Exhibit #E4, Page 1
Studio Exhibit for Austin, Minnesota

Minnesota Public Radio

May, 1998

Minnesota Public Radio ("MPR") proposes to construct and operate a new noncommercial educational FM station to serve the Austin, MN and surrounding area. Its studios will be co-located with those of KZSE (FM) for which MPR is the licensee. That studio is located at 206 South Broadway, Suite 735, Rochester, MN 55904.

MPR is a nonprofit corporation formed for the purpose of providing noncommercial educational radio service to listeners in Minnesota and surrounding states. MPR's current 29 FM and one AM operating facilities provide 24 hours-per-day quality programming accessible to 98% of Minnesota's citizens, as well as to substantial numbers of listeners in North and South Dakota, Iowa, Wisconsin, Michigan, Idaho and southern Ontario. MPR provides programming to its network of stations from its primary Minneapolis/Saint Paul stations – KSJN(FM), Minneapolis, Minnesota, and KNOW(FM), Saint Paul, Minnesota, and from many of its network stations throughout the region, including KZSE (FM) in Rochester, MN. KZSE (FM) is an all news/information station. The proposed station will be operated as a "news/information service" station in that it will primarily broadcast KZSE (FM).

MPR currently holds licenses for and operates two FM translators in Austin, MN (K280EF and K277AD) and one translator in nearby Albert Lea, MN (K280EB). The Albert Lea translator and one of the Austin translators, K277AD, rebroadcast the signal of KZSE (FM) of Rochester, MN. Since it is requested that the proposed station will be a satellite station of KZSE (FM), it is anticipated that K277AD will be replaced with the proposed station. It is also anticipated that the proposed station will deliver MPR programming not only to the Austin area, but to the Albert Lea area, thereby alleviating the need for K280EB in Albert Lea.

MPR therefore requests a waiver of Section 73.1125 of the Commission's Rules to permit MPR to operate its proposed noncommercial educational FM station on Channel 211 (90.1 MHz) at Austin, MN, as a satellite station without a main studio in the community of license. As demonstrated below, grant of the instant waiver request would be in the public interest.

The Commission has issued decisions stating that the "main studio must, at a minimum, maintain full-time managerial and full-time staff personnel." Jones Eastern of the Outer Banks, Inc., FCC 91-175, released June 19, 1991, at ¶ 9; see also Salem Broadcasting, Inc., DA 91-804, released July 2, 1991.

Grant of this requested waiver is necessary to permit MPR to operate the proposed Austin station as a "satellite" because the Austin area could not otherwise support another wholly independent non-commercial educational FM station. There is a small population within the station's proposed service area. Because of this area's limited economic base, it is highly unlikely that a station with separate staff and studio could provide the same high quality public radio service that MPR proposes. Therefore, waiver of Section 73.1125 is necessary in this case to ensure that the residents of Austin area receive the diverse and important programming MPR will provide.

Minnesota Public Radio

May, 1998

The Commission has recognized the advantages accruing to noncommercial broadcasters from consolidated operations:

> In the past, we have recognized the benefits of centralized operations for noncommercial educational stations, given the limited funding available to these stations, and we have granted waivers to state and regional public television and radio networks to operate "satellite" stations that do not necessarily meet the requirements of a main studio.

Main Studio Program Origination Rules, 3 FCC Rcd. 5024, 5027 (1988) (citing Nebraska Educational Television Commission, 4 R.R.2d 771 (1965). Indeed, the Commission has previously determined that waiver of the main studio rule for other stations in the MPR network serves the public interest. See Letter from Linda Blair, Chief, Audio Services Division to Todd M. Stansbury, dated May 31, 1996 (attached hereto); see also Letter from Dennis Williams, Assistant Chief, Audio Services Division to Todd M. Stansbury, dated November 6, 1995, File No. BPED-9508101A.

Upon grant of this request, MPR will satisfy the public needs and interests of residents of Austin by the following means:

First, MPR maintains a toll-free telephone line by which the residents of the Austin area will be able to reach MPR management to express concerns about the station operations.

Second, MPR has established a site on the World Wide Web (http://www.mpr.org), which enables local residents to receive extensive information regarding MPR's programming and provides a link for local residents to email concerns about the station operations to MPR management. The site contains descriptions of special reports, schedules for news and classical music programming, and on-line audio sources for MPR programming, including its radio series "A Prairie Home Companion®". In addition, MPR has established home pages on the MPR Web Site for its network stations. When the proposed station is constructed, MPR will add the proposed station to the Web Site list.

Third, MPR maintains Regional Advisory Councils associated with its stations is various parts of the state, and an Institutional Sponsor Council of the Board of Trustees, all of which actively advise management on programming issues of interest to the residents throughout MPR's service area, including Austin. A resident of Austin currently services on the KZSE Regional Advisory Council, and a representative of Luther College, a major educational institution in nearby Decorah, Iowa, serves on the Institutional Council.

Fourth, MPR has an existing relationship with the Austin area through its 225 active members in Austin and with the Albert Lea area through its 97 active members in Albert Lea, all of whom identify themselves as listeners of MPR's translators in Austin and Albert Lea (out of a total MPR membership of slightly under 84,000). MPR actively solicits comments from its members concerning programming and station operation and ensures that member requests and recommendations are thoughtfully considered in making programming decisions.

Fifth, KZSE (FM) maintains a local news reporter who produces local inserts, consisting of weather, special events, and other information of particular interest to the residents of Rochester, Austin, and surrounding areas. The reporter subscribes to the local and area publications, including publications from the Austin area, and maintains ongoing relationships with community residents and leaders, who are periodically contacted regarding local events and developments. The reporter uses information provided by these contracts to investigate events and to file news stories for broadcast by MPR either regionally or throughout the MPR multi-state network. MPR's news reporter also serves as a liaison between the area residents and MPR's programming management in Minneapolis/Saint Paul.

Sixth, KZSE (FM) has been, and intends to continue to, produce and broadcast a local call-in news program featuring issues of concern to the local communities of Rochester and the surrounding communities, including the Austin area.

Seventh, MPR operates the largest news organization of any radio service in the Midwest. With this extensive news resource, MPR is able to produce news programming from throughout MPR's service area and distribute it to all stations in the network. Additionally, MPR operates a traveling ***Mainstreet Radio***® crew of 4 to 5 persons, which gathers and produces programming material from rural and small city locations such as the Austin area throughout MPR's service area for broadcast through the network. Thus, each service area, including Austin, plays an integral role in program production.

