

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., licensee of KTTV-DT, Channel 11 in Los Angeles, California, in support of this amendment to its Application for Construction Permit BMPCDT-20080616AAK, which proposes operation with a maximized post-transition DTV facility. The purpose of this amendment is to change the reference to the coverage of the largest station in the Los Angeles market from KCBS-TV to KCOP-DT. No change in the site location, antenna model, antenna height or effective radiated power is proposed herein.

It is still proposed to mount an ERI omnidirectional antenna at the 67-meter level of the existing 74-meter tower on which the present KTTV-DT antenna is mounted. The new ERI antenna will be installed with 1.5° electrical beam tilt and 1.5° mechanical beam tilt oriented at 210° T. Exhibit B provides elevation and horizontal 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 43 dBu service contour. An interference study is included in Exhibit D, and a power density calculation is provided in Exhibit E.

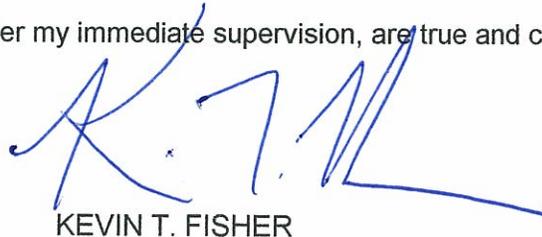
It is important to note that, while the proposed effective radiated power of 115 kw exceeds that allowable in Section 73.622(f)(7)(i) of the Commission's Rules, the coverage of the facility proposed herein does not exceed that of the largest digital television station in the market (KCOP-DT, Channel 13 in Los Angeles, California), as allowed in Section 73.622(f)(5) of the Rules. The area within the service contour of KCOP-DT, as authorized in

BMPCDT-20080319ACJ, is 57,204 square kilometers, whereas the coverage of the facility proposed herein comprises an area of 57,135 square kilometers.

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 KTTV-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 1015352 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.

