Federal Communications Commission Washington, D.C. 20554	Approved by OMB 3060-0029 (January 2008)	FOR FCC USE ONLY
FCC 340		
APPLICATION FOR CONSTRUCTION PERMIT FOR RESERVED CHANNEL NONCOMMERCIAL EDUCATIONAL BROADCAST STATION Read INSTRUCTIONS Before Filling Out Form		FOR COMMISSION USE ONLY FILE NO. BMPED - 20081212ABI

Section I - General Information

1.	Legal Name of the Licensee/Permittee MINNESOTA PUBLIC RADIO		
	Mailing Address 480 CEDAR STREET		
	City ST. PAUL	State or Country (if foreign address) MN	Zip Code 55101 -
	Telephone Number (include area code) 6512901259	E-Mail Address (if available) FCCFILING@MPR.ORG	
	FCC Registration Number: 0002642510	Call Sign KRFI	Facility Identifier 173553
2.	Contact Representative (if other than licensee/Permittee) TODD M STANSBURY		Firm or Company Name WILEY REIN LLP
	Mailing Address 1776 K STREET NW SUITE 500		
	City WASHINGTON	State or Country (if foreign address) DC	ZIP Code 20006 -
	Telephone Number (include area code) 2027194948		E-Mail Address (if available) TSTANSBURY@WILEYREIN.COM
3.	Is this application being filed in response to a window? If Yes, specify closing date and/or window number:		○ Yes ◉ No

4 **Application Purpose**

○ New station	○ Major Modification of construction permit
○ Major Change in licensed facility	◉ Minor Modification of construction permit
○ Minor Change in licensed facility	○ Major Amendment to pending application
	○ Minor Amendment to pending application

(a) File number of original construction permit: BNPED-20071016AHN

(b) Service Type: ◉ FM ○ TV ○ DTV

(c) DTV Type: ○ Pre-Transition ○ Post-Transition ○ Both

(d) Community of License:
City: REDWOOD FALLS State: MN

(e) Facility Type ◉ Main ○ Auxiliary

If an amendment, **submit as an Exhibit** a listing by Section and Question Number the [Exhibit 1]

portions of the pending application that are being revised.

NOTE: The failure to include an explanatory providing full particulars in connection with a "No" response may result in dismissal of the application. See Instructions, paragraph L for additional information regarding completion of explanatory exhibits.

SECTION II - Legal and Financial

1.	**Certification.** Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.	(●) Yes ( ) No
2.	**Eligibility.** Each application must answer "Yes" to one and "No" to two of the three following certifications. An applicant should not submit an explanatory exhibit in connection with these Question 2 "No" responses. The applicant certifies that it is: a. a nonprofit educational institution; or b. a governmental entity other than a school; or c. a nonprofit educational organization, other than described in a. or b.	 ( ) Yes (●) No ( ) Yes (●) No (●) Yes ( ) No
3.	For applicants checking "Yes" to question 2(c) and applying for a new noncommercial educational television station only, the applicant certifies that the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural, and civic segments of the principal community to be served.	( ) Yes ( ) No (●) N/A
4.	a. The applicant certifies that the Commission has previously granted a broadcast application identified here by file number that found this applicant qualified as a noncommercial educational entity with a qualifying educational program, and that the applicant will use the proposed station to advance a program similar to that the Commission has found qualifying in applicant's previous application. b. Applicants who answered "No" to Question 4(a), must include an exhibit that describes the applicant's educational objective and how the proposed station will be used to advance an educational program that will further that objective according to 47 C.F.R. Section 73.503 (for radio applicants) and 47 C.F.R. Section 73.621 (for television applicants).	( ) Yes ( ) No FCC FileNumber - [Exhibit 2]
5.	The applicant certifies that its governing documents (e.g., articles of incorporation, by-laws, charter, enabling statute, and/or other pertinent organizational document) permit the applicant to advance an educational program and that there is no provision in any of those documents that would restrict the applicant from advancing an educational program or complying with any Commission rule, policy, or provision of the Communications Act of 1934, as amended.	( ) Yes ( ) No
6.	a. **Parties to the Application.** List separately each party to the application including, as applicable, the applicant, its officers, directors, five percent or greater stockholders, non-insulated partners, members, and all other persons and entities with attributable interests. If another entity hold an attributable interest in the applicant, list separately, as applicable, its officers, directors, five percent or greater stockholders, non-insulated partners, and board members. Create a separate row for each individual or entity. Attach additional pages if necessary. [Enter Parties/Owners Information]	

Parties to the Application

List separately each party to the application including, as applicable, the applicant, its officers, directors, five percent or greater stockholders, non-insulated partners, members, and all other persons and entities with attributable interests. If another entity hold an attributable interest in the applicant, list separately, as applicable, its officers, directors, five percent or greater stockholders, non-insulated partners, and board members. Create a separate row for each individual or entity. Attach additional pages if necessary.

(a) Name and Residence Address(es)	(b) Citizen-ship	(c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc	(d) Director or Member of Governing Board	(e)% of: Ownership(O) or Voting Stock(VS) or Membership (M)			(f) % of: of Total Assets (equity plus debt)
				Owner-ship (O) or	Voting Stock (VS) or	Member-ship (M)	
PLEASE SEE ATTACHMENT TO EXHIBIT 3			○ Yes ○ No				

b. Applicant certifies that equity and financial interests not set forth above are non-attributable pursuant to 47 C.F.R. Section 73.3555 and that there are no agreements or understandings with any non-party that would give influence over the applicant's programming, personnel, or finances to that non-party. ○ Yes ○ No [Exhibit 3]

7. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest pursuant to the notes to 47 C.F.R. Section 73.3555. ☐ N/A [Exhibit 4]

8. **Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with: ○ Yes ○ No

a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; or

b. any pending broadcast application in which character issues have been raised.