Finally, MPR has received a grant from the Corporation for Public Broadcasting that has been used to test a pilot program called "Local Link" ™ . The purpose of Local Link is to enhance local news coverage in rural and small communities. This program, which is unique in public broadcasting, is currently in the implementation and testing stages and has recently been installed at several of MPR's stations, including KZSE (FM). Local Link is enabling MPR to improve news programming in its small city markets, including Austin. For example, one of the goals of Local Link is to allow reporters located at stations in the areas of the state outside of Minneapolis and Saint Paul to spend less time on-air reading the news and more time getting out in the region they cover working with their contacts and covering local and regional news.

For the foregoing reasons, MPR submits that it will be able to ascertain and satisfy the interests and need of residents of Houghton and, therefore, respectfully requests that the Commission grant this waiver of the main studio rule for WGGL.

Prepared 05/11/98
Mitzi T Gramling

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D. C. 20554

[illegible]96

IN REPLY REFER TO
1800B3-ALM

Todd M. Stansbury, Esq.
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D. C. 20006

Re: New FM Service in Appleton, Minnesota, File No. BPED-941108MB

Dear Mr. Stansbury:

The staff has under consideration the application of Minnesota Public Radio ("MPR") to construct a new noncommercial educational ("NCE") FM station in Appleton, Minnesota (File No. BPED-941108MB). MPR requests waiver of the Commission's main studio requirement, see 47 C.F.R. § 73.1125,[1] in order to operate the Appleton station as a satellite of its NCE station KNOW(FM), St. Paul, Minnesota. For the reasons set forth below, we will waive 47 C.F.R § 73.1125 and grant MPR's application for a construction permit.

Section 73.1125(a) requires each broadcast station to maintain a main studio within the station's principal community contour to ensure that the station will serve the needs and interests of the residents of its community of license. Amendment of Sections 73.1125 and 73.1130, 3 FCC Rcd 5024, 5027 (1988). However, under Section 73.1125(a)(4), the Commission will waive this requirement where "good cause" exists to do so and where the proposed studio location "would be consistent with the operation of the station in the public interest." Each waiver request by an NCE station seeking to operate as the satellite of another NCE station is considered on a case-by-case basis. The Commission has recognized the benefits of centralized operations for NCE stations, given their limited funding, and thus found "good cause" exists to waive the main studio location requirement where satellite operations are proposed. Id. A satellite station must, however, demonstrate that it will meet its local service obligation to satisfy the Section 73.1125 "public interest" standard. Id.

MPR's request is based on the economies of scale which would be realized by grant of its waiver. We agree and conclude that there is "good cause" to waive 47 C.F.R. § 73.1125(a)(4) in these circumstances. MPR proposes to operate the Appleton station as a satellite of KNOW(FM), St. Paul, Minnesota, approximately 110 miles from Appleton. Where there is a great distance between parent and satellite stations, as here, we are particularly concerned that the licensee take adequate measures to maintain its awareness of the satellite community's needs and interests. To that end, MPR has pledged to: (1) continue its policy that residents of each service area participate on a regional advisory council which

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[1] In relevant part, Section 73.1125 requires each broadcast station to maintain a main studio within its station's principal community contour.

provides input to management on programming issues of interest to the residents throughout MPR's service area, including Appleton; (2) continue its existing relationship with the community of Appleton which has been established by means of its existing station KRSU(FM), Appleton, Minnesota; (3) solicit comments from MPR members in Appleton concerning programming and station operation; (4) base a "beat" reporter in Appleton who will subscribe to local and area publications and maintain ongoing relationships with community residents and leaders, who will be periodically contacted regarding local events and developments; (5) maintain a toll-free telephone number for residents of Appleton to contact MPR management in accordance with 47 C.F.R. § 73.1125(c); and (6) operate a site on the World Wide Web which enables local residents to receive extensive information and comment on MPR's programming. We also remind MPR that it must maintain a public file for the new station in Appleton, as required by 47 C.F.R. § 73.3527(d). In these circumstances, we are persuaded that MPR will meet its local service obligations and thus, that grant of the requested waiver is consistent with the public interest.

Accordingly, the application of Minnesota Public Radio for a new noncommercial educational FM station in Appleton, Minnesota (File No. BPED-941108MB) and its request for waiver of 47 C.F.R. § 73.1125 ARE GRANTED. The authorization will be forwarded under separate cover.

Sincerely,

Lisa Scanlan
for

Linda Blair, Chief
Audio Services Division
Mass Media Bureau

EXHIBIT # E5
Blanketing Interference

Concerning the Application of
Minnesota Public Radio

Austin, Minnesota

The 115 dBu blanketing contour of the proposed facility travels 965 meters from the proposed 6 kW three-bay antenna. The area within this contour is rural. There is no cable head-end within the blanketing contour. Little no blanketing interference is anticipated.

There are two FM stations and several TV translator stations within ten kilometers of the proposed facility. Page #2 of this exhibit is a list of such stations.