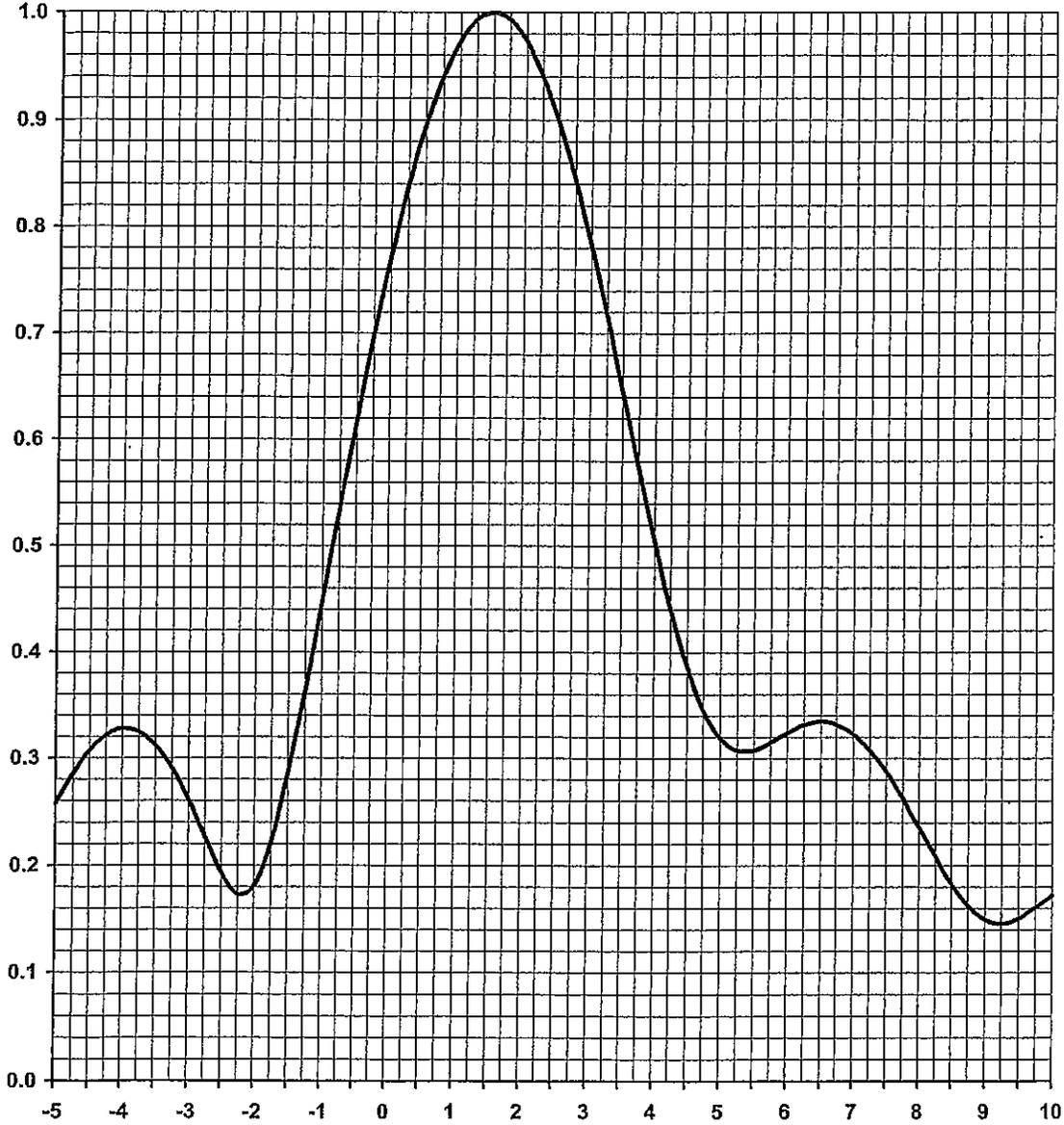


KEVIN T. FISHER

July 9, 2009

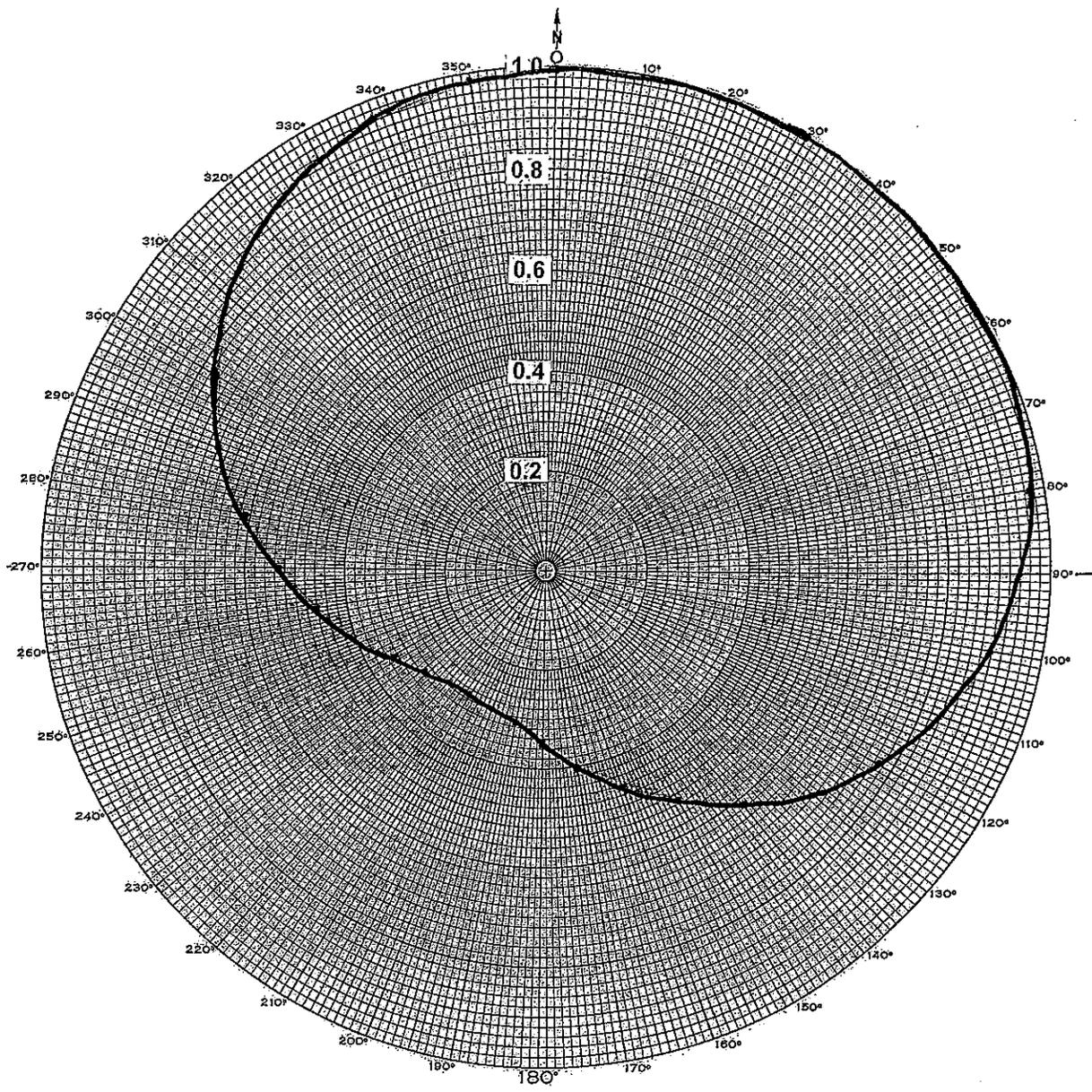
### ELEVATION PATTERN

<b>TYPE:</b>	<b>ATW14V6H</b>		<b>Frequency:</b>	<b>11 (Digital)</b>
<b>Directivity:</b>	<b>Numeric</b>	<b>dBd</b>	<b>Location:</b>	<b>Los Angeles, CA</b>
<b>Main Lobe:</b>	<b>14.00</b>	<b>11.46</b>	<b>Beam Tilt:</b>	<b>1.50</b>
<b>Horizontal:</b>	<b>8.37</b>	<b>9.22</b>	<b>Polarization:</b>	<b>Horizontal</b>



**ELECTRONICS RESEARCH, INC. *ERI***

**EXHIBIT B-1**  
**ANTENNA ELEVATION PATTERN**  
**PROPOSED KTTV-DT**  
**CHANNEL 11 – LOS ANGELES, CALIFORNIA**  
**[AMENDMENT TO BMPCDT-20080616AAK]**  
 SMITH AND FISHER



**EXHIBIT B-2**  
**ANTENNA AZIMUTH PATTERN**  
**PROPOSED KTTV-DT**  
**CHANNEL 11 – LOS ANGELES, CALIFORNIA**  
**[AMENDMENT TO BMPCDT-20080616AAK]**  
**SMITH AND FISHER**

## ANTENNA AZIMUTH PATTERN DATA

PROPOSED KTTV-DT  
