMETERS

PROPOSED W66DC
CHANNEL 36 – WAUPACA, WISCONSIN
[MODIFICATION OF BPTT-20050506ACU]

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	57.7 %
Antenna Power Gain – Toward Horizon:	28.2
Antenna Power Gain – Main Lobe:	28.2
Effective Radiated Power – Toward Horizon:	16.3 kw
Effective Radiated Power – Main Lobe:	16.3 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	450 feet
Antenna Make and Model:	ERI ALP16L2-HSOC
Orientation	Omnidirectional
Beam Tilt	0.5 degrees
Radiation Center Above Ground:	132 meters
Radiation Center Above Mean Sea Level:	400 meters

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED W66DC
CHANNEL 36 – WAUPACA, WISCONSIN
[MODIFICATION OF BPTT-20050506ACU]

We conducted a computer analysis of the interference situation for the proposed facility, the results of which are shown in Exhibit D-2. The study is based on contour protection requirements of Sections 74.705, 74.706, 74.708, 74.709 and 74.710 of the FCC's Rules with respect to analog and digital full-power, analog and digital low power television stations, and Land Mobile allotments. It concludes that the facility proposed herein meets these requirements except to two stations: WMVT(TV), Channel 36 in Milwaukee, Wisconsin; and, KTTC-DT, Channel 36 in Rochester, Minnesota.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to these facilities of concern. The software utilizes a 1-square kilometer cell size (except where noted), calculates signal strength at 0.1 kilometer increments along each radial studied, and employs the 1990 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than Trinity's proposed W66DC) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-3. They conclude that the facility proposed herein causes no significant new interference to either of the potentially affected stations.

As a result, waivers of Section 74.705 of the Commission's Rules with respect to interference to WMVT and Section 74.706 with regard to KTTC-DT are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED W66DC
CH. 36 - WAUPACA, WI

REFERENCE
44 25 03 N
88 55 03 W

LPTV Pwr = 16.2 kW, HAMS L COR= 400 M

DISPLAY DATES
DATA 03-11-06
SEARCH 03-14-06

..... Channel 36-, 602 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
WMVT	LI 36Z	Milwaukee	WI 167.97	150.7	> 207.05	-39.08
KTTC-D	CP 36	Rochester	MN 301.85	254.6	> 307.53	-5.68
WLEFTV	LI 36+	Park Falls	WI 200.45	328.5	> 199.35	1.10
W60CI	AP 21Z	La Crosse	WI 207.71	251.7	> 055.69	11.30
KAAL-D	AP 36	Austin	MN 350.76	257.0	> 297.79	52.97
WHATV	LI 21-	Madison	WI 159.26	198.4	> 105.50	53.76
WJYS-D	LI 36	Hammond	IN 300.67	159.3	> 240.24	60.43
WMVT-D	CPM 35	Milwaukee	WI 167.97	150.7	> 103.30	64.67

INTERFERENCE SUMMARY

PROPOSED W66DC
CHANNEL 36 - WAUPACA, WISCONSIN
[MODIFICATION OF BPTT-20050506ACU]

<u>Call Sign</u>	<u>Status</u>	<u>City, State</u>	<u>Ch.</u>	<u>Longley-Rice Service Population</u>	<u>Unmasked Interference From Proposed Facility</u>	<u>%</u>
WMVT(TV) BPET-20050623ABQ	Lic.	Milwaukee, WI	36	2,045,601	4,051	0.2
KTTC-DT BPCDT-19991101AIF	CP	Rochester, MN	36	525,242	0	0

POWER DENSITY CALCULATION

PROPOSED W66DC
CHANNEL 36 – WAUPACA, WISCONSIN
[MODIFICATION OF BPTT-20050506ACU]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Waupaca facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 16.3 kw, an antenna radiation center 132 meters above ground, and the vertical pattern of the ERI antenna, maximum power density two meters above ground of 0.00084 mw/cm^2 is calculated to occur 42 meters from the base of the tower. Since this is only 0.2 percent of the 0.40 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 36 (602-608 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.