

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of FOX TELEVISION STATIONS, INC., licensee of WFLD-DT, Channel 31 in Chicago, Illinois, in support of its Application for Construction Permit to operate with a maximized post-transition DTV facility.

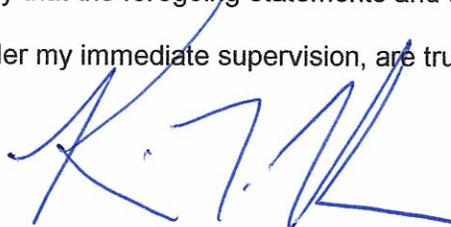
It is proposed utilize the existing Andrew directional antenna, which is mounted at the 474-meter level of the Sears Tower in Chicago. Exhibit B provides elevation and azimuth pattern data for the licensed antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. An interference study is included in Exhibit D, and it is important to note that the study utilized a cell size of 2.0 kilometers and an increment spacing of 1.0 kilometer. A power density calculation is provided in Exhibit E.

It is important to note that, while the proposed effective radiated power of 1000 kw exceeds that allowable in Section 73.622(f)(8)(i) of the Commission's Rules, the coverage of the facility proposed herein does not exceed that of the largest station in the market (WPWR-DT, Channel 51 in Gary, Indiana), as allowed in Section 73.622(f)(5) of the Rules.

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 WFLD-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 FCC issued Antenna Structure Registration Number 1032959 to the Sears 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.