CHANNEL 11 – LOS ANGELES, CALIFORNIA  
[AMENDMENT TO BMPCDT-20080616AAK]

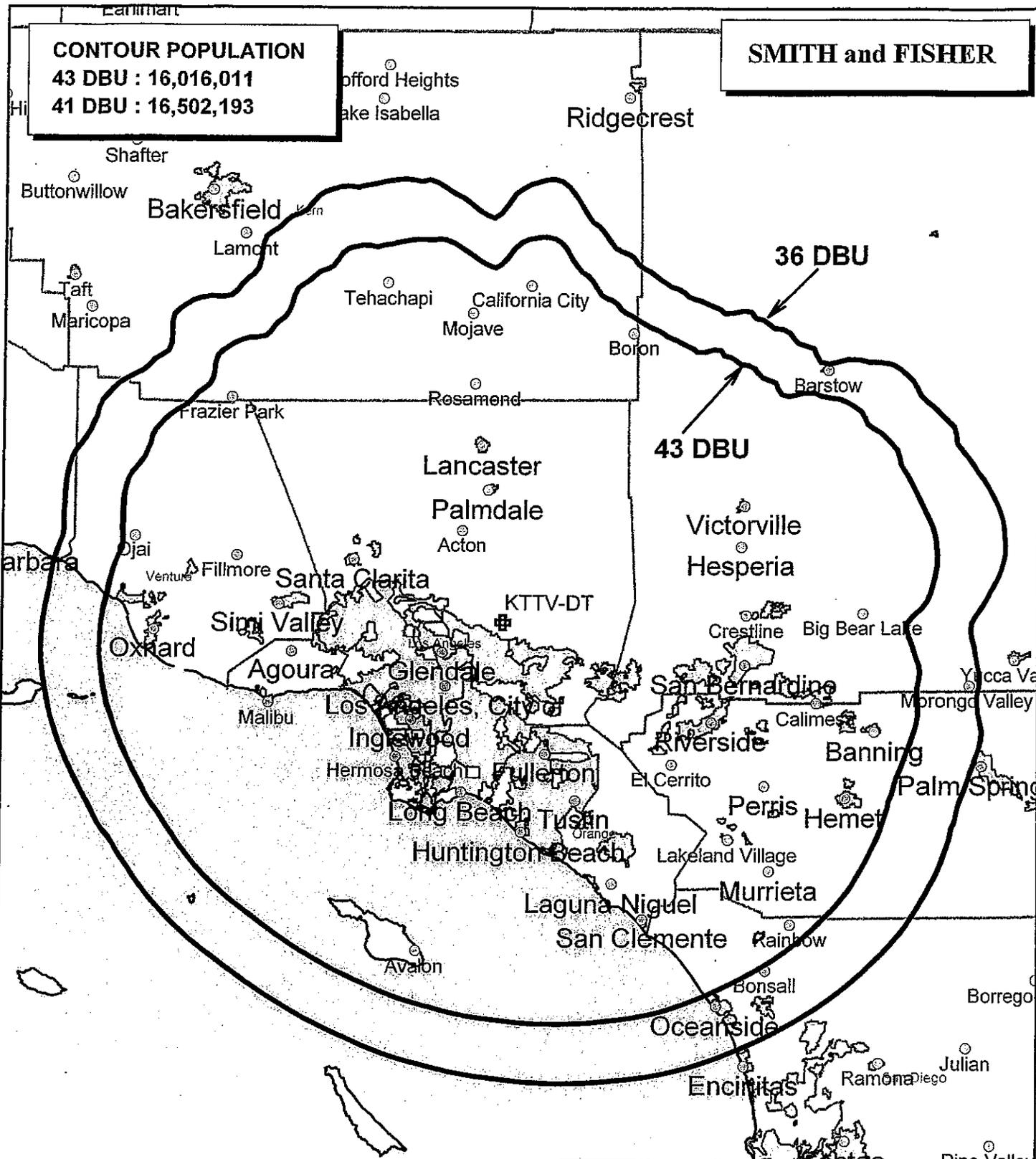
<u>Azimuth</u> (° T)	<u>Relative</u> <u>Field</u>	<u>ERP</u> (dbk)	<u>Azimuth</u> (° T)	<u>Relative</u> <u>Field</u>	<u>ERP</u> (dbk)
0	0.995	20.6	180	0.349	11.5
10	0.998	20.6	190	0.315	10.6
20	0.999	20.6	200	0.294	10.0
30	1.000	20.6	210	0.287	9.8
40	0.999	20.6	220	0.294	10.0
50	0.998	20.6	230	0.315	10.6
60	0.995	20.6	240	0.349	11.5
70	0.986	20.5	250	0.398	12.6
80	0.969	20.3	260	0.460	13.9
90	0.941	20.1	270	0.534	15.2
100	0.898	19.7	280	0.614	16.4
110	0.842	19.1	290	0.696	17.5
120	0.773	18.4	300	0.773	18.4
130	0.696	17.5	310	0.842	19.1
140	0.614	16.4	320	0.898	19.7
150	0.534	15.2	330	0.941	20.1
160	0.460	13.9	340	0.969	20.3
170	0.398	12.6	350	0.986	20.5

