

ENGINEERING STATEMENT

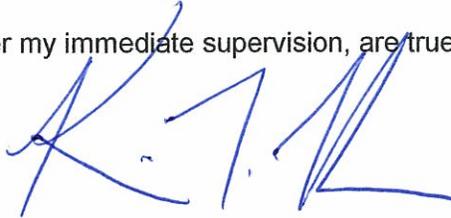
The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., licensee of WTXF-DT, Channel 42 in Philadelphia, Pennsylvania, in support of its Application for Construction Permit to operate on Channel 42 with a maximized post-transition DTV facility.

It is proposed to utilize the authorized ERI directional antenna, to be mounted at the 338-meter level of the existing 361-meter tower on which the present WTXF-DT antenna is located. Exhibit B provides 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 provided in Exhibit D, and power density calculation is included 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 WTXF-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. In addition, the FCC issued Antenna Structure Registration Number 1037800 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.

A handwritten signature in blue ink, appearing to read 'K. T. Fisher', is written over the text of the declaration.

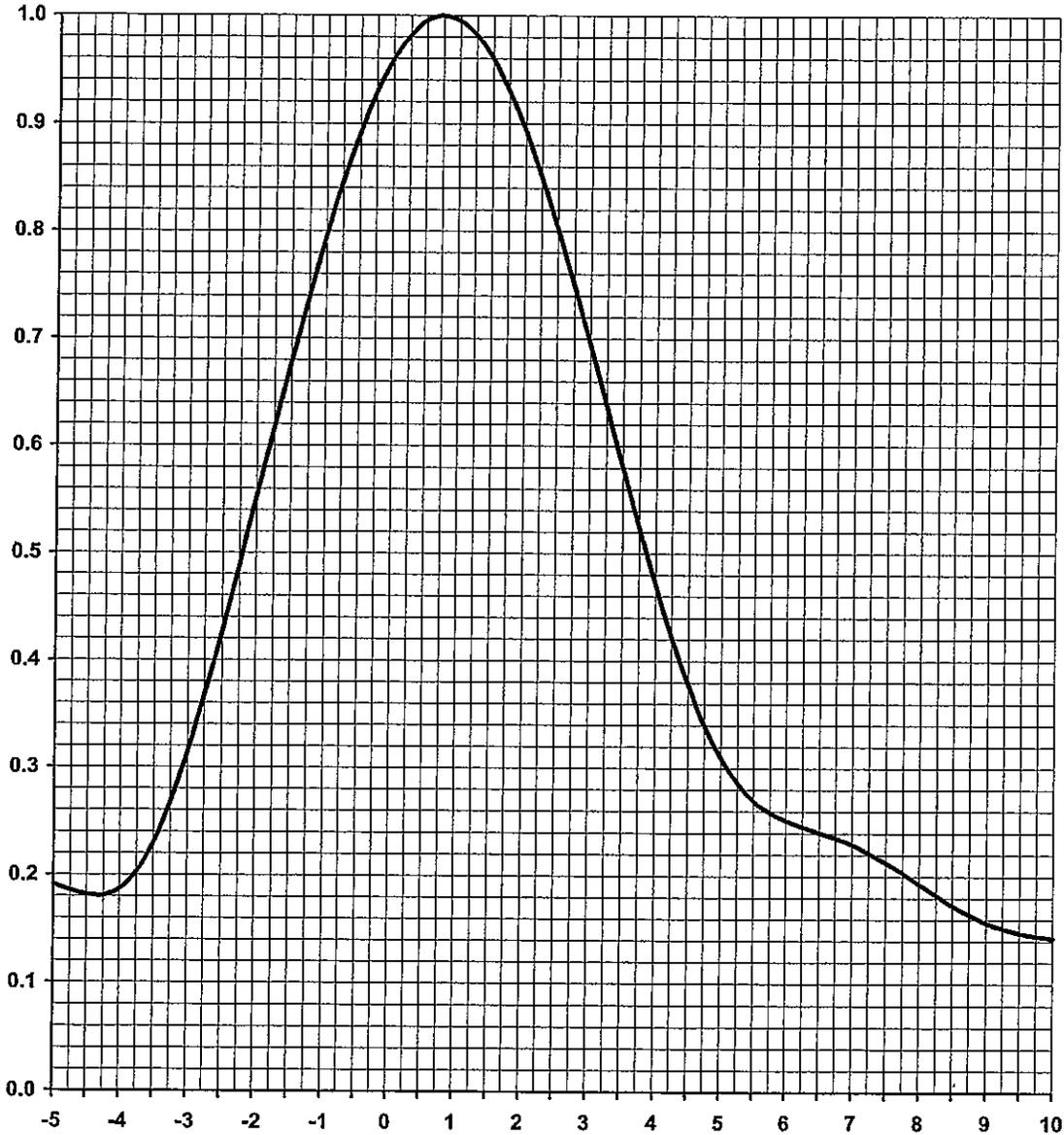
KEVIN T. FISHER

June 11, 2008

ELEVATION PATTERN

TYPE:	ATW12HS3H	
Directivity:	Numeric	dBd
Main Lobe:	12.00	10.79
Horizontal:	11.06	10.44

Frequency:	42 (Digital)
Location:	Philadelphia, PA
Beam Tilt:	0.75
Polarization:	Horizontal



ELECTRONICS RESEARCH, INC. ERI

EXHIBIT B-1
ANTENNA ELEVATION PATTERN
PROPOSED WTXF-DT
CHANNEL 42 – PHILADELPHIA, PENNSYLVANIA
SMITH AND FISHER

AZIMUTH PATTERN

TYPE: CH42HAZ-OC
Directivity: Numeric 1.70 dB 2.30
Peak(s) at: _____

Polarization: Horizontal
Frequency: 42 (Digital)
Location: Philadelphia, PA

Note: Pattern shape and directivity may vary with channel and mounting configuration.