See Explanation in [Exhibit 5]

9. **Adverse Findings.** Applicant certifies that, with respect to the applicant, any party to the application, and any non-party equity owner in the applicant, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to any of the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another government unit; or discrimination. ○ Yes ○ No

If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of the the court or administrative body and the proceeding (by dates and file numbers), and a description of the disposition of the matter. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 C.F.R. Section 1.65, the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

See Explanation in [Exhibit 6]

10. **Alien Ownership and Control.** Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens ○ Yes ○ No

	and foreign governments.	See Explanation in [Exhibit 7]
11.	**Program Service Certification.** Applicant certifies that it is cognizant of and will comply with its obligations as a commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.	○ Yes ○ No
12.	**Local Public Notice.** Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.	○ Yes ○ No
13.	**Anti-Drug Abuse Act Certification.** Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.	◉ Yes ○ No
14.	**Equal Employment Opportunity (EEO).** If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.	○ Yes ○ No ◉ N/A
QUESTIONS 15, 16 AND 17 APPLY ONLY TO APPLICANTS FOR NEW STATIONS. OTHER APPLICANTS CAN PROCEED TO QUESTION 18.		
15.	**Financial.** The applicant certifies that sufficient net liquid assets are on hand or that sufficient funds are available from committed sources to construct and operate the requested facilities for three months without revenue. If "No" to 15., answer question 16. and 17.	○ Yes ○ No See Explanation in [Exhibit 8]
16.	Is this application contingent upon receipt of a grant from the National Telecommunications and Information Administration?	○ Yes ○ No
17.	Is this application contingent upon receipt of a grant from a charitable organization, the approval of the budget of a school or university, or an appropriation from a state, county, municipality or other political subdivision?	○ Yes ○ No
NOTE: If Yes to 16. **or** 17., the application cannot be granted unconditionally until all of the necessary funds are committed or appropriated. In the case of grants from the National Telecommunications and Information Administration, no further action on the applicant's part is required. If the applicant relies on funds from a source specified in Question 17., **the applicant must advise the Commission when the funds are committed or appropriated.** This should be accomplished by letter amendment to the application. Applicants should take note that the Commission's construction period is not considered "tolled" by funding difficulties and that any permit granted conditionally on funding will expire if the station is not constructed for any reason, including lack of funding.		
QUESTIONS 18 AND 19 DO NOT APPLY TO APPLICATIONS FOR NEW STATIONS. APPLICANTS FOR NEW FM STATIONS CAN PROCEED TO SECTION III. APPLICANTS FOR NEW TV STATIONS CAN PROCEED TO SECTION IV.		
Holding Period.		
18.	Applicant certifies that this application does not propose a modification to an authorization that was awarded on the basis of a preference for fair distribution of service pursuant to 47 U.S.C. Section 307(b). If "No," answer a. and b. below. If applicant answers "No" to 18. above and cannot answer "Yes" to either a. or b. below, the application is unacceptable.	○ Yes ○ No
	a. Applicant certifies that the proposed modification will not downgrade service to the area on which the Section 307(b) preference was based.	○ Yes ○ No
	b. Applicant certifies that although it proposes to downgrade service to the area on which the Section 307(b) preference was based, applicant has provided full service to that area for a period of four years of on-air operations.	○ Yes ○ No
19.	Applicant certifies that this application does not propose a modification to an authorized station that received a credit for superior technical parameters under the point system selection method in 47 C.F.R. Section 73.7003. If "No," applicant must be able to answer "Yes" to a. below or provide an exhibit that makes a compelling showing that the downgrade would be in the public interest.	○ Yes ○ No

	a. Applicant certifies that the population and area within the proposed service contour (60 dBu (FM) or grade B (TV)) are greater than or equivalent to those authorized.	○ Yes ○ No [Exhibit 9]

Section III
Fair Distribution of Service Pursuant to 47 U.S.C. Section 307(b) (New and Major Changes to FM Radio Only) (Other applicants can proceed to Section IV).

1.	Applicant certifies that the proposed station will provide a first noncommercial educational aural service to (a) at least 10 percent of the people residing within the station's 60 dBu (1mV/m) service contour **and** (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit.	◉ Yes ○ No [Exhibit 10]
2.	Applicant certifies that the proposed station will provide a second noncommercial educational aural service to (a) at least 10 percent of the people residing within the station's 60 dBu (1mV/m) service contour **and** (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit.	◉ Yes ○ No [Exhibit 11]

Section IV Point System Factors - New and Major Change Applications Only (used to select among mutually exclusive radio and television applications for new stations and major modifications) **NOTE**: Applicants will not receive any additional points for amendments made after the close of the application filing window.