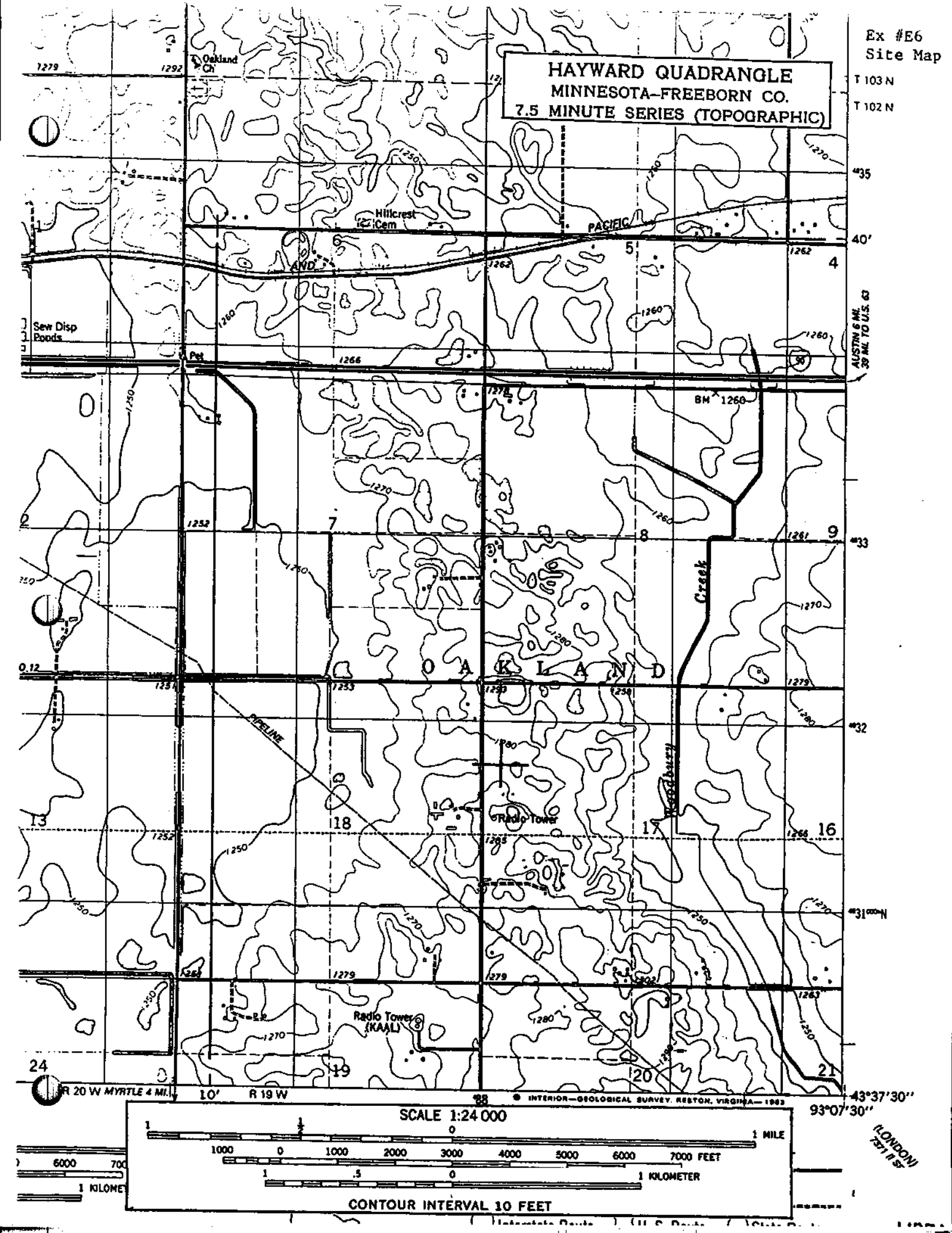
Minnesota Public Radio is aware of its responsibility under the rules relating to intermodulation and objectionable blanketing interference. It will correct any such interference, at its own expense, within a period of one year from commencement of broadcasting at the proposed transmitter site. Corrections shall employ traditional means such as filters, traps and tuning adjustments.

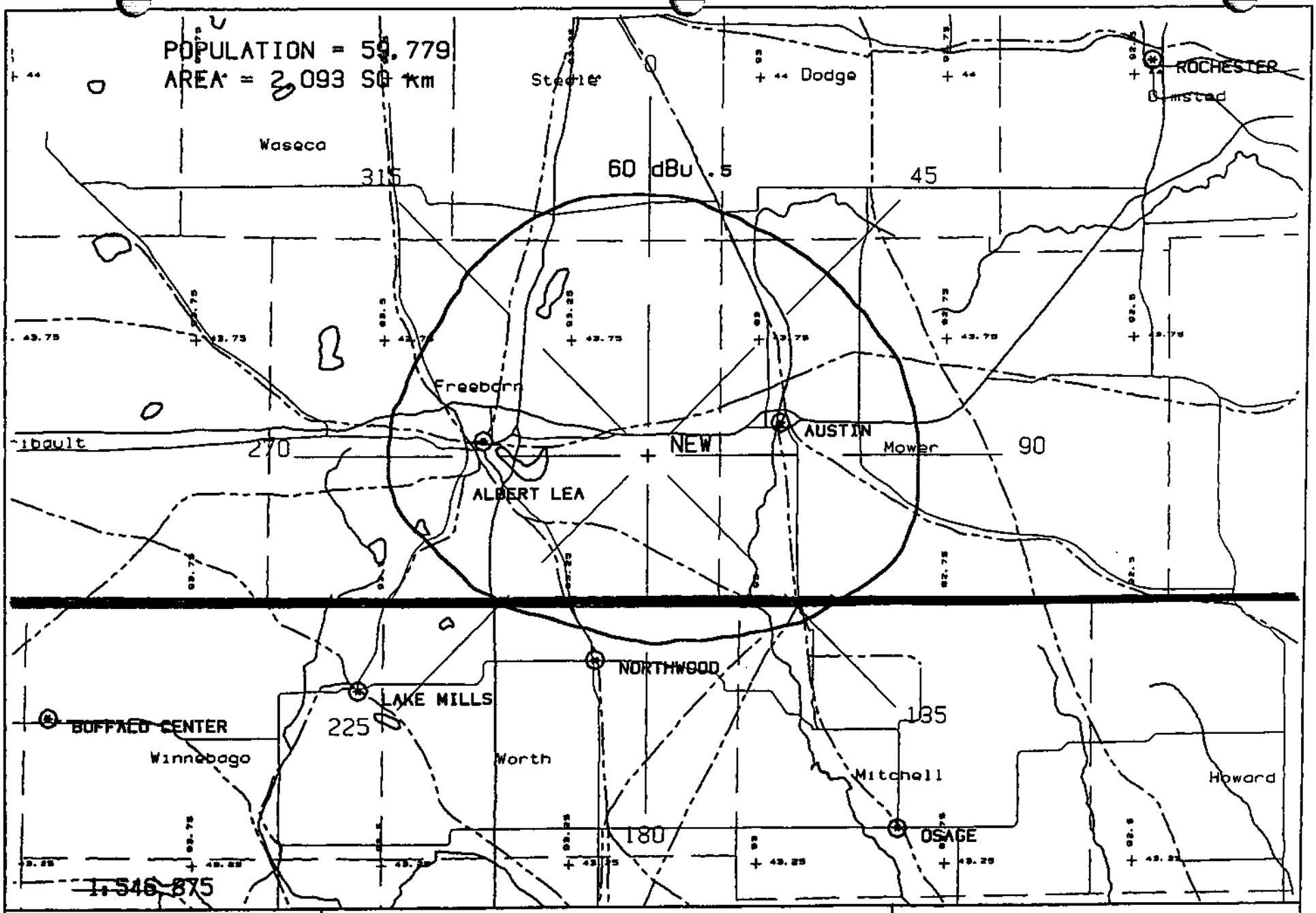
ID Stations Study at NLat 43 38 27, WLng 93 08 51, Search Distance = 10 km