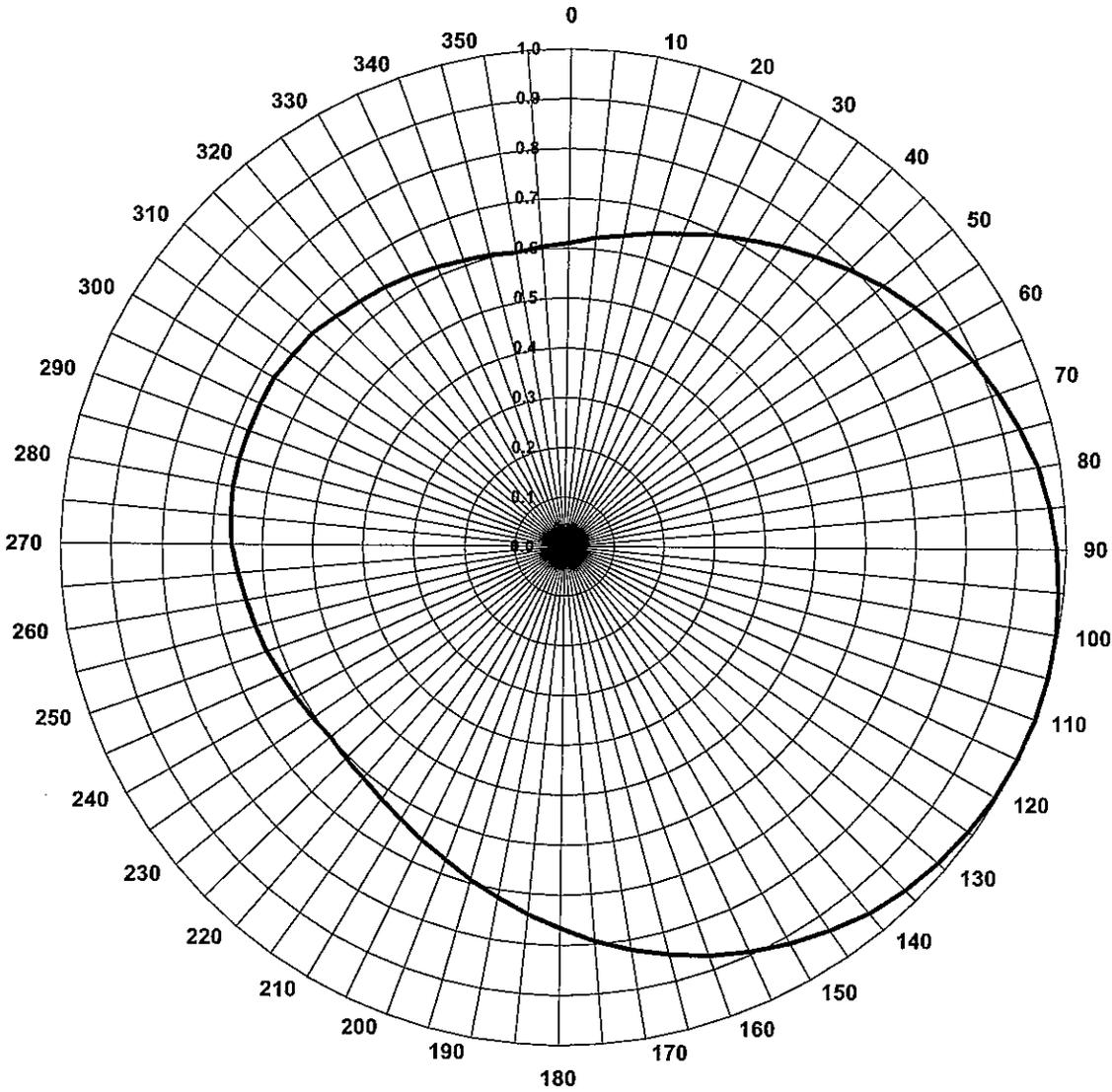


EXHIBIT B-2
ANTENNA AZIMUTH PATTERN
PROPOSED WTXF-DT
CHANNEL 42 – PHILADELPHIA, PENNSYLVANIA
SMITH AND FISHER

ANTENNA AZIMUTH PATTERN DATA
PROPOSED WTXF-DT
CHANNEL 42 – PHILADELPHIA, PENNSYLVANIA

<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>	<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>
0	0.610	23.8	180	0.765	25.8
10	0.635	24.2	190	0.715	25.2
20	0.670	24.7	200	0.670	24.7
30	0.715	25.2	210	0.635	24.2
40	0.765	25.8	220	0.610	23.8
50	0.820	26.4	230	0.600	23.7
60	0.870	26.9	240	0.610	23.8
70	0.915	27.4	250	0.625	24.0
80	0.955	27.7	260	0.640	24.3
90	0.980	28.0	270	0.660	24.5
100	0.995	28.1	280	0.670	24.7
110	1.000	28.1	290	0.670	24.7
120	0.995	28.1	300	0.670	24.7
130	0.980	28.0	310	0.660	24.5
140	0.955	27.7	320	0.640	24.3
150	0.915	27.4	330	0.625	24.0
160	0.870	26.9	340	0.610	23.8
170	0.820	26.4	350	0.600	23.7

