

ENGINEERING STATEMENT

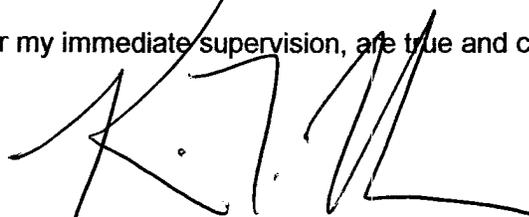
The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., licensee of KRIV-DT, Channel 27 in Houston, Texas, in support of its Application for Construction Permit to operate a post-transition auxiliary facility on Channel 26, its allotted channel.

It is proposed to mount a Dielectric directional antenna at the 525-meter level of the existing 600-meter tower on which the present KRIV-DT antenna is mounted. Exhibit B provides antenna azimuth and elevation pattern data, and proposed operating parameters are tabulated in Exhibit C. Exhibit D is a map upon which the predicted service contours of post-transition KRIV-DT (as recently authorized) and the proposed auxiliary facility are plotted. As shown, the auxiliary's 41 dBu contour is completely contained within that authorized to KRIV-DT. As a result, and since this proposal is for an auxiliary facility, an interference study is not provided. A power density calculation appears 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 KRIV-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 1028555 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 black ink, appearing to read 'K. T. Fisher', written over the text of the declaration.