_Ex #E5, Blanketing

Call	Dist-km	Azimuth	City	State	File Number	Chan.	Power	Coordinates	
AM	--------- None Foun----------								
FM	----------								
K[illegible]SFM	001.5	198.7	Austin	MN	BLH4037	260C1 FM	0100.000kW	433742N	930912W
KQPR	006.0	242.5	Albert Lea	MN	BLH901113KE	241A FM	0006.000kW	433658N	931247W
TV	----------								
K61EU	000.3	170.9	AUSTIN	MN	BLTTL920313JL	61C TV	0001.470kW	433818N	930849W
K43DH	000.3	170.9	AUSTIN	MN	BLTTL920904ID	43C TV	0001.470kW	433818N	930849W
K45DF	000.3	170.9	AUSTIN	MN	BLTTL920313JF	45C TV	0001.470kW	433818N	930849W
K49DB	000.3	170.9	AUSTIN	MN	BLTTL920313JG	49C TV	0001.470kW	433818N	930849W
K51CY	000.3	170.9	AUSTIN	MN	BLTTL920313JH	51C TV	0001.470kW	433818N	930849W
K53DI	000.3	170.9	AUSTIN	MN	BLTTL920313JI	53C TV	0001.470kW	433818N	930849W
K55FJ	000.3	170.9	AUSTIN	MN	BLTTL920313JJ	55C TV	0001.470kW	433818N	930849W
K57EU	000.3	170.9	AUSTIN	MN	BLTTL920313JK	57C TV	0001.470kW	433818N	930849W
KAAL	001.5	198.7	AUSTIN	MN	BLCT2236	06C TV	0100.000kW	433742N	930912W

Ex #E6
Site Map





Ex #E7, Coverage

03-04-1998 DOUG VERNIER 319 266-8402

CH# 211A - 90.1 MHz
Minnesota Public Radio
INTERFERENCE CHECKS WITH NEW, AUSTIN, MN at N. LAT. 43 38 27 W. LNG. 93 08 51
PWR = 6 kW DA H.A.A.T. = 96.9 M C.O.R. = 475 M AMSL
Protected F(50-50) 60 dBu = 27.84 km
F(50-10) 40 dBu = 86.23 54 dBu = 42.6 80 dBu = 8.88 100 dBu = 2.77

CH# CALL CITY	TYPE STATE	* IN * LICENSEE	* OUT *	BEARING <---	DISTANCE	LAT. LNG.	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) FILE #
209C2 KMSU	LI	CN 46.9	39.5	309.5	88.47 km	44 08 34	20.00	13.74	40.10
Mankato	MN	Mankato State University		129.5	54.97 Mi	94 00 08	122.0	414	BLED850812KH
210A KRPR *	LI	CN 16.1	12.6	55.1	78.74 km	44 02 32	1.00	34.94	23.37
Rochester	MN	Rochester Community Colleg		235.1	48.93 Mi	92 20 26	161.5*	502	BLED810325AB
> Reference HAAT at 55.1 degrees = 95.2 M, Pwr.= 6 kW, Pro. Dist. = 27.65 km, Int. Dist. = 42.73 km									
211C WOIFM *	LI	CN 0.5	59.5	190.8	207.04 km	41 48 33	100.00	186.64	83.12
Ames	IA	Iowa State Univ of Science		10.8	128.65 Mi	93 36 53	445.7*	745	BLED978
> Reference HAAT at 190.8 degrees = 94 M, Pwr.= 1.5 kW, Pro. Dist. = 19.94 km, Int. Dist. = 64.44 km									
211C1 KSJRFM	LI	CN 38.5	78.9	332.4	234.02 km	45 29 52	100.00	167.71	68.90
Collegeville	MN	Minnesota Public Radio, In		152.4	145.41 Mi	94 32 14	258.0	617	BMLED880616KA
212C WHLA	LI	CY 10.6	29.1	82.1	144.52 km	43 48 17	100.00	106.10	72.82
La Crosse	WI	State of Wi.-Educ. Communi		262.1	89.80 Mi	91 22 06	307.0	574	BMLED970521KB
213C1 KGAC.A	AP	CN 46.2	29.8	310.1	101.19 km	44 13 20	75.00	27.15	62.52
St. Peter	MN	Minnesota Public Radio, In		130.1	62.88 Mi	94 07 03	216.0	504	BPED970203IC
213C1 KGAC	LI	CN 46.2	29.8	310.1	101.19 km	44 13 20	75.00	27.15	62.52
St. Peter	MN	Minnesota Public Radio, In		130.1	62.88 Mi	94 07 03	216.0	504	BLED850401KB
214D K214BA	LI	DCN 27.1	42.4	191.8	56.11 km	43 08 47	0.27	1.17	10.91
Mason City, etc.	IA	University of Northern Iow		11.8	34.87 Mi	93 17 20	66.0	426	BLFT920619TB
FCC Comment > Translator for KHKE, Cedar Falls, IA									
I.F. RELATIONSHIPS:									
265C1 KOWZ	LI	ZCN 22.0 R	26.9 M	337.2	48.89 km	44 02 46	100.00	7.98	62.80
Blooming Prairie	MN	Blooming Prairie Farm Radi		157.2	30.38 Mi	93 23 03	189.0	540	BLH950731KB
FCC Comment > One-Step Application-From Channel 265A									

Nearest CH 6 Grade B =KAAL at-102.86 km, Distance= 1.47 Azimuth = 198.7 Deg. T.

* Uses actual antenna radial HAAT and power toward reference

HOW TO READ THE FM COMPUTER PRINT-OUT

The computer printout should be self-explanatory for the most part. The parameters of the station being checked, (reference station) are printed in the heading. The 60 dBu protected contour is predicted from the Commission's F(50-50) table, while the 40, 54, 80 and 100 dBu contours are interference contours derived from the Commission's F(50-10) table. Contour distances are in kilometers and are predicted using spline interpolation from data points identical to those published in Report No. RS 76-01 by Gary C. Kalagian. Critical contour distances are determined using the Commission's TVFMINT FORTRAN subroutine. When interference contour distances are less than 16 kilometers the F(50-50) tables are used. If signal contour distances are less than 1.6 km the free-space equation is used.