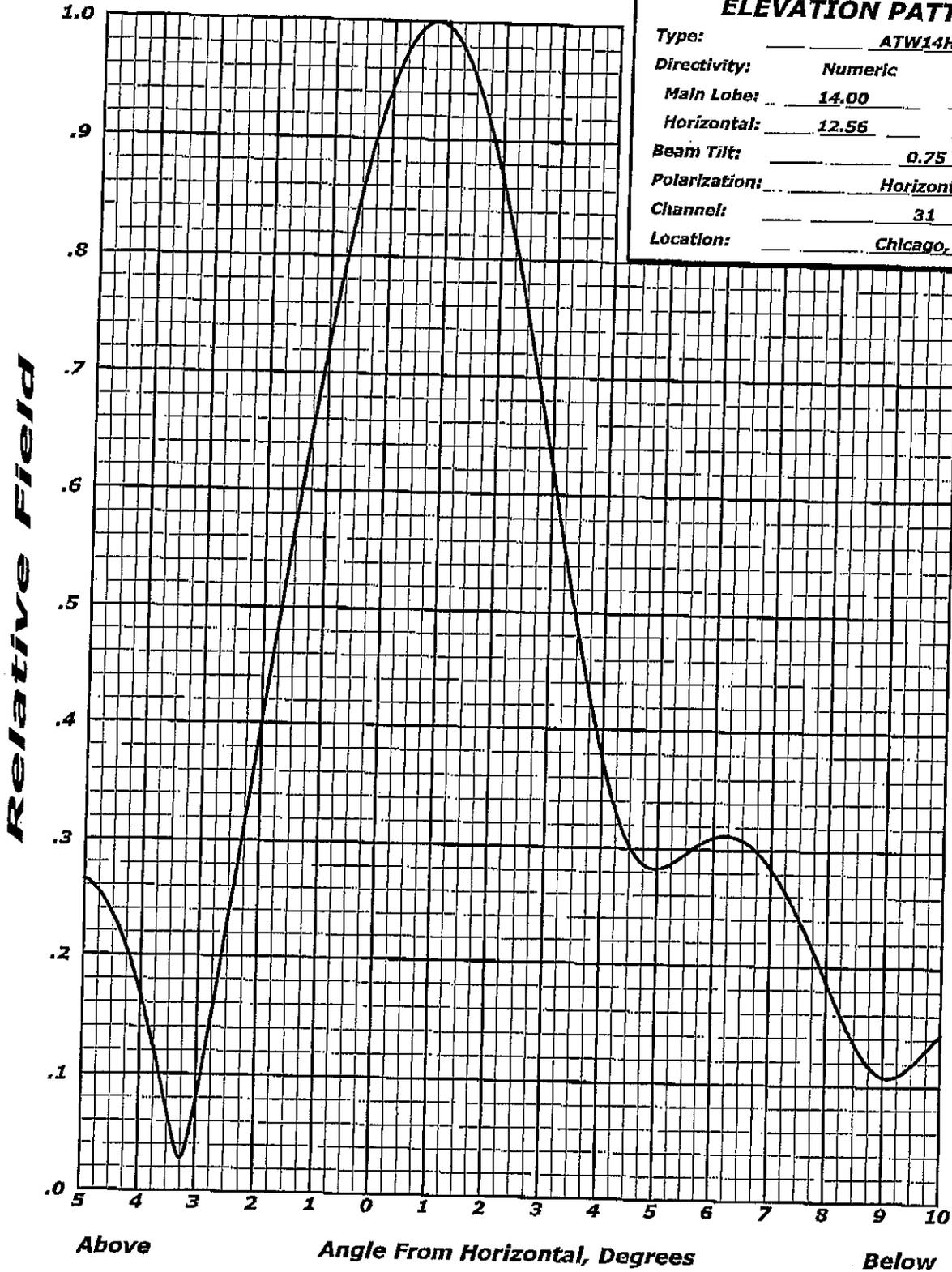


KEVIN T. FISHER

June 15, 2008

ANDREW ELEVATION PATTERN

Type:	ATW14H3H	
Directivity:	Numeric	dBd
Main Lobe:	14.00	(11.46)
Horizontal:	12.56	(10.99)
Beam Tilt:	0.75	
Polarization:	Horizontal	
Channel:	31	
Location:	Chicago, IL	



ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

EXHIBIT B-1

ANTENNA ELEVATION PATTERN
PROPOSED WFLD-DT
CHANNEL 31 - CHICAGO, ILLINOIS
SMITH AND FISHER

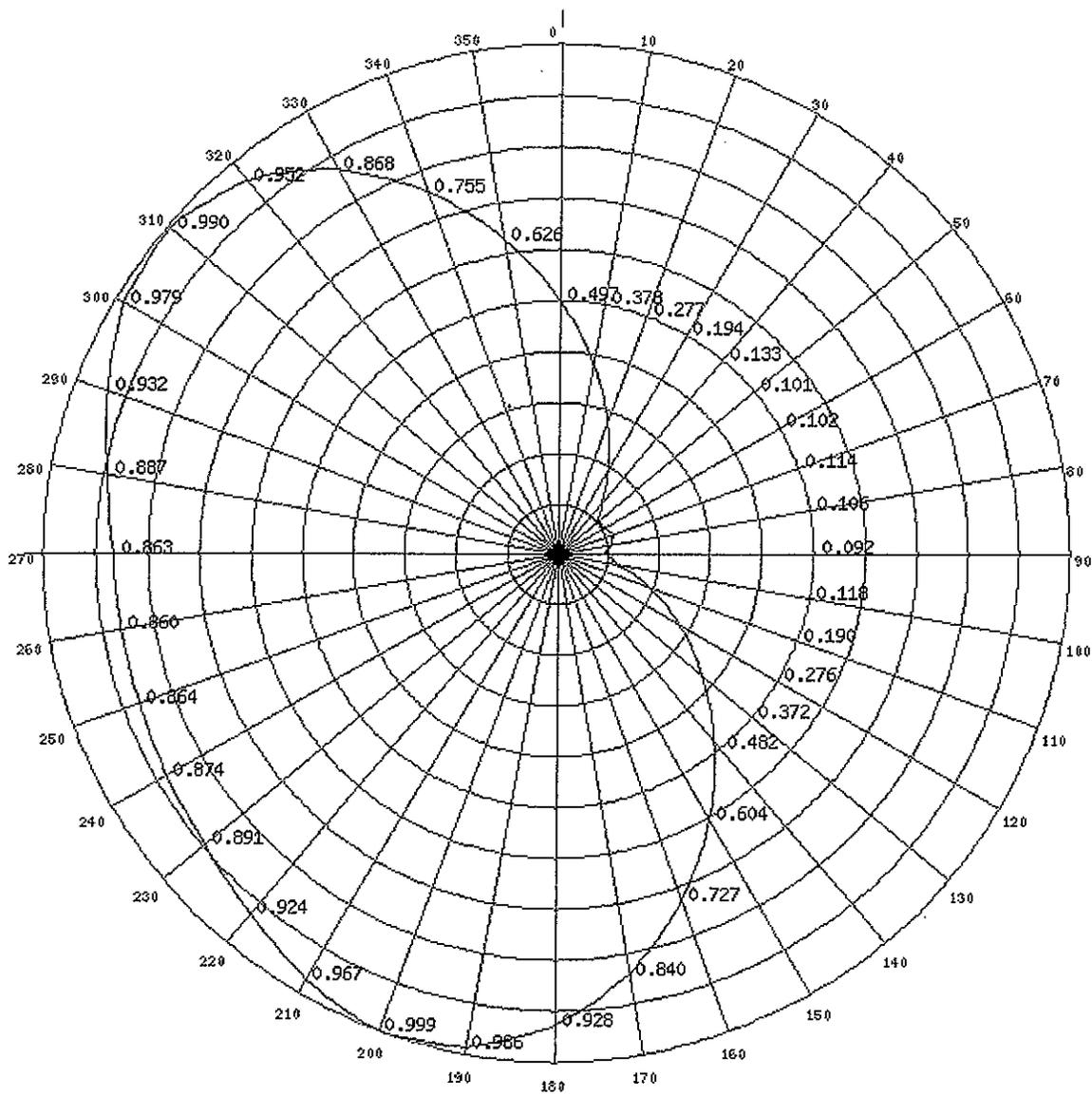


EXHIBIT B-2
ANTENNA AZIMUTH PATTERN
PROPOSED WFLD-DT
CHANNEL 31 – CHICAGO, ILLINOIS
 SMITH AND FISHER

ANTENNA AZIMUTH PATTERN DATA

PROPOSED WFLD-DT
CHANNEL 31 -CHICAGO, ILLINOIS

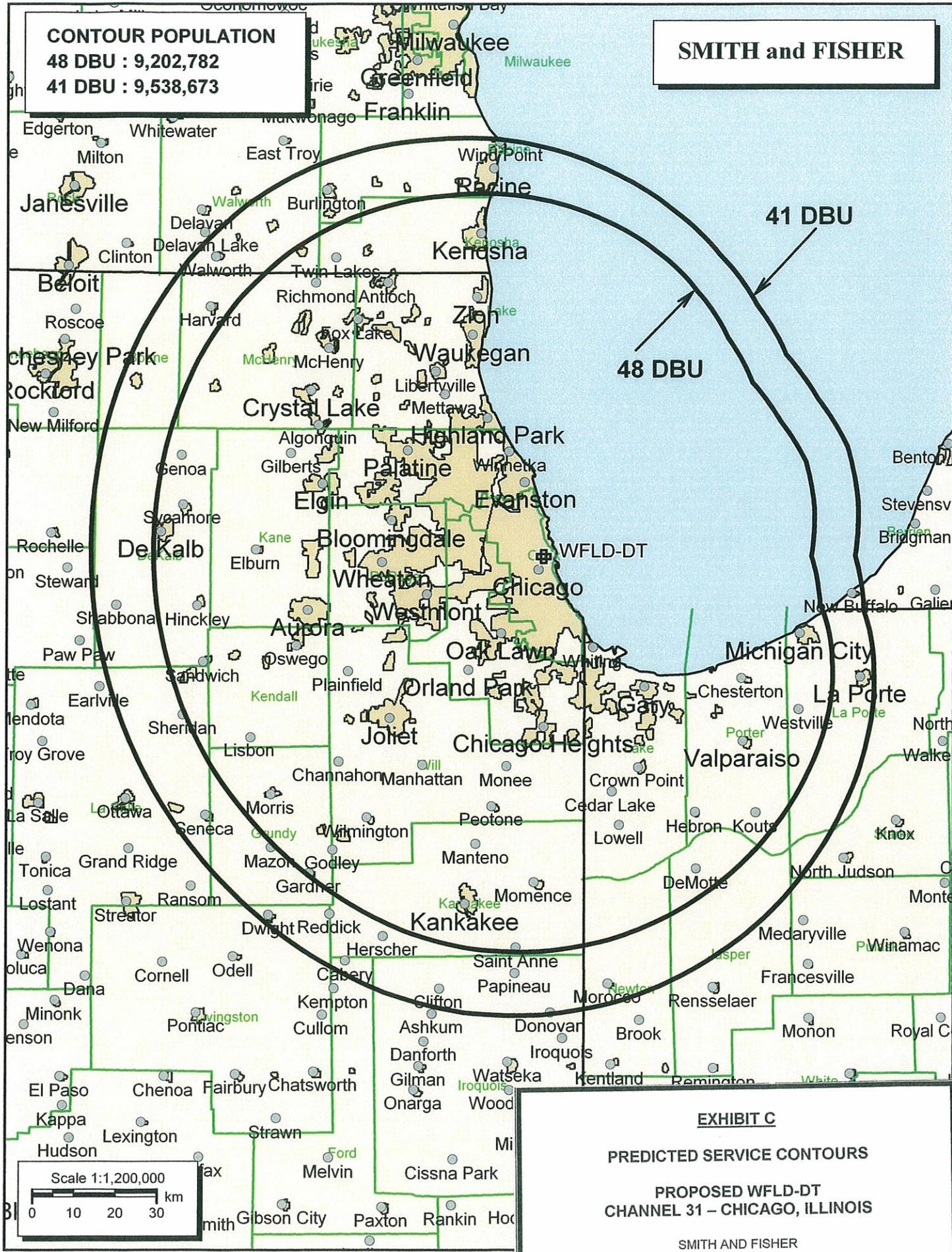
<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>	<u>Azimuth</u> <u>(° T)</u>	<u>Relative</u> <u>Field</u>	<u>ERP</u> <u>(dbk)</u>
0	0.497	23.9	180	0.928	29.4
10	0.378	21.5	190	0.986	29.9
20	0.277	18.8	200	0.999	30.0
30	0.194	15.8	210	0.967	29.7
40	0.133	12.5	220	0.924	29.3
50	0.101	10.1	230	0.891	29.0
60	0.102	10.2	240	0.874	28.8
70	0.114	11.1	250	0.864	28.7
80	0.106	10.5	260	0.860	28.7
90	0.092	9.3	270	0.863	28.7
100	0.118	11.4	280	0.887	29.0
110	0.190	15.6	290	0.932	29.4
120	0.276	18.8	300	0.979	29.8
130	0.372	21.4	310	0.990	29.9
140	0.482	23.7	320	0.952	29.6
150	0.604	25.6	330	0.868	28.8
160	0.727	27.2	340	0.755	27.6
170	0.840	28.5	350	0.626	25.9