KEVIN T. FISHER

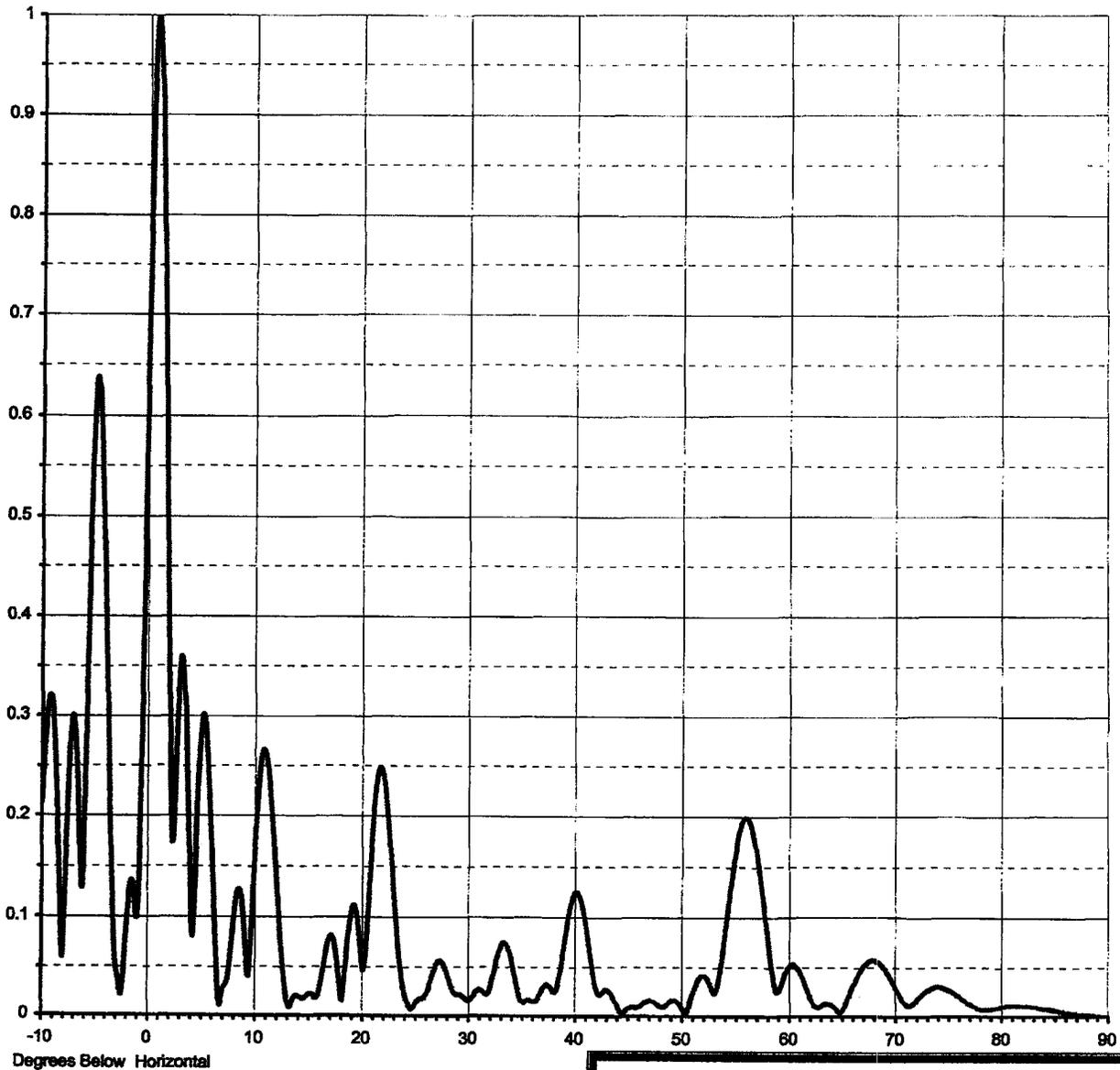
March 14, 2008



Proposal Number **C-02230** Revision: **1**  
Date **11-Jan-08**  
Call Letters **KRIV-DT** Channel **26**  
Location **Houston, TX**  
Customer  
Antenna Type **TFU-24WB-R**

### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>21.50 ( 13.32 dB )</b>	Beam Tilt	<b>0.75 deg</b>
RMS Gain at Horizontal	<b>10.40 ( 10.17 dB )</b>	Frequency	<b>545.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>24H215075-90</b>

