

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of NATIONAL MINORITY T.V., INC., licensee of WWRS-DT, Channel 43 in Mayville, Wisconsin, in support of its Application for Construction Permit to operate with a maximized post-transition DTV facility.

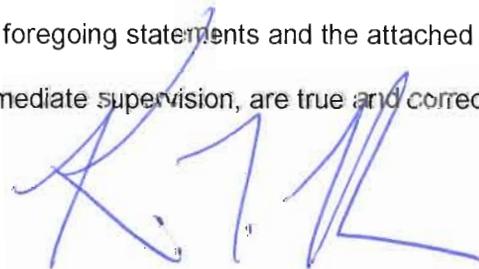
It is proposed to mount a standard ERI directional antenna at the 142-meter level of the existing 150-meter tower on which the present WWRS-DT antenna is mounted. Exhibit B provides an elevation and azimuth pattern data for the proposed antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. An interference study is included in Exhibit D, a power density calculation is provided in Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the WWRS-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. The Commission issued Antenna Structure Registration Number 1219139 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.

June 9, 2008

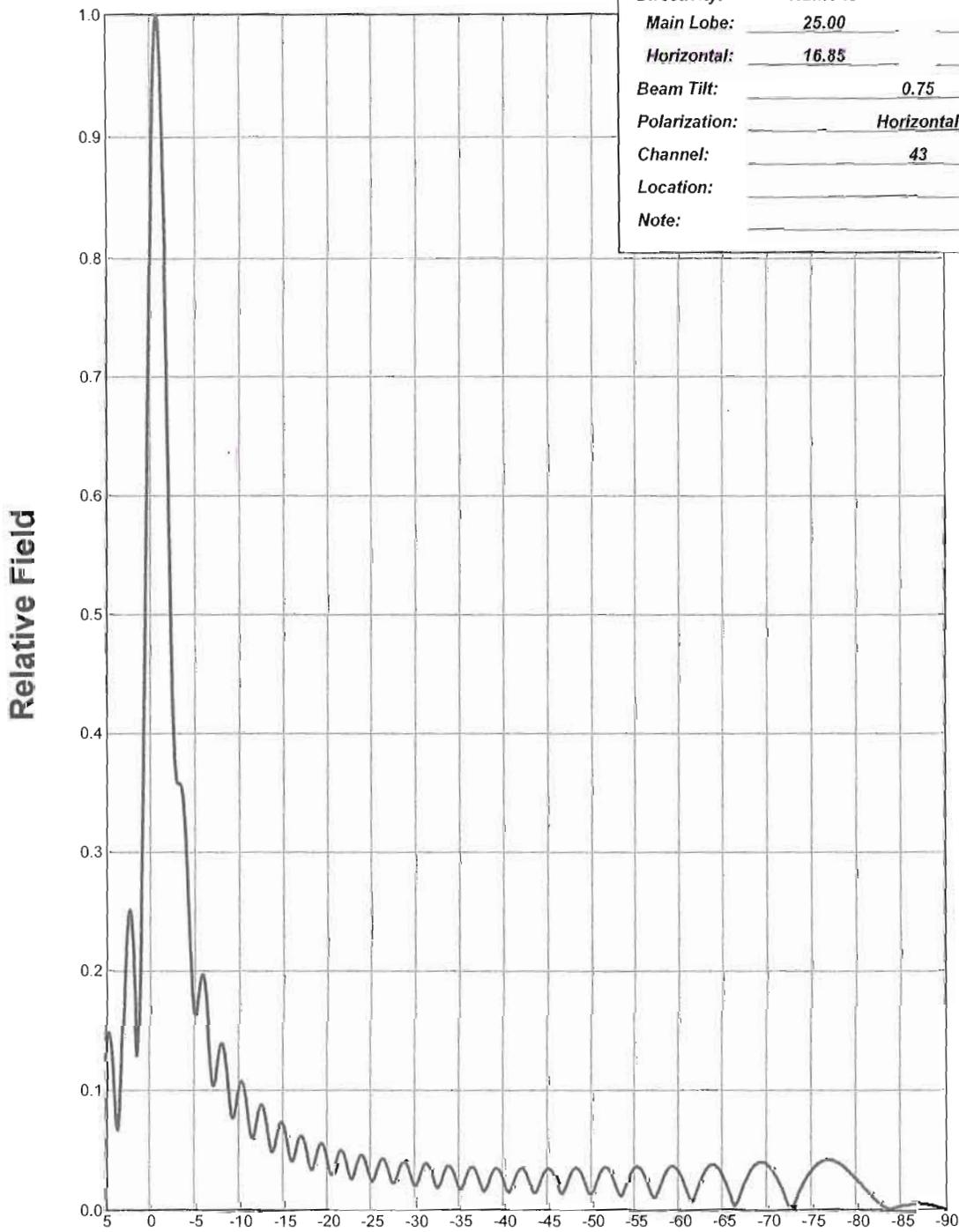


KEVIN T. FISHER



ELEVATION PATTERN

Type:	ATW25H3H	
Directivity:	Numeric	dBd
Main Lobe:	25.00	13.98
Horizontal:	16.85	12.27
Beam Tilt:	0.75	
Polarization:	Horizontal	
Channel:	43	
Location:		
Note:		



Electronics Research, Inc.
7777 Gardner Road
Chandler, Indiana U.S.A 47610

EXHIBIT B-1

ANTENNA ELEVATION PATTERN

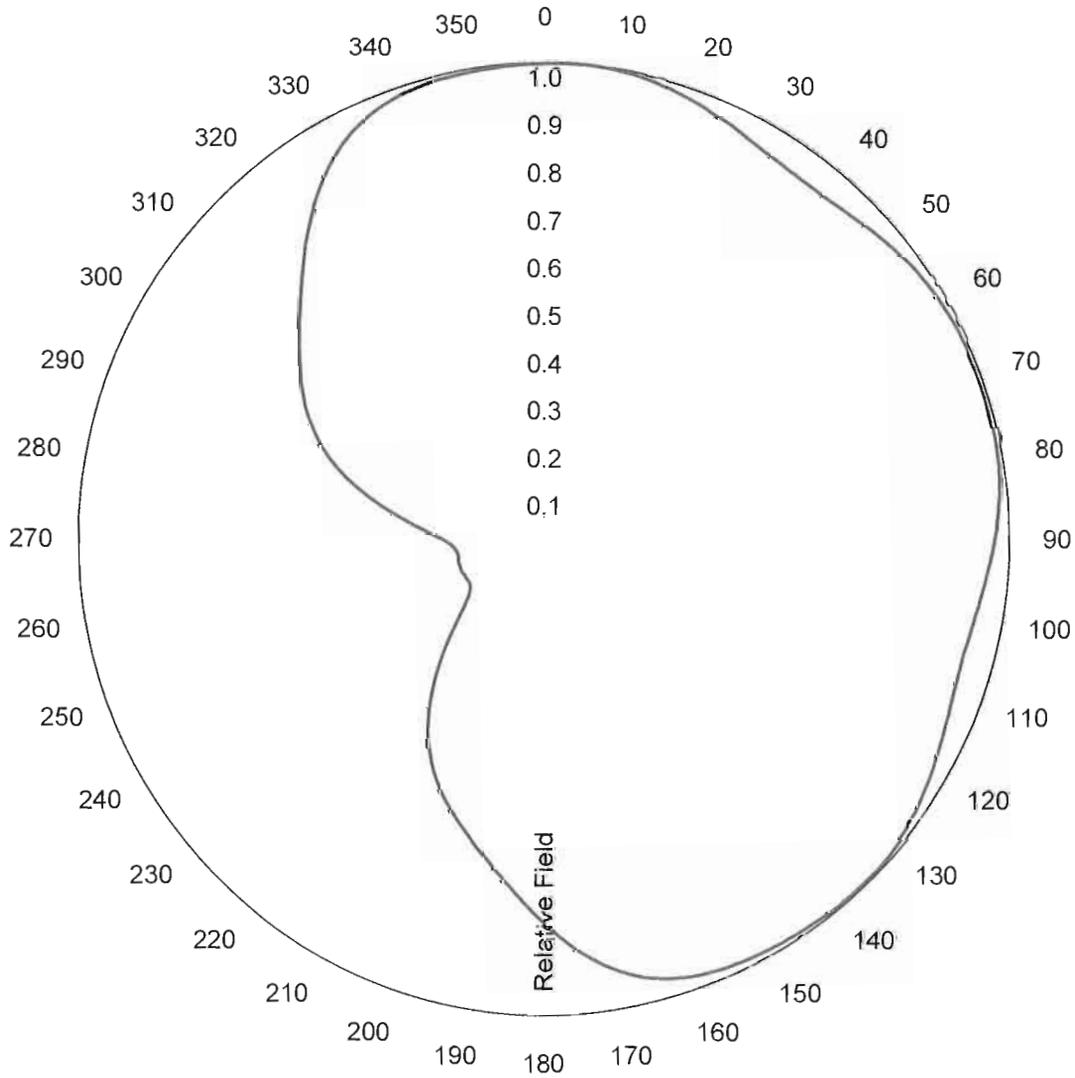
PROPOSED WWRB-DT
CHANNEL 43 - MAYVILLE, WISCONSIN