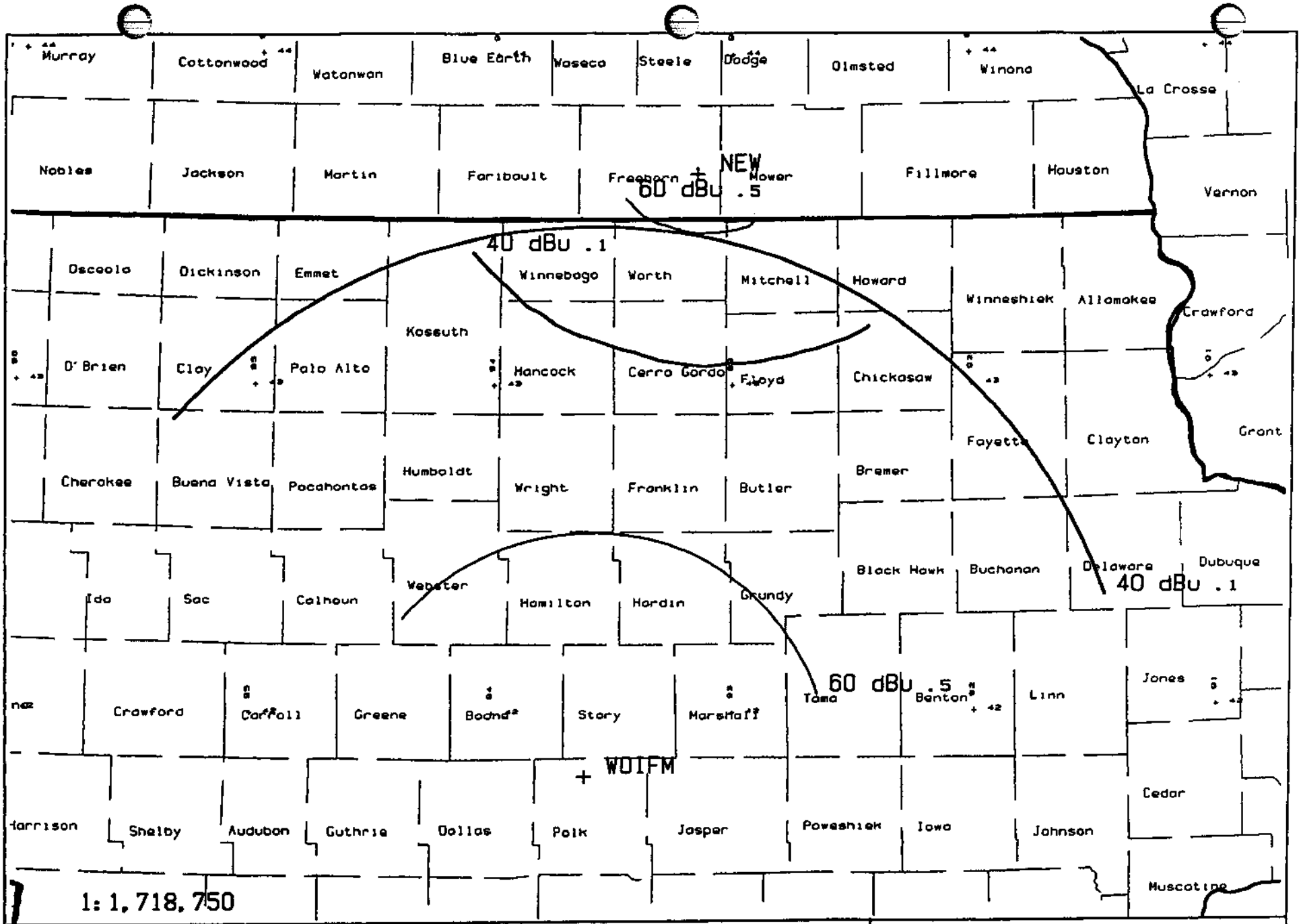
The column listed "* IN *" is the sum of the reference station's 60 dBu protected contour and the data file station's interference contour subtracted from the distance between the stations. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, the column is a measure of incoming interference. Negative distances in this column indicate the presence of interference. Listed antenna heights are the average heights of eight standard radials as found in the Commission's records unless otherwise noted, in which case the specific antenna heights along the azimuths between the reference station and the database station are used and visa versa. The column labeled "* OUT *" shows the distance of kilometers of overlap or clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing interference.

Under the "BEARING" column, the first row of numbers indicate the bearings from true north of the data base stations in relationship with the reference station, while the numbers in the second row indicate the reverse bearings from the database station to the reference station.

The columns labeled "INT" and "PRO" hold the distance in kilometers of the appropriate interference contour and the protected contour of a data base station.

For I.F. relationships the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are taken from Sec 73.207 of the rules as amended. Canadian and Mexican separation distances, U/D ratios and protected contour values are from the US/Mexican Working Agreement and the US/Canada Working Agreement".

The first three letters of the "TYPE" column identify the current F.C.C. status of the stations. The fourth letter will be a "D" or "Z" (Sec. 73.215) if the facility is directional. The fifth letter will be an E, H or V depending on the type of antenna polarization. The sixth letter will be a "Y" if the antenna uses beam tilt.


Murray
Cottonwood
Watonwan
Blue Earth
Waseca
Steele
Dodge
Olmsted
Winona
La Crosse
Nobles
Jackson
Martin
Faribault
Freeborn
NEW
Mower
Fillmore
Houston
Vernon
60 dBu .5
40 dBu .1
Osceola
Dickinson
Emmet
Winnebago
Worth
Mitchell
Howard
Winneshiek
Allamakee
Crawford
Kossuth
O'Brien
Clay
Palo Alto
Hancock
Cerro Gordo
Floyd
Chickasaw
Fayette
Clayton
Grant
Cherokee
Buena Vista
Pocahontas
Humboldt
Wright
Franklin
Butler
Bremer
Black Hawk
Buchanan
Delaware
Dubuque
40 dBu .1
Ida
Sac
Calhoun
Webster
Hamilton
Hardin
Grundy
60 dBu .5
Tama
Benton
Linn
Jones
Crawford
Carroll
Greene
Boone
Story
Marshall
WOIFM
Cedar
Harrison
Shelby
Audubon
Guthrie
Dallas
Polk
Jasper
Poweshiek
Iowa
Johnson
Muscatine
1:1,718,750
Scale in km
0 20 40 60 80
NEW 211A 6kW 475.48M AMSL
WOIFM 211C 100kW 745M AMSL
NEW vs WOIFM
D. Vernier - 03/98

Ex #E8, Pg 3

Doug Vernier - Telecommunications Consultants
03-04-1998 03 Sec. Terrain Data

NEW
Channel = 211A
Max ERP = 6 kW
RCAMSL = 475.48 M
N. Lat = 433827
W. Lng = 930851

Protected
60 dBu

WOIFM BLED978
Channel = 211C
Max ERP = 100 kW
RCAMSL = 745 M
N. Lat = 41 48 33
W. Lng = 93 36 53

Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
170.0	001.5000	0094.3	020.0	012.6	100.0000	0446.8	188.5	39.7
171.0	001.5000	0094.4	020.0	012.5	100.0000	0446.7	188.3	39.7
172.0	001.5000	0094.5	020.0	012.4	100.0000	0446.7	188.2	39.7
173.0	001.5000	0094.8	020.0	012.3	100.0000	0446.6	188.1	39.8
174.0	001.5000	0095.1	020.1	012.2	100.0000	0446.6	187.9	39.8
175.0	001.5000	0095.2	020.1	012.1	100.0000	0446.6	187.8	39.8
176.0	001.5000	0095.2	020.1	012.0	100.0000	0446.5	187.7	39.8
177.0	001.5000	0095.4	020.1	011.9	100.0000	0446.5	187.6	39.8
178.0	001.5000	0095.2	020.1	011.8	100.0000	0446.5	187.5	39.9
179.0	001.5000	0094.8	020.0	011.7	100.0000	0446.4	187.5	39.9
180.0	001.5000	0094.3	020.0	011.6	100.0000	0446.3	187.5	39.9
181.0	001.5000	0093.6	019.9	011.5	100.0000	0446.3	187.5	39.9
182.0	001.5000	0092.7	019.8	011.4	100.0000	0446.2	187.5	39.9
183.0	001.5000	0092.3	019.8	011.3	100.0000	0446.1	187.5	39.9
184.0	001.5000	0092.0	019.7	011.2	100.0000	0446.0	187.5	39.9
185.0	001.5000	0091.8	019.7	011.1	100.0000	0445.9	187.5	39.9
186.0	001.5000	0091.6	019.7	011.0	100.0000	0445.8	187.4	39.9
187.0	001.5000	0091.5	019.7	010.9	100.0000	0445.7	187.4	39.9
188.0	001.5000	0091.4	019.6	010.8	100.0000	0445.6	187.4	39.9
189.0	001.5000	0091.4	019.6	010.7	100.0000	0445.5	187.4	39.9
190.0	001.5000	0091.4	019.6	010.6	100.0000	0445.4	187.4	39.9
191.0	001.5000	0091.3	019.6	010.5	100.0000	0445.3	187.4	39.9
192.0	001.5000	0091.2	019.6	010.3	100.0000	0445.3	187.4	39.9
193.0	001.5000	0090.7	019.6	010.2	100.0000	0445.2	187.5	39.8
194.0	001.5000	0090.5	019.5	010.1	100.0000	0445.1	187.5	39.8
195.0	001.5000	0090.4	019.5	010.0	100.0000	0445.1	187.6	39.8
196.0	001.5000	0090.3	019.5	009.9	100.0000	0445.0	187.6	39.8
197.0	001.5000	0090.2	019.5	009.8	100.0000	0444.9	187.7	39.8
198.0	001.5000	0090.1	019.5	009.7	100.0000	0444.9	187.7	39.8
199.0	001.5000	0090.1	019.5	009.6	100.0000	0444.8	187.8	39.8
200.0	001.5000	0090.2	019.5	009.5	100.0000	0444.7	187.8	39.8
201.0	001.5181	0090.2	019.6	009.4	100.0000	0444.6	187.8	39.8
202.0	001.5362	0090.4	019.7	009.3	100.0000	0444.5	187.8	39.8
203.0	001.5545	0090.5	019.7	009.2	100.0000	0444.4	187.8	39.8
204.0	001.5729	0090.3	019.8	009.1	100.0000	0444.3	187.9	39.8
205.0	001.5913	0090.2	019.8	009.0	100.0000	0444.1	187.9	39.8
206.0	001.6099	0090.2	019.9	008.9	100.0000	0444.0	188.0	39.7
207.0	001.6286	0090.1	019.9	008.8	100.0000	0443.9	188.0	39.7
208.0	001.6475	0090.1	020.0	008.7	100.0000	0443.8	188.1	39.7
209.0	001.6664	0090.1	020.0	008.6	100.0000	0443.6	188.1	39.7
210.0	001.6854	0090.1	020.1	008.5	100.0000	0443.5	188.2	39.7
211.0	001.7109	0090.3	020.2	008.4	100.0000	0443.4	188.3	39.7

Doug Vernier - Telecommunications Consultants

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)
212.0	001.7367	0090.5	020.3
213.0	001.7626	0090.8	020.4
214.0	001.7887	0091.4	020.5
215.0	001.8150	0092.2	020.7
216.0	001.8415	0093.1	020.9
217.0	001.8682	0094.0	021.0
218.0	001.8951	0094.7	021.2
219.0	001.9221	0095.4	021.3
220.0	001.9494	0095.9	021.5

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
008.3	100.0000	0443.3	188.3	39.7
008.2	100.0000	0443.1	188.4	39.7
008.1	100.0000	0443.0	188.4	39.7
007.9	100.0000	0442.8	188.4	39.7
007.8	100.0000	0442.7	188.4	39.6
007.7	100.0000	0442.6	188.4	39.6
007.6	100.0000	0442.5	188.5	39.6
007.5	100.0000	0442.4	188.5	39.6
007.3	100.0000	0442.3	188.6	39.6

EXHIBIT #E9

CHANNEL-SIX STUDY

Concerning the Application of
Minnesota Public Radio
March 1998

Channel 211

6.0 kW (Horz.) – 6.0 kW (Vert.)

This study shows compliance with section 73.525 of the Commission's relating to protection of channel-six TV stations from interference. Table A in Sec. 73.525 defines the cut-off distance for FM stations on channel 211 to be 196 km. There is only one channel-six television station within this cut-off distance. KAAL, Austin, Minnesota is located at distance of 1.47 kilometers and at an azimuth of 198.7 degrees True North. KAAL operates with an HAAT toward the proposed facility of 309.4 meters. The television station transmits with an ERP of 100 kilowatts from a transmitter site having geographic coordinates at N. Lat. 43 37 42, W. Lng. 93 09 12.