1.	**Established Local Applicant:** Applicant certifies that for at least the 24 months immediately prior to application, and continuing through the present, it qualifies as a local applicant pursuant to 47 C.F.R. Section 73.7000, that its governing documents require that such localism be maintained, and that it has placed documentation of its qualifications as an established local applicant in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ◉ No
2.	**Diversity of Ownership:** (a) Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized station (comparing radio and television to television, including non-fill-in translator stations other than those identified in 2(b) below) in which any party to the application has an attributable interest as defined in 47 C.F.R. Section 73.3555, that its governing documents require that such diversity be maintained, and that it has placed documentation of its diversity qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ◉ No
	(b) Is the application's certification to 2(a) based on its exclusion of translator station(s) that will be replaced with a full service station pursuant to the authorization requested here? If Yes, applicant must include an exhibit identifying the translator station authorization for which it will request cancellation upon commencement of operation of the proposed full service station (i.e., upon its filing of a license application and receipt of program test authority).	○ Yes ◉ No [Exhibit 12]
3.	**State-wide Network:** Applicant certifies that (a) it has NOT claimed a credit for diversity of ownership above: (b) it is one of the three specific types of organizations described in 47 C.F.R. Section 73.7003(b)(3); and (c) it has placed documentation of its qualifications in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ◉ No
4.	**Technical Parameters:** Applicant certifies that the numbers in the boxes below accurately reflect the new area and population that its proposal would serve with a 60 dBu (FM) or Grade B (TV) signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) (FM) and 73.683(TV) and that it has documented the basis for its calculations in the local public inspection file and has submitted copies to the Commission. Major modification applicants should include the area of proposed increase only (exclude any area already within the station's existing service area). (Points, if any, will be determined by FCC)	◉ Yes ○ No
	New area served in square kilometers (excluding areas of water):	1267
	Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	11004

SECTION V - Tie Breakers - New and Major Change Applications Only (used to choose among competing radio and

	television applications receiving the same number of points in Section IV)
1.	**Existing Authorizations.** By placing a number in the box, the applicant certifies that it and other parties to the application have, as of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number of relevant broadcast station authorizations. Radio applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or those identified in IV (2)(b) above. TV applicants should count all attributable full service TV stations, commercial and noncommercial and TV translator stations other than fill-in stations or those identified in IV(2)(b) above. 64 (number of commercial and non-commercial licenses and construction permits)
2.	**Pending Applications.** By placing a number in the box, the applicant certifies that it and other parties to the application have, as of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number of pending applications for new or major changes to relevant broadcast stations. Radio applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or those identified in IV(2)(b) above. TV applicants should count all attributable full service TV stations, commercial and noncommercial, and TV translator stations other than fill-in stations or those identified in IV(2)(b) above. 11 (number of pending commercial and non-commercial applications)

Section VI -- Certification

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. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive 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 request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing THOMAS J KIGIN	Typed or Printed Title of Person Signing EXECUTIVE VICE PRESIDENT
Signature	Date 12/12/2008

Section VII Preparer's Certification

I certify that I have prepared Section VII (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name KATE MICHLER	Relationship to Applicant (e.g., Consulting Engineer) TECHNICAL CONSULTANT	
Signature	Date 11/25/2008	
Mailing Address DOUG VERNIER TELECOMMUNICATION CONSULTANTS 721 WEST 1ST STREET, SUITE A		
City CEDAR FALLS	State or Country (if foreign address) IA	Zip Code 50613-
Telephone Number (include area code) 3192668402	E-Mail Address (if available) KMICHLER@V-SOFT.COM	

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).

Section VII - FM Engineering

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1.	Channel Number: 201
2.	Class (select one): ○ D ◉ A ○ B1 ○ B ○ C3 ○ C2 ○ C1 ○ C0 ○ C
3.	Antenna Location Coordinates: (NAD 27) Latitude: Degrees 44 Minutes 32 Seconds 59 ◉ North ○ South Longitude: Degrees 94 Minutes 58 Seconds 0 ◉ West ○ East
4.	Proposed Assignment Coordinates: (NAD 27) - RESERVED CHANNELS ABOVE 220 ONLY ☑ Not Applicable Latitude: Degrees Minutes Seconds ○ North ○ South Longitude: Degrees Minutes Seconds ○ West ○ East
5.	Antenna Structure Registration Number: 1028073 ☐ Not Applicable ☐ Notification filed with FAA
6.	Overall Tower Height Above Ground Level: 137.2 meters
7.	Height of Radiation Center Above Mean Sea Level: 428.3 meters(H) 428.3 meters(V)
8.	Height of Radiation Center Above Ground Level: 122 meters(H) 122 meters(V)
9.	Height of Radiation Center Above Average Terrain: 120.8 meters(H) 120.8 meters(V)
10.	Effective Radiated Power: 0.33 kW(H) 0.33 kW(V)
11.	Maximum Effective Radiated Power: (Beam-Tilt Antenna ONLY) ☑ Not Applicable kW(H) kW(V)
12.	Directional Antenna Relative Field Values: ☑ Not applicable (Nondirectional) Rotation (Degrees): ☐ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0		10		20		30		40		50	
60		70		80		90		100		110	
120		130		140		150		160		170	
180		190		200		210		220		230	
240		250		260		270		280		290	
300		310		320		330		340		350	

Additional Azimuths

Relative Field Polar Plot

	NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.
	CERTIFICATION **AUXILIARY ANTENNA APPLICANTS ARE NOT REQUIRED TO RESPOND TO ITEMS 13-17. PROCEED TO ITEM 18.**
13.	**Main Studio Location.** The proposed main studio location complies with 47 C.F.R. Section 73.1125. ○ Yes ◉ No