SMITH AND FISHER



AZIMUTH PATTERN

Type:	ATW-C1	
	Numeric	dBd
Directivity:	1.52	1.82
Peak(s) at:		
Polarization:	Horizontal	
Channel:	43	
Location:		
Note:		



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EXHIBIT B-2

ANTENNA AZIMUTH PATTERN
PROPOSED WWRB-DT
CHANNEL 43 - MAYVILLE, WISCONSIN
SMITH AND FISHER



**AZIMUTH PATTERN
FCC FILING FORMAT**

Type: ATW-C1

Polarization: Horizontal

Angle	Field	ERP (kW)	ERP (dBk)
0	0.999	997.995	29.991
10	0.996	992.010	29.965
20	0.972	944.778	29.753
30	0.941	885.475	29.472
40	0.937	877.963	29.435
50	0.963	927.363	29.672
60	0.985	970.219	29.869
70	0.992	984.058	29.930
80	0.987	974.163	29.886
90	0.966	933.150	29.700
100	0.938	879.838	29.444
110	0.935	874.219	29.416
120	0.963	927.363	29.672
130	0.989	978.115	29.904
140	0.994	988.030	29.948
150	0.987	974.163	29.886
160	0.974	948.670	29.771
170	0.921	848.236	29.285
180	0.811	657.717	28.180
190	0.695	483.022	26.840
200	0.604	364.814	25.621
210	0.504	254.014	24.049
220	0.363	131.768	21.198
230	0.235	55.225	17.421
240	0.190	36.100	15.575
250	0.195	38.025	15.801
260	0.193	37.249	15.711
270	0.228	51.984	17.159
280	0.348	121.103	20.832
290	0.495	245.023	23.892
300	0.602	362.402	25.592
310	0.691	477.478	26.790
320	0.803	644.805	28.094
330	0.917	840.884	29.247
340	0.979	958.435	29.816
350	0.993	986.043	29.939