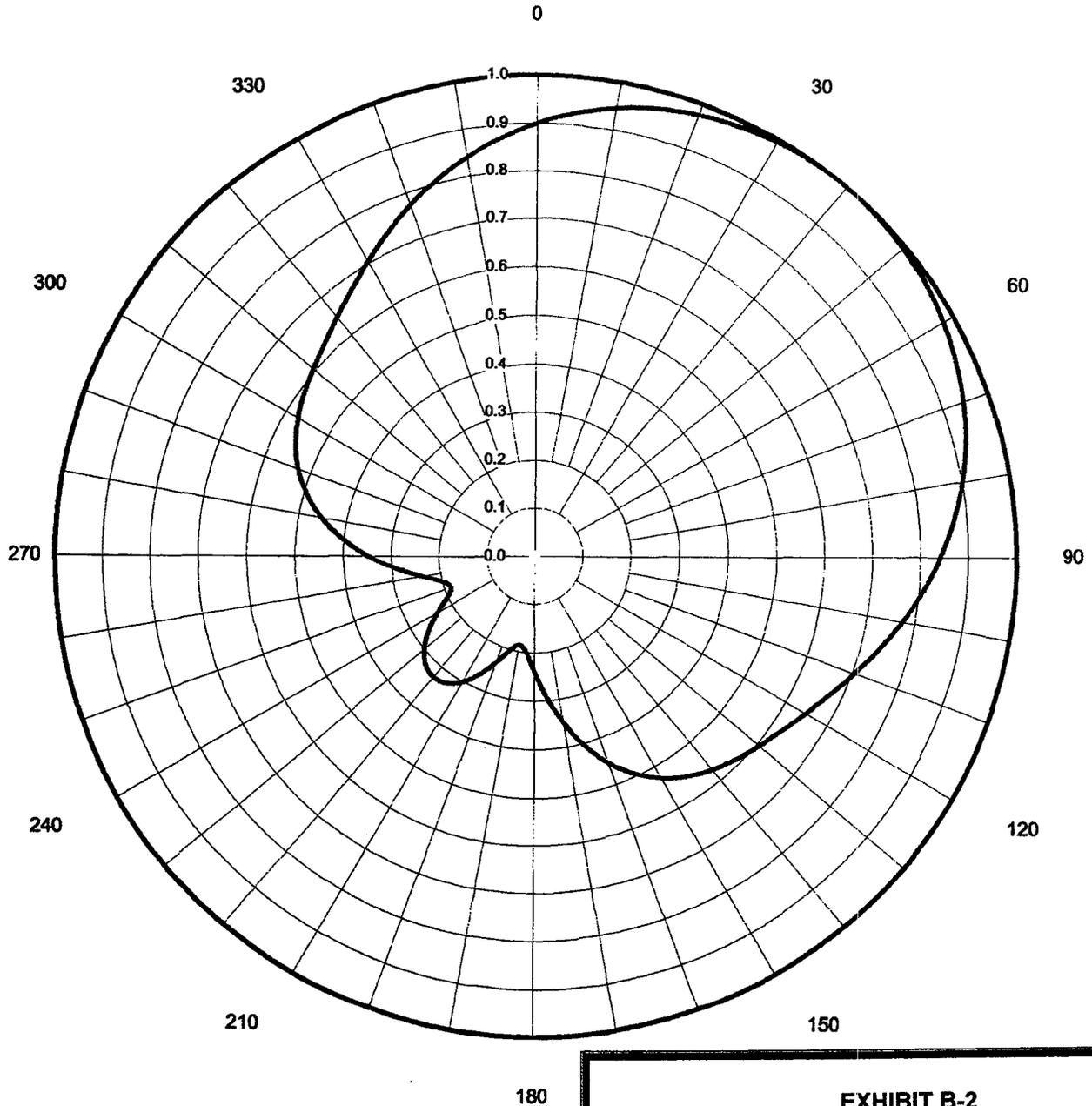


**EXHIBIT B-1**  
**ANTENNA ELEVATION PATTERN**  
**PROPOSED KRIV-DT AUXILIARY**  
**CHANNEL 26 – HOUSTON, TEXAS**  
**SMITH AND FISHER**

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Customer			
Antenna Type	<b>TFU-24WB-R</b>		

## AZIMUTH PATTERN

Gain	<b>2.30</b>	<b>( 3.62 dB)</b>	Frequency	<b>545.00 MHz</b>
Calculated / Measured		<b>Calculated</b>	Drawing #	<b>TFU-C230</b>



**EXHIBIT B-2**  
**ANTENNA AZIMUTH PATTERN**  
**PROPOSED KRIV-DT AUXILIARY**  
**CHANNEL 26 – HOUSTON, TEXAS**  
**SMITH AND FISHER**

## ANTENNA AZIMUTH PATTERN DATA

PROPOSED KRIV-DT AUXILIARY  
CHANNEL 26 – HOUSTON, TEXAS

<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	0.901	25.5	180	0.238	13.9
10	0.946	25.9	190	0.186	11.8
20	0.977	26.2	200	0.234	13.8
30	0.994	26.3	210	0.300	15.9
40	1.000	26.4	220	0.327	16.7
50	0.994	26.3	230	0.300	15.9
60	0.977	26.2	240	0.234	13.8
70	0.946	25.9	250	0.186	11.8
80	0.901	25.5	260	0.238	13.9
90	0.841	24.9	270	0.349	17.2
100	0.773	24.1	280	0.453	19.5
110	0.704	23.3	290	0.527	20.8
120	0.647	22.6	300	0.572	21.5
130	0.606	22.0	310	0.606	22.0
140	0.572	21.5	320	0.647	22.6
150	0.527	20.8	330	0.704	23.3
160	0.453	19.5	340	0.773	24.1
170	0.349	17.2	350	0.841	24.9