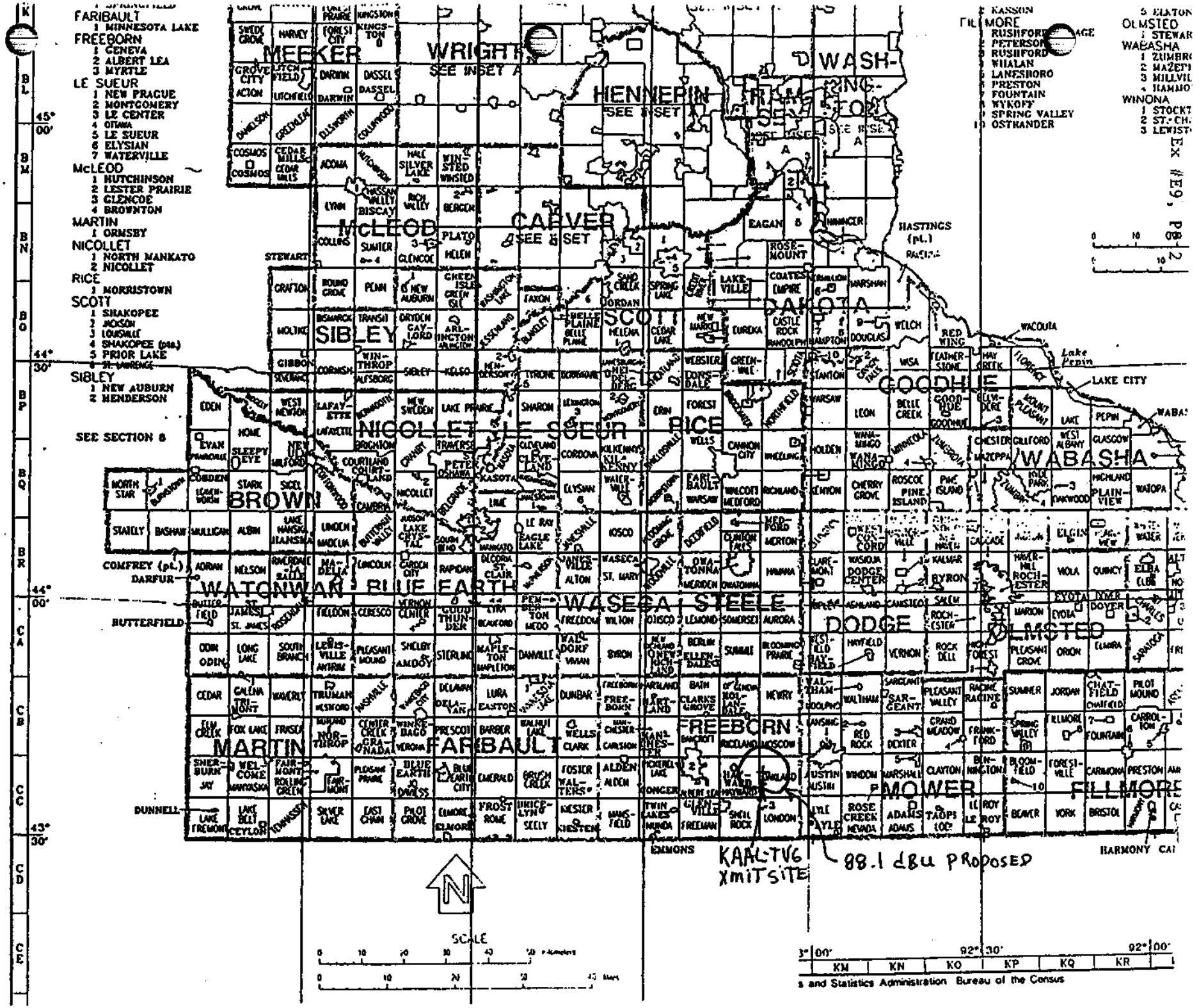
Page # 2 of this exhibit is a 1990 U.S. Census **American Indian Areas, Counties, County Subdivision, and Places** map showing the proposed channel-six interference area. The interference area has been predicted using the procedures described in Section 73.525 (e) of the Commission Rules and Regulations. A study power of 6.15 kilowatts was used since the facility proposed will use mixed polarization. The following formula was applied to calculate the study power: **P (total of 6.15 kW)** = P (6.0 kW H) + P (6.0 kW/40 V.)

The map shows the proposed station's 88.1 dBu interference signal contour. This is the only relevant interference contour. Since the proposed station is located within such a short distance from KAAL, the Commission's rules assume an interfering signal level of 90 dBu at all points. The interference threshold U/D for the channel 211 station is -1.9 dB, therefore the interference signal contour becomes 88.1 dBu. Page #3 of this exhibit is a tabulation of the proposed station's interference contour and page #4 is a tabulation of the relevant KAAL protected contours at the various distances within the calculated interference area.

The map defines the following counties, subdivision and the associated populations as being within the interference area:

Freeborn County:		
-Moscow Twp (619 * .15)	=	93
-Oakland Twp(426 * .75)	=	320
-Riceland Twp(495 * .1)	=	50
-Hayward Twp(459-246) * .4)	=	85
(subtract Hayward Ct)		
Total	=	548

Since there are no more than 3,000 people found to be within the proposed NCE station's predicted channel-six television interference area, this proposal fully complies with the Commission's Rules.


FARIBAULT
1 MINNESOTA LAKE
FREEBORN
1 GENEVA
2 ALBERT LEA
3 MYRTLE
LE SUEUR
1 NEW PRAGUE
2 MONTGOMERY
3 LE CENTER
4 OTTAWA
5 LE SUEUR
6 ELYSIAN
7 WATERVILLE
McLEOD
1 HUTCHINSON
2 LESTER PRAIRIE
3 GLENCOE
4 BROWNTON
MARTIN
1 ORMSBY
NICOLLET
1 NORTH MANKATO
2 NICOLLET
RICE
1 MORRISTOWN
SCOTT
1 SHAKOPEE
2 JACKSON
3 LOUISVILLE
4 SHAKOPEE (pt.)
5 PRIOR LAKE
6 ST. LAWRENCE
SIBLEY
1 NEW AUBURN
2 HENDERSON
SEE SECTION B
COMFREY (pt.)
DARFUR
BUTTERFIELD
DUNNELL
MEEKER
WRIGHT
SEE INSET A
HENNEPIN
SEE INSET
WASH-
INGTON
McLEOD
CARVER
SEE INSET
SCOTT
SIBLEY
DAKOTA
NICOLLET
LE SUEUR
RICE
GOODHUE
BROWN
WATONWAN
BLUE EARTH
WASECA
STEELE
DODGE
WABASHA
OLMSTED
MARTIN
FARIBAULT
FREEBORN
MOWER
FILLMORE
HASTINGS (pt.)
LAKE CITY
WACOUTA
Lake Pepin
HARMONY
KAALTVG
XmITSITE
88.1 dBu PROPOSED
EX #E9, P
SCALE
N
92° 30'
92° 00'
KN
KO
KP
KQ
KR
s and Statistics Administration Bureau of the Census