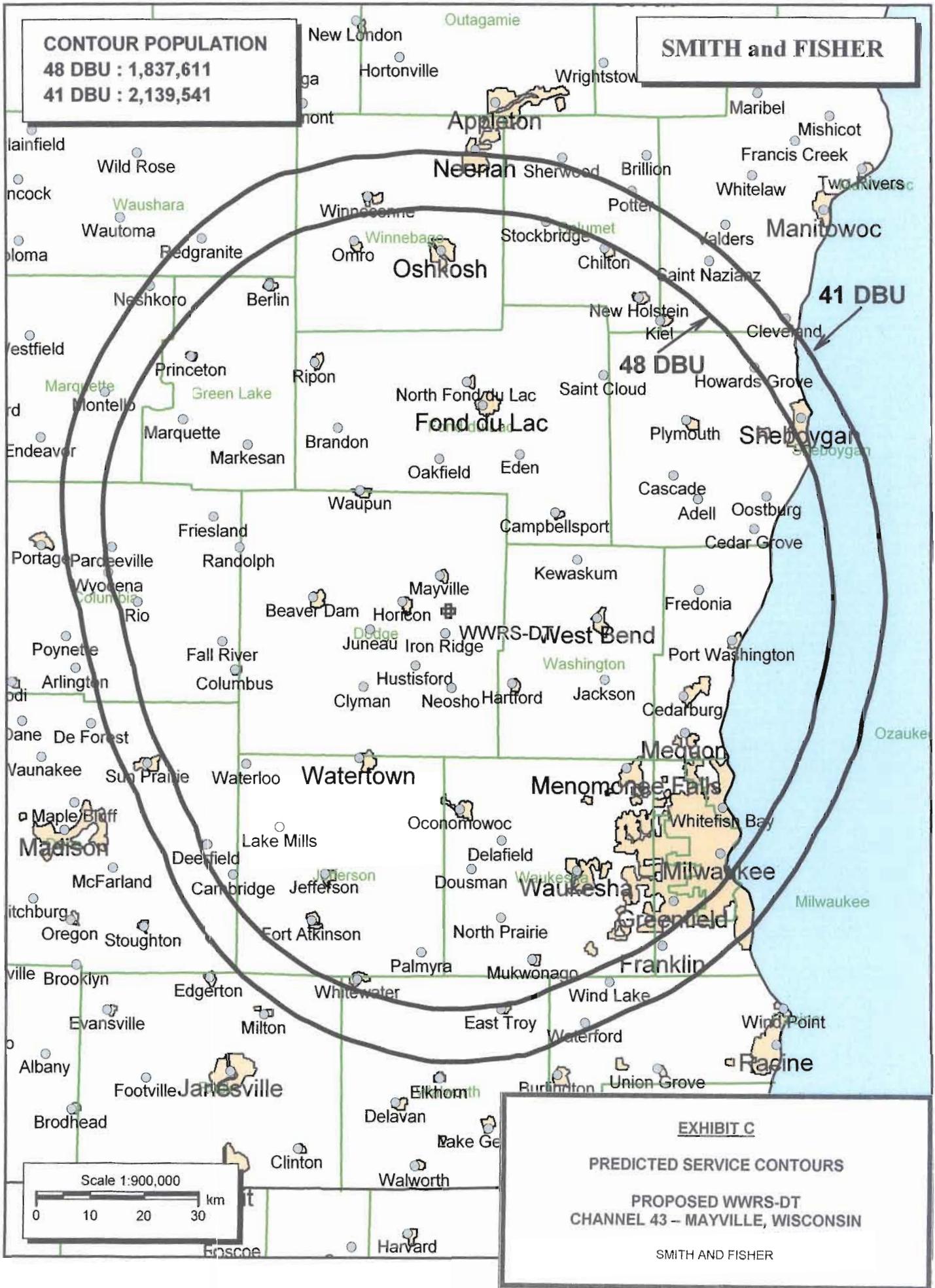
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EXHIBIT B-3

ANTENNA RELATIVE FIELD VALUES

**PROPOSED WWRS-DT
CHANNEL 43 - MAXVILLE, WISCONSIN**

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CONTOUR POPULATION
 48 DBU : 1,837,611
 41 DBU : 2,139,541

SMITH and FISHER

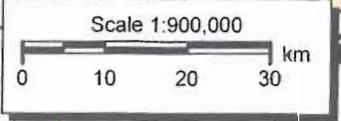


EXHIBIT C
 PREDICTED SERVICE CONTOURS
 PROPOSED WWRs-DT
 CHANNEL 43 - MAYVILLE, WISCONSIN
 SMITH AND FISHER

INTERFERENCE STUDY
PROPOSED WWRS-DT
CHANNEL 43 – MAYVILLE, WISCONSIN

The instant application specifies an ERP of 1000 kw (directional) at 200 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various post-transition digital television facilities as they will exist on or before February 17, 2009, the date by which all stations must operate with the parameters recently adopted in the Commission's DTV Table of Allotments.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe III" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a cell size of 2.0 kilometers and an increment spacing of 1.0 kilometer along each radial. In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed WWRS-DT to other pertinent stations are tabulated in Exhibit D-2.

As shown, the proposed WWRS-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted WWRS-DT facility) to the service population of any potentially affected post-transition DTV station.

A Longley-Rice interference study also reveals that the proposed WWRS-DT facility does not cause significant (0.5%) interference within the protected service contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

INTERFERENCE STUDY SUMMARY
PROPOSED WWRS-DT
CHANNEL 43 – MAYVILLE, WISCONSIN

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WWRS-DT*</u>	<u>%</u>
KFXB-DT	Dubuque, IA	43	307,673	259	<0.1
WCPX-DT	Chicago, IL	43	9,299,312	26,633	0.3
WPNE-DT	Green Bay, WI	42	1,042,530	1,439	0.1

*Above that caused by the allotment facility.

POWER DENSITY CALCULATION
PROPOSED WWRS-DT
CHANNEL 43 – MAYVILLE, WISCONSIN

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Mayville facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 1000 kw, an antenna radiation center 142 meters above ground, and the elevation pattern of the ERI antenna, maximum power density two meters above ground of 0.0028 mw/cm^2 is calculated to occur 32 meters east of the base of the tower. Since this is only 0.7 percent of the 0.43 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 43 (644-650 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level 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.