CONTOUR POPULATION

48 DBU : 9,202,782

41 DBU : 9,538,673

SMITH and FISHER



41 DBU

48 DBU

EXHIBIT C

PREDICTED SERVICE CONTOURS

**PROPOSED WFLD-DT
CHANNEL 31 - CHICAGO, ILLINOIS**

SMITH AND FISHER

Scale 1:1,200,000



INTERFERENCE STUDY
PROPOSED WFLD-DT
CHANNEL 31 – CHICAGO, ILLINOIS

The instant application specifies an ERP of 1000 kw (directional) at 475 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 WFLD-DT to other pertinent stations are tabulated in Exhibit D-2.

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

A Longley-Rice interference study also reveals that the proposed WFLD-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 WFLD-DT
CHANNEL 31 – CHICAGO, ILLINOIS

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WFLD-DT*</u>	<u>%</u>
WEDE-CA	Arlington Heights, IL	34	3,459,951	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.

EXHIBIT E

POWER DENSITY CALCULATION
PROPOSED WFLD-DT
CHANNEL 31 – CHICAGO, ILLINOIS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to the facility proposed herein.

WFLD-DT will operate with a maximum ERP of 1000 kw horizontal and 250 kw vertical and a center of radiation 474 meters above ground. Employing the methods set forth in *OET Bulletin No. 65* and considering the vertical patterns of the proposed Andrew ATW14H3H-ETC2-31H antenna, we calculate that maximum power density two meters above ground of 0.00076 mw/cm² would exist 465 meters southeast of the base of the Sears Tower. This is but 0.2 percent of the 0.38 mw/cm² reference for uncontrolled environments, i.e., areas with public access, surrounding stations operating on Channel 31 (572-578 MHz). Therefore, this facility may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation, without regard to the contributions from other sources.

With respect to the roof of Sears Tower, although excessive power density levels from WFLD-DT are not predicted, the total level from the numerous facilities on Sears Tower approaches the reference value at certain locations. However, access to the roof is carefully restricted, so that excessive exposure of employees or of the general public is precluded, and WFLD-DT will enter into an agreement with the Sears Tower management and the other

EXHIBIT E

broadcasters whereby it will reduce power or leave the air as necessary to avoid excessive RF exposure when personnel must enter this restricted area.

On this basis, and considering that the station produces significantly less than five percent of the current FCC reference in uncontrolled areas, a grant of the subject application would clearly constitute a minor environmental action with regard to public and occupational exposure to nonionizing electromagnetic radiation.