TERRAIN AND CONTOUR DATA
CH 211 TV6 INTERFERENCE CONTOUR

ERP = 6.15 kW
FM - 2-6 Tables 03 Sec

Azimuth Deg T.	Ave. Elev. 3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	F(50-10) Distance to 88.1 dBu Contour km
0	380.9	94.6	7.889	5.6
10	382.5	93.0	7.889	5.6
20	386.4	89.1	7.889	5.4
30	386.9	88.6	7.889	5.4
40	385.3	90.2	7.889	5.5
50	383.1	92.4	7.889	5.5
60	380.2	95.3	7.889	5.6
70	372.7	102.8	7.889	5.9
80	370.6	104.9	7.889	5.9
90	369.7	105.8	7.889	5.9
100	366.4	109.1	7.889	6.0
110	364.0	111.5	7.552	6.0
120	365.5	110.0	6.385	5.6
130	371.4	104.1	5.357	5.1
140	372.1	103.4	4.080	4.7
150	375.6	99.9	3.006	4.3
160	379.9	95.6	2.472	4.1
170	381.2	94.3	1.868	3.9
180	381.2	94.3	1.868	3.9
190	384.1	91.4	1.868	3.8
200	385.3	90.2	1.868	3.8
210	385.4	90.1	2.374	3.9
220	379.6	95.9	3.006	4.2
230	374.6	100.9	3.581	4.5
240	376.9	98.6	4.716	4.7
250	380.4	95.1	6.343	5.1
260	374.4	101.1	7.307	5.6
270	377.5	98.0	7.793	5.7
280	379.4	96.1	7.889	5.7
290	385.5	90.0	7.889	5.5
300	388.1	87.4	7.889	5.4
310	386.0	89.5	7.889	5.5
320	380.9	94.6	7.889	5.6
330	378.5	97.0	7.889	5.7
340	377.2	98.3	7.889	5.7
350	378.7	96.8	7.889	5.7
Ave. =	378.6 M	96.9 M		

Antenna Radiation Center AMSL = 475.5 M

Geographic Coordinates:

North latitude: 43 38 27
West longitude: 93 08 51

TERRAIN AND CONTOUR DATA
KAAL-TV6 AUSTIN, MN

ERP = 100 kW
FM - 2-6 Tables 03 Sec

Azimuth Deg T.	Ave. Elev. 3 to 16 km Meters AMSL	Effective Antenna Height Meters AAT	ERP (dBk)	F(50-50) Distance to 121.5 dBu Contour km	F(50-50) Distance to 100 dBu Contour km
0	381.3	314.7	20.000	1.7	10.4
10	382.9	313.1	20.000	1.7	10.3
20	386.7	309.3	20.000	1.7	10.3
30	385.6	310.4	20.000	1.7	10.3
40	384.2	311.8	20.000	1.7	10.3
50	383.0	313.0	20.000	1.7	10.3
60	377.5	318.5	20.000	1.7	10.4
70	372.8	323.2	20.000	1.7	10.5
80	369.3	326.7	20.000	1.7	10.5
90	368.1	327.9	20.000	1.7	10.6
100	365.6	330.4	20.000	1.7	10.6
110	365.0	331.0	20.000	1.7	10.6
120	370.1	325.9	20.000	1.7	10.5
130	370.2	325.8	20.000	1.7	10.5
140	373.5	322.5	20.000	1.7	10.5
150	376.3	319.7	20.000	1.7	10.4
160	378.8	317.2	20.000	1.7	10.4
170	380.3	315.7	20.000	1.7	10.4
180	382.4	313.6	20.000	1.7	10.3
190	383.9	312.1	20.000	1.7	10.3
200	385.1	310.9	20.000	1.7	10.3
210	384.4	311.6	20.000	1.7	10.3
220	379.4	316.6	20.000	1.7	10.4
230	376.8	319.2	20.000	1.7	10.4
240	374.0	322.0	20.000	1.7	10.5
250	378.8	317.2	20.000	1.7	10.4
260	376.8	319.2	20.000	1.7	10.4
270	373.3	322.7	20.000	1.7	10.5
280	377.5	318.5	20.000	1.7	10.4
290	384.0	312.0	20.000	1.7	10.3
300	386.7	309.3	20.000	1.7	10.3
310	387.6	308.4	20.000	1.7	10.3
320	381.8	314.2	20.000	1.7	10.3
330	380.2	315.8	20.000	1.7	10.4
340	378.8	317.2	20.000	1.7	10.4
350	378.4	317.6	20.000	1.7	10.4
Ave. =	378.4 M	317.6 M			

Antenna Radiation Center AMSL = 696.0 M

Geographic Coordinates:

North latitude: 43 37 42
West longitude: 93 09 12

EXHIBIT # E10

R.F. RADIATION COMPLIANCE STATEMENT

Channel 211 – 6.0 kW DA H & V
Austin, Minnesota

March 1998

The proposed antenna will be energized such that it produces 6.0 kW effective radiated power, circularly polarized, from a center of radiation of 82.3 meters above ground. Using the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, and then by applying a combination of the element and array pattern as defined in E.P.A. study PB85-245868 ("**Engineering Assessment of the Potential Impact of the Federal Radiation Protection Guidance on the AM, FM and TV Broadcast Services**".) the following table of exposure levels were developed for four common antennas.

Antenna Type	Level at 2 M above Ground at the tower base. microW/Sq cm	% controlled	% uncontrolled
Dielectric	3.94	.394	.91
ERI	1.82	.182	1.97
Jampro	4.25	.425	2.12
Shively	.30	.030	.15

The applicant will protect workers on the tower by either reducing ERP or terminating transmission. An agreement is in effect with the business band radio licensees at this location to reduce power or to terminate operations to protect workers from receiving in excess of the Commission's standard.

Consequently, it appears that the proposed FM station, when using one of the four common antenna listed above, will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic field rules and regulations.

SECTION VI - EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

Does the applicant propose to employ five or more full-time employees? ☐ Yes ☒ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC Form 396-A). (See also 47 C.F.R. Section 73.2080.)

SECTION VII - CERTIFICATIONS

1. Has or will the applicant comply with the public notice requirements of 47 C.F.R. Section 73.3580? ☒ Yes ☐ No ☐ Not applicable (minor change)

2. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b). ☒ Yes ☐ No

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

The APPLICANT acknowledges that all the statements made in this application and attached Exhibits are considered material representations, and that all Exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section. 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Name Minnesota Public Radio	Signature Thomas J Kigin
Title Vice President	
Typed or Printed Name of Person Signing Thomas J. Kigin	Date 05/15/98

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).