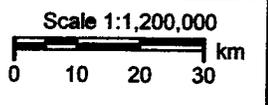
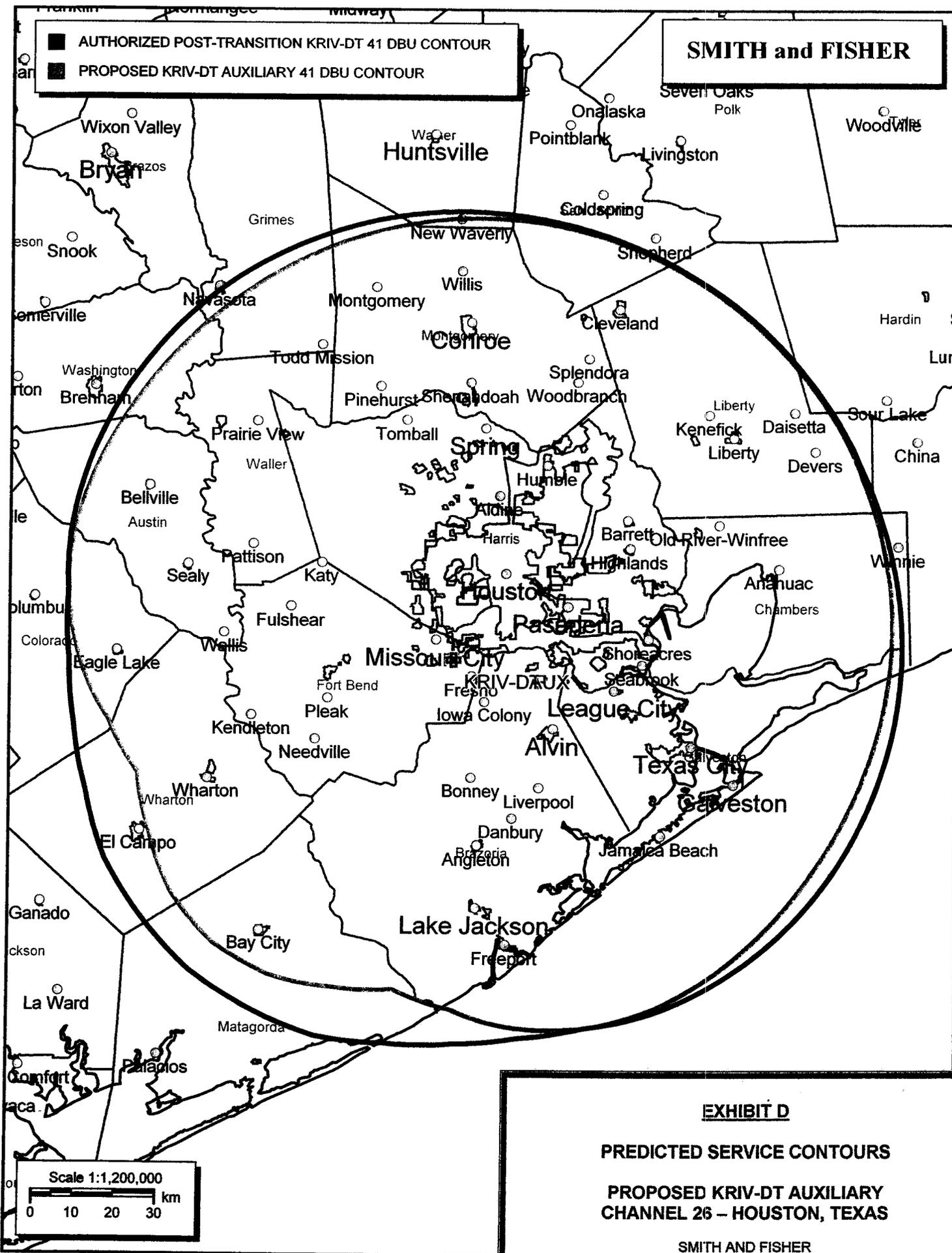
PROPOSED OPERATING PARAMETERS

PROPOSED KRIV-DT AUXILIARY  
CHANNEL 26 – HOUSTON, TEXAS

Transmitter Power Output:	12.6 kw
Transmission Line Efficiency:	69.7%
Antenna Power Gain – Main Lobe:	49.5
Effective Radiated Power – Main Lobe:	435 kw
Transmitter Make and Model:	Type-accepted
Transmission Line Make and Model:	Dielectric EIA/DCA
Size and Type:	8-3/16" rigid
Length:	1850 feet
Antenna:	
Make and Model:	Dielectric TFU-24WB-R
Orientation:	40° T
Beam Tilt:	0.75 degrees
Radiation Center Above Ground:	525 meters
Radiation Center Above Mean Sea Level:	549 meters

**SMITH and FISHER**

- AUTHORIZED POST-TRANSITION KRIV-DT 41 DBU CONTOUR
- PROPOSED KRIV-DT AUXILIARY 41 DBU CONTOUR



**EXHIBIT D**  
**PREDICTED SERVICE CONTOURS**  
**PROPOSED KRIV-DT AUXILIARY**  
**CHANNEL 26 - HOUSTON, TEXAS**  
**SMITH AND FISHER**

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED KRIV-DT AUXILIARY  
CHANNEL 26 – HOUSTON, TEXAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Houston facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 435 kw, an antenna radiation center 525 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of  $0.0014 \text{ mw/cm}^2$  is calculated to occur 353 meters northeast of the base of the tower. Since this is only 0.4 percent of the  $0.36 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 26 (542-548 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.