		See Explanation in [Exhibit 13]
14.	**Community Coverage.** The proposed facility complies with 47 C.F.R. Section 73.315. (Channels 221 and above) or 47 C.F.R. Section 73.515 (Channels 220 and below).	(•) Yes ( ) No See Explanation in [Exhibit 14]
15.	**Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply:	(•) Yes ( ) No See Explanation in [Exhibit 15]
	Contour Overlap Requirements. a. [x] 47 C.F.R. Section 73.509 **Exhibit Required.**	[Exhibit 16]
	Spacing Requirements. b. [ ] 47 C.F.R. Section 73.207 with respect to station(s)	
	Grandfathered Short-Spaced. c. [ ] 47 C.F.R. Section 73.213(a) with respect to station(s) **Exhibit Required.**	[Exhibit 17]
	Contour Protection. d. [ ] 47 C.F.R. Section 73.215(a) with respect to station(s) **Exhibit Required.**	[Exhibit 18]
	Television Channel 6 Protection. e. [x] 47 C.F.R. Section 73.525 with respect to station(s) **Exhibit Required.**	[Exhibit 19]
16.	**Reserved Channels Above 220.** a. **Availability of Channels.** The proposed facility complies with the assignment requirements of 47 C.F.R. Section 73.203.	( ) Yes ( ) No See Explanation in [Exhibit 20]
17.	**International Borders.** The proposed antenna location is not within 320 kilometers of the common border between the United States and Canada or Mexico. If "No," specify the country and provide an exhibit of compliance with all provisions of the relevant International Agreement.	(•) Yes ( ) No ( ) Canada ( ) Mexico [Exhibit 21]
18.	**Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Worksheet #7, an **Exhibit is required.** By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.	(•) Yes ( ) No See Explanation in [Exhibit 22]
19.	**Community of License Change - Section 307(b).** If the application is being submitted to change the facility's community of license, then the applicant certifies that it has attached an exhibit containing information demonstrating that the proposed community of license change comports with the fair distribution of service policies underlying Section 307(b) of the Communications Act of 1934, as amended (47 U.S.C. Section 307(b)). **An exhibit is required** unless this question is not applicable.	( ) Yes ( ) No (•) N/A [Exhibit 23]

PREPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED.

Exhibits

Exhibit 13
Description: MAIN STUDIO LOCATION

MINNESOTA PUBLIC RADIO REQUESTED AND WAS GRANTED A WAIVER TO SECTION 73.1125 IN THE CONSTRUCTION PERMIT BEING MODIFIED (BNPED-20071016AHN) TO OPERATE AS A SATELLITE STATION OF KNOW, ST. PAUL, MN. MPR RESPECTFULLY REQUESTS A CONTINUATION OF THAT WAIVER.

Attachment 13

Exhibit 14
Description: COMMUNITY COVERAGE

THE COMMUNITY OF LICENSE, REDWOOD FALLS, MN IS COMPLETELY ENCOMPASSED BY THE 60 DBU CONTOUR OF THE PROPOSED FACILITY. PLEASE SEE ATTACHED EXHIBIT. THE 60 DBU CONTOUR OF THE EXISTING AUTHORIZED FACILITY IS ALSO INCLUDED ON THE MAP FOR REFERENCE. PAGE #2 IS A TABLE OF THE DISTANCES TO THE 60 DBU CONTOUR ALONG 8 CARDINAL RADIALS OF THE PROPOSED FACILITY. COMMUNITY COVERAGE

Attachment 14

Description
Exhibit #14, Community Coverage

Exhibit 16
Description: CONTOUR OVERLAP REQUIREMENTS

PLEASE SEE ATTACHED EXHIBIT.

Attachment 16

Description
Exhibit #16, Contour Overlap Requirements

Exhibit 19
Description: TELEVISION CHANNEL 6 PROTECTION

THERE IS ONLY ONE TELEVISION CHANNEL 6 STATION WITHIN THE 265 KILOMETER CUTOFF DISTANCE FOR FM STATIONS ON CHANNEL 201. KAAL IS A 100 KW STATION IN AUSTIN, MN. PLEASE SEE ATTACHED EXHIBIT. THE FM STUDY POWER USED TO PREPARE THIS EXHIBIT IS 0.33825 KW (H + V/40) IN COMPLIANCE WITH SECTIN 73.525(E)(4)(II). THE 6 DB RECEIVER DIRECTIVITY CREDIT WAS APPLIED TO ALL POINTS WITHIN THE ANGLE DESCRIBED IN SECTION 73.525(E)(1)(III). THERE IS NO OVERLAP BETWEEN THE PROPOSED FM STATION AND KAAL. TELEVISION CHANNEL 6 PROTECTION

Attachment 19

Description
Exhibit #19, Television Channel 6 Protection

Exhibit 22
Description: ENVIRONMENTAL PROTECTION ACT

PLEASE SEE ATTACHED EXHIBIT.