**CONTOUR POPULATION**

43 DBU : 16,016,011

41 DBU : 16,502,193

**SMITH and FISHER**



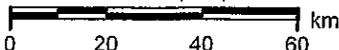
**EXHIBIT C**

**PREDICTED SERVICE CONTOURS**

**PROPOSED KTTV-DT  
CHANNEL 11 - LOS ANGELES, CALIFORNIA  
[AMENDMENT TO BMPCDT-20080616AAK]**

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Scale 1:1,600,000



INTERFERENCE STUDY  
PROPOSED KTTV-DT  
CHANNEL 11 – LOS ANGELES, CALIFORNIA  
[AMENDMENT TO BMPCDT-20080616AAK]

The instant application specifies an ERP of 115 kw at 920 meters above average terrain, which we have determined to be allowable under the FCC's approved interference standards with respect to various digital television facilities as they have existed since June 12, 2009, the date by which all stations must operate with the parameters 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 KTTV-DT to other pertinent stations are tabulated in Exhibit D-2.

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

A Longley-Rice interference study also reveals that the proposed KTTV-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.

EXHIBIT D-2

INTERFERENCE STUDY SUMMARY  
PROPOSED KTTV-DT  
CHANNEL 11 – LOS ANGELES, CALIFORNIA  
[AMENDMENT TO BMPCDT-20080616AAK]

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From KTTV-DT*</u>	<u>%</u>
KGTV-DT (Allot.)	San Diego, CA	11	2,964,161	0	0
KGTV-DT (CP)	San Diego, CA	10	3,088,689	0	0

\*Above that caused by KTTV-DT allotment facility.

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED KTTV-DT  
CHANNEL 11 – LOS ANGELES, CALIFORNIA  
[AMENDMENT TO BMPCDT-20080616AAK]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Los Angeles facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 115 kw (H) and 29 kw (V), an antenna radiation center 66.7 meters above ground, and the elevation pattern of the ERI antenna, maximum power density two meters above ground of  $0.0062 \text{ mw/cm}^2$  is calculated to occur 20 meters from the base of the tower. Since this is only 3.1 percent of the  $0.2 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 11 (198-204 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.