CONTOUR POPULATION

48 DBU : 7,593,169

41 DBU : 8,981,379

SMITH and FISHER

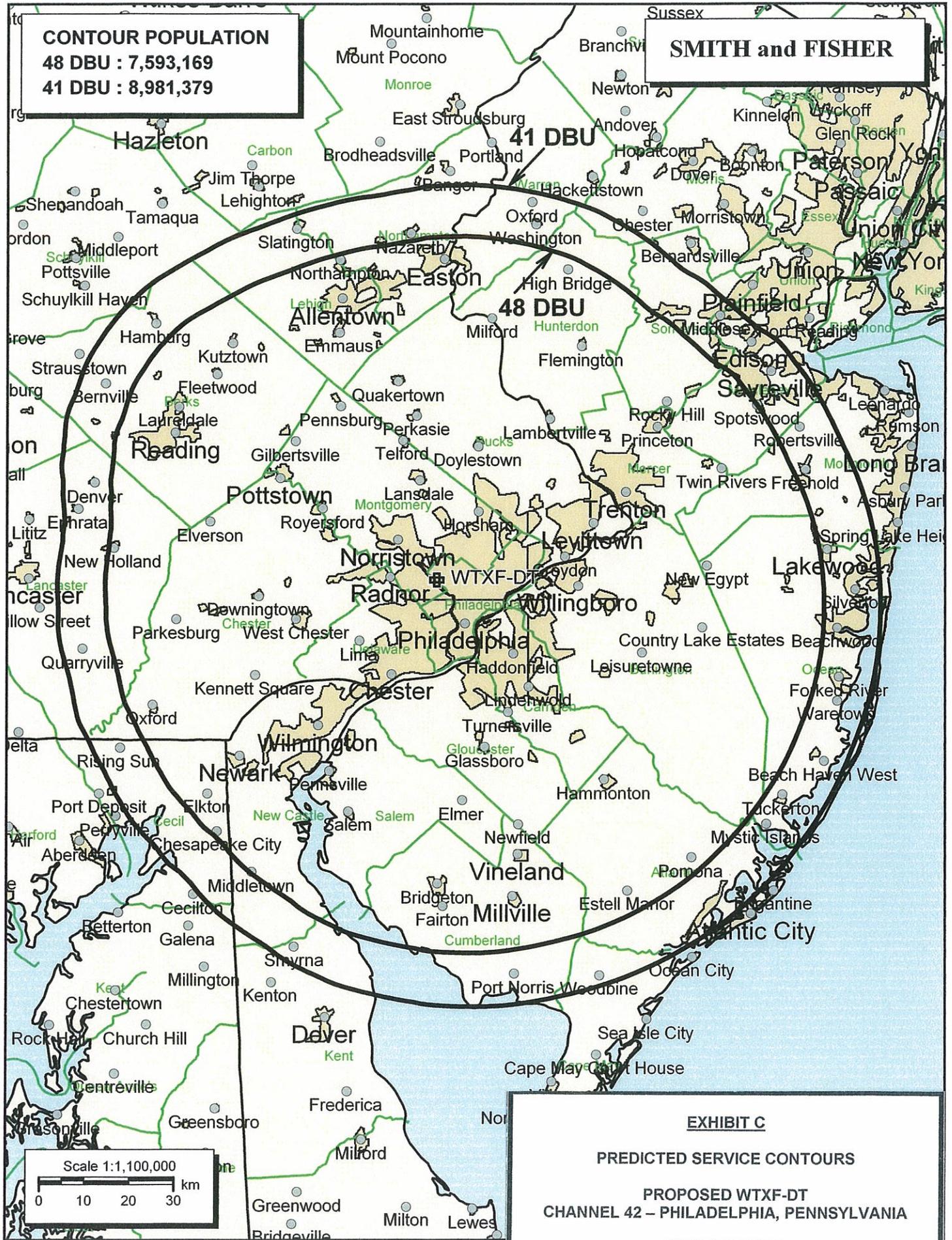


EXHIBIT C

PREDICTED SERVICE CONTOURS

**PROPOSED WTXF-DT
CHANNEL 42 - PHILADELPHIA, PENNSYLVANIA**

SMITH AND FISHER

INTERFERENCE STUDY
PROPOSED WTXF-DT
CHANNEL 42 – PHILADELPHIA, PENNSYLVANIA

The instant application specifies an ERP of 650 kw (directional) at 343 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 WTXF-DT to other pertinent stations are tabulated in Exhibit D-2.

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

A Longley-Rice interference study also reveals that the proposed WTXF-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 WTXF-DT
 CHANNEL 42 – PHILADELPHIA, PENNSYLVANIA

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WTXF-DT*</u>	<u>%</u>
WNJT-DT (Allot.)	Trenton, NJ	43	9,767,084	16,148	0.2
WNJT-DT (Lic.)	Trenton, NJ	43	9,576,592	28,778	0.3
WSAH-DT (Lic.)	Bridgeport, CT	42	5,552,409	22,710	0.4
WSAH-DT (Allot.)	Bridgeport, CT	42	5,610,205	12,487	0.2
WMPT-DT (Lic.)	Annapolis, MD	42	6,710,349	0	0
WMPT-DT (Allot.)	Annapolis, MD	42	6,884,211	160	<0.1
WVIA-DT	Scranton, PA	41	1,957,101	0	0
WSKG-DT	Binghamton, NY	42	626,437	0	0
WPHA-CA	Philadelphia, PA	38	2,001,359	0	0

*Above that caused by the allotment facility.

Note: This study utilized a cell size of 2.0 km and an increment spacing of 1.0 km.

POWER DENSITY CALCULATION
PROPOSED WTXF-DT
CHANNEL 42 – PHILADELPHIA, PENNSYLVANIA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Philadelphia facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 650 kw (H) and 162 kw (V), an antenna radiation center 338 meters above ground, and the elevation pattern of the Andrew antenna, maximum power density two meters above ground of 0.0010 mw/cm^2 is calculated to occur 56 meters east-southeast of the base of the tower. Since this is only 0.2 percent of the 0.43 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 42 (638-644 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.