Attachment 22

Description
Exhibit #22, Environmental Protection Act

KRFINew Proposed 60 dBu Change Area

KRFINew

Latitude: 44-32-59 N
Longitude: 094-58-00 W
ERP: 0.33 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 428.0 m
HAAT: 120.8 m
Horiz. Pattern: Omni
Vert. Pattern: No

Pop = 9,179

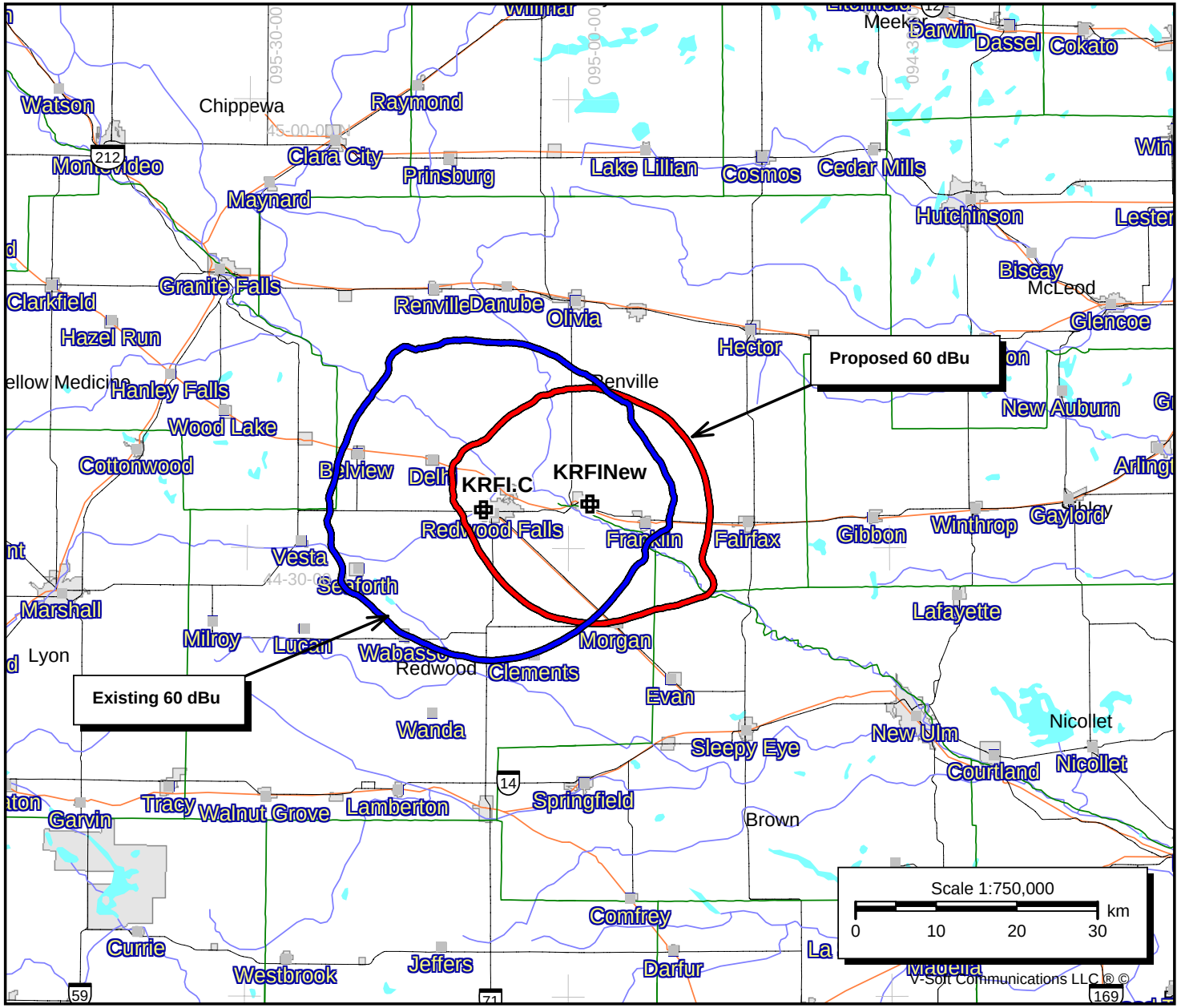
KRFI.C

BNPED20071016AHN
Latitude: 44-32-35.20 N
Longitude: 095-07-57 W
ERP: 2.10 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 392.4 m
HAAT: 80.9 m
Horiz. Pattern: Omni
Vert. Pattern: No

Pop = 10,996

11/24/2008

Doug Vernier
721 West 1st Street, Suite A
Cedar Falls, Iowa 50613
Telecommunications Consultants



N. Lat. = 443259.0 W. Lng. = 945800.0
HAAT and Distance to Contour
V-Soft 3-16 km, 131 pts Method - USGS 03 SEC
KRFI (New) Distance to 60 dBu Contour

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	319.0	109.0	0.3300	-4.81	1.000	14.40
045	319.8	108.2	0.3300	-4.81	1.000	14.35
090	312.6	115.4	0.3300	-4.81	1.000	14.84
135	278.4	149.6	0.3300	-4.81	1.000	17.16
180	313.4	114.6	0.3300	-4.81	1.000	14.79
225	317.0	111.0	0.3300	-4.81	1.000	14.53
270	284.7	143.3	0.3300	-4.81	1.000	16.73
315	312.9	115.1	0.3300	-4.81	1.000	14.81

Ave El= 307.23 M HAAT= 120.77 M AMSL= 428 M

Minnesota Public Radio
KRFI Redwood Falls Move to K216FZ Site

REFERENCE CH# 201A - 88.1 MHz, Pwr= 0.33 kW, HAAT= 120.5 M, COR= 428 M DISPLAY DATES
44 32 59.0 N. Average Protected F(50-50)= 15.37 km DATA 11-21-08
94 58 00.0 W. Omni-directional SEARCH 11-21-08

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*IN* (Overlap in km)	*OUT*
201A KRFI	CP _CX	266.9	13.2	44 32 35.2	2.100	73.0	23.7	-75.9*	-63.3*
Redwood Falls	MN	86.7	BNPED20071016AHN	95 07 57.0	81	392	Minnesota Public Radio		
201C2 KVSC	LIC _VN	28.0	122.1	45 31 00.0	16.500	107.5	38.5	0.4	35.5
St. Cloud	MN	208.5	BLED19921103KB	94 13 52.0	136	463	St. Cloud State University		
202A 980602MC	CP _CN	126.4	52.3	44 16 11.0	0.400	15.4	10.9	18.4	13.6
New Ulm	MN	306.8	BPED19980602MC	94 26 22.0	54	351	Minn-iowa Christian Broadc		
201A KRLP	CP _CX	193.1	75.9	43 53 03.0	0.040	29.6	8.8	31.6	17.3
Windom	MN	13.0	BMPED20080917ADT	95 10 56.0	118	555	Educational Media Foundati		
202C3 1215436	APP DCX	68.7	67.8	44 46 05.0	15.000	26.9	18.3	25.9	26.0
Hutchinson	MN	249.2	BNPED20071022BAV	94 10 06.0	75	385	Nassuna Broadcasting, Inc.		
204C3 1198410	APP DVX	101.7	62.2	44 26 03.1	20.000	3.2	31.4	44.0	29.5
Saint Peter	MN	282.2	BNPED20071022AOE	94 12 06.1	75	375	Southern Minnesota Catholi		
202A 1212911	APP _CX	50.1	61.5	44 54 09.0	0.150	9.7	6.7	37.4	33.1
Hutchinson	MN	230.5	BNPED20071022AWQ	94 22 08.0	34	365	We Have This Hope Christia		
06-2C KAAL	LI _HN	124.6	177.7	43 37 42.0	100.000	38.3	104.3	264.5R	35.1M
Austin	MN	305.9	BLCT2236	93 09 12.0	320	696	Kaal-tv, Llc		
202C3 1205498	APP DCX	72.0	88.1	44 47 20.0	11.000	36.5	24.0	36.1	39.5
Waconia	MN	252.8	BNPED20071016AFZ	93 54 27.0	86	385	Key To Life Center		
202C3 1198965	APP DCX	74.2	78.6	44 44 18.0	12.000	21.0	14.1	43.0	40.3
Young America	MN	254.8	BNPED20071015AEU	94 00 42.0	62	363	Crown College		
204C3 1212075	APP NVX	108.2	71.2	44 20 47.6	10.000	2.5	24.2	53.6	45.9
Mankato	MN	288.8	BNPED20071012AXN	94 07 05.3	50	361	Shining Light Ministries		

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone = 2, Co to 3rd adjacent.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.

HOW TO READ THE FM COMPUTER PRINT-OUT

Full Service Stations

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. Contour distances are in kilometers and are predicted 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 difference in kilometers between of the reference station's protected contour and the data file station's interference contour at the closest point between the contours. (All distances are derived by the method detailed in Sec. 73.208 of the Rules and Regulations as amended in Docket 80-90.) Therefore, “IN” column is a measure of incoming interference. Negative distances in this column indicate the presence of contour overlap. Listed antenna heights and power are those given in the FCC database. The column labeled “OUT " shows the greatest distance in kilometers of overlap or smallest of clearance between the reference station's interference contour and the database station's protected contour. Negative distance figures in this column indicate outgoing contour overlap.

Under the "AZI" column, the first row of numbers indicate the True North bearings from the reference station toward the database stations, while the numbers in the second row indicate the reverse bearings from the database stations to the reference station.

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

For I.F. relationships, some channel-six TV relationships and relationships with commercial channel stations providing clearance the minimum spacings values the "IN" and "OUT" columns can 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** (or lack of it) 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 call letters of stations meeting the minimum separation distances under the rules will be flagged by the characters “<<” appended to the right-hand side of the call sign. The “^” character appended to the call sign means the station has been “max-classed” according to the provisions of section 73.525 of the Rules.

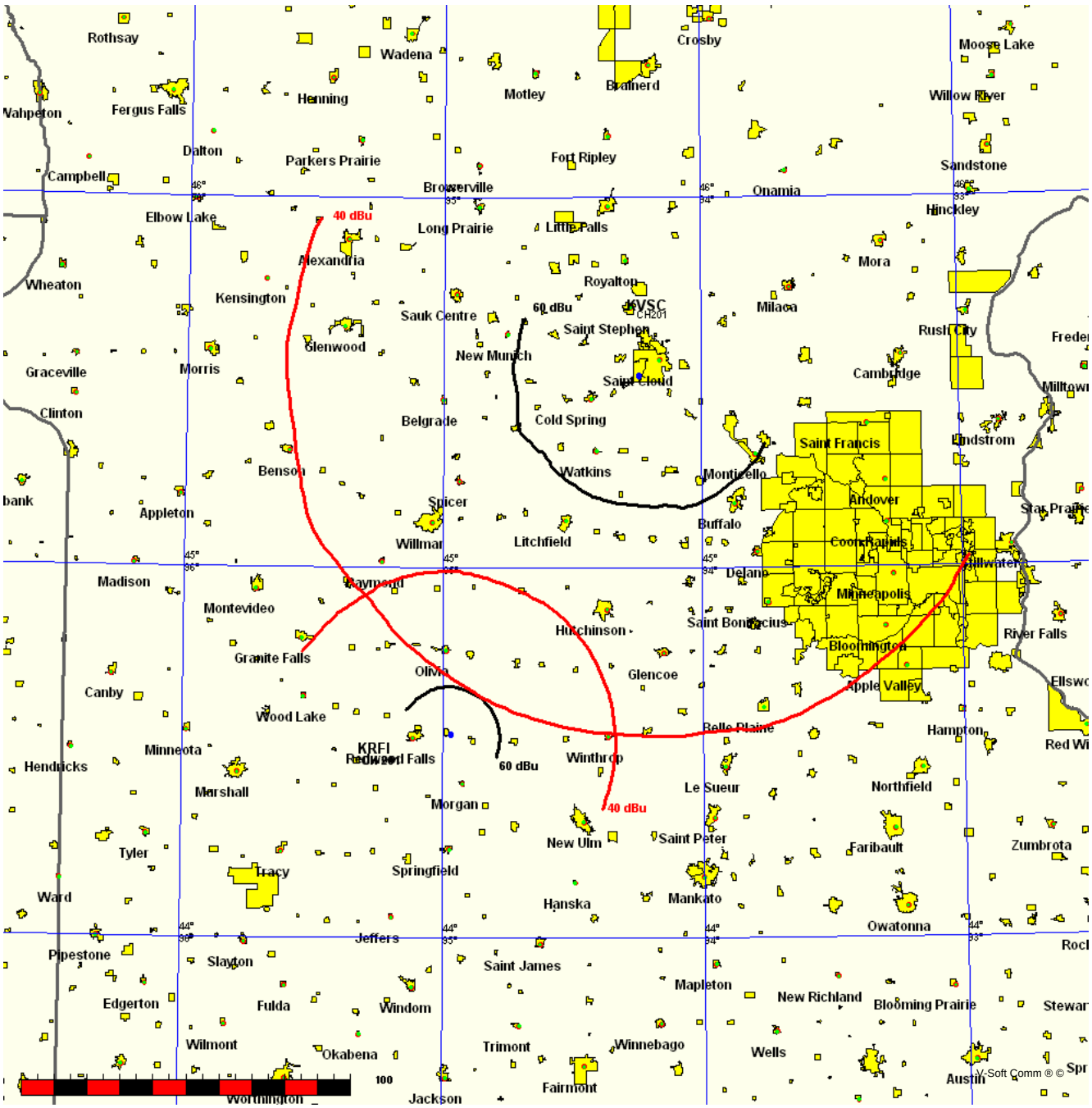
The first three letters of the "TYPE" column identify the current FCC status of the stations. The fourth letter will be a "D" if the facility is directional. “Z” indicates a 73.215 directional. An “N” indicates it is a 73.215 station that operates with an omni-directional antenna. The fifth letter will 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 or an “X” if the commission is not sure, otherwise it will be an “N” or left blank.

Minnesota Public Radio
KRFI (New) v. KVSC

FMCommander Single Allocation Study - 11-24-2008 - USGS 03 SEC
KRFI's Overlaps (In= 0.36 km, Out= 35.49 km)

KRFI CH 201 A
Lat= 44 32 59.0, Lng= 94 58 00.0
0.33 kW 120.5 M HAAT, 428 M COR
Prot.= 60 dBu, Intef.= 40 dBu

KVSC CH 201 C2 BLED19921103KB
Lat= 45 31 00.0, Lng= 94 13 52.0
16.5 kW 136 M HAAT, 463 M COR
Prot.= 60 dBu, Intef.= 40 dBu

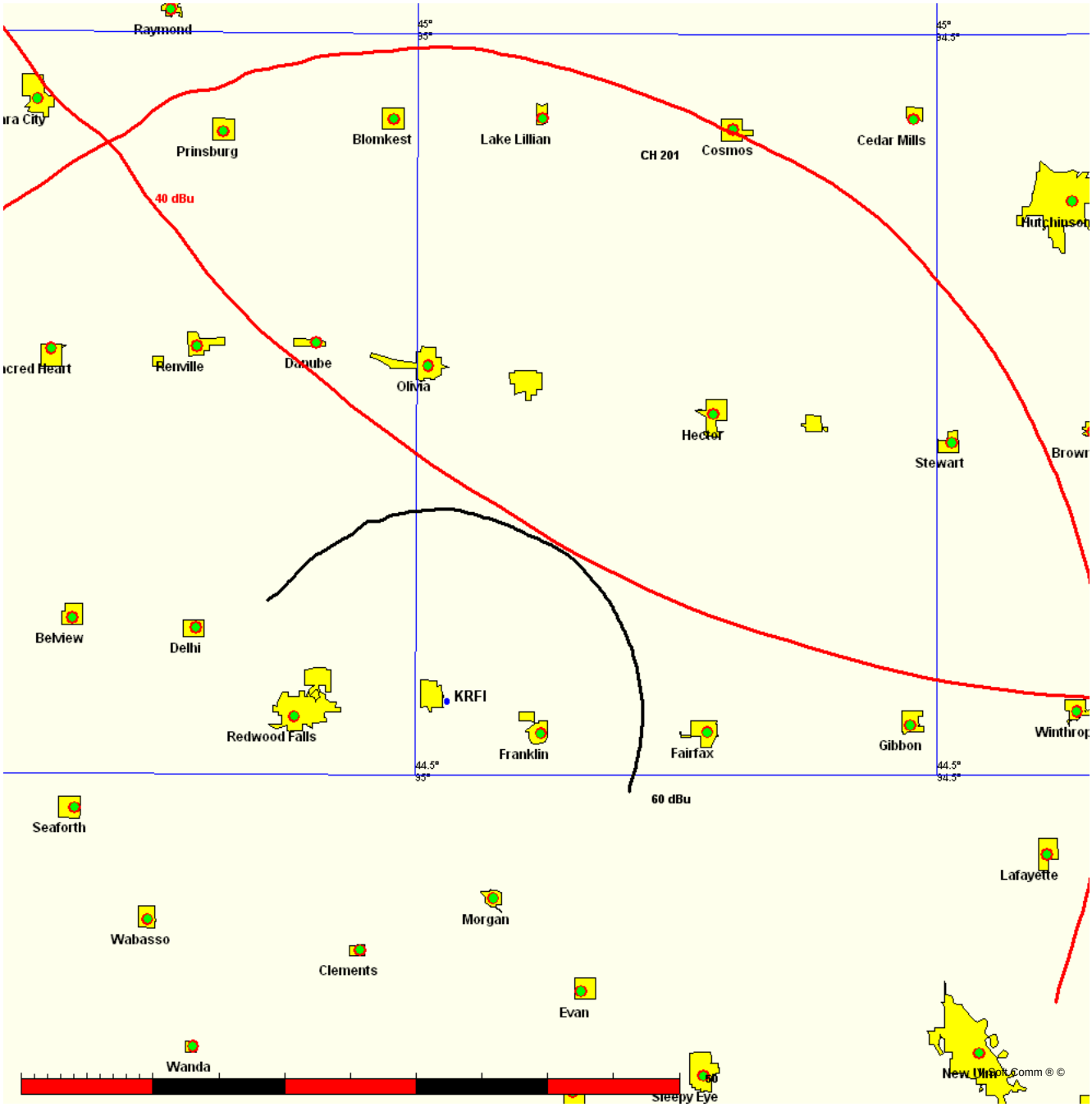


Minnesota Public Radio
KRFI (New) v. KVSC - Cluse Up

FMCommander Single Allocation Study - 11-24-2008 - USGS 03 SEC
KRFI's Overlaps (In= 0.36 km, Out= 35.49 km)

KRFI CH 201 A
Lat= 44 32 59.0, Lng= 94 58 00.0
0.33 kW 120.5 M HAAT, 428 M COR
Prot.= 60 dBu, Intef.= 40 dBu

KVSC CH 201 C2 BLED19921103KB
Lat= 45 31 00.0, Lng= 94 13 52.0
16.5 kW 136 M HAAT, 463 M COR
Prot.= 60 dBu, Intef.= 40 dBu



11-24-2008 USGS 03 SEC Terrain Data FMOver Analysis

KRFI
Channel = 201A
Max ERP = 0.33 kW
RCAMSL = 428 M
N. Lat. 44 32 59.0
W. Lng. 94 58 00.0
Protected
60 dBu

KVSC BLED19921103KB
Channel = 201C2
Max ERP = 16.5 kW
RCAMSL = 463 M
N. Lat. 45 31 00.0
W. Lng. 94 13 52.0
Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
328.0	000.3300	0109.8	014.5	214.8	016.5000	0117.5	115.6	38.40	
329.0	000.3300	0109.5	014.4	214.7	016.5000	0117.5	115.4	38.43	
330.0	000.3300	0109.4	014.4	214.6	016.5000	0117.5	115.1	38.48	
331.0	000.3300	0109.6	014.4	214.6	016.5000	0117.5	114.9	38.52	
332.0	000.3300	0110.4	014.5	214.6	016.5000	0117.5	114.7	38.56	
333.0	000.3300	0112.0	014.6	214.5	016.5000	0117.5	114.4	38.61	
334.0	000.3300	0113.0	014.7	214.5	016.5000	0117.5	114.1	38.66	
335.0	000.3300	0113.6	014.7	214.5	016.5000	0117.5	113.9	38.71	
336.0	000.3300	0113.6	014.7	214.4	016.5000	0117.6	113.7	38.75	
337.0	000.3300	0112.5	014.6	214.3	016.5000	0117.6	113.5	38.78	
338.0	000.3300	0110.9	014.5	214.2	016.5000	0117.6	113.3	38.81	
339.0	000.3300	0109.9	014.5	214.1	016.5000	0117.6	113.2	38.84	
340.0	000.3300	0109.7	014.4	214.0	016.5000	0117.7	113.0	38.88	
341.0	000.3300	0110.0	014.5	213.9	016.5000	0117.7	112.8	38.92	
342.0	000.3300	0111.4	014.6	213.9	016.5000	0117.7	112.5	38.97	
343.0	000.3300	0111.3	014.6	213.8	016.5000	0117.7	112.3	39.01	
344.0	000.3300	0110.7	014.5	213.7	016.5000	0117.7	112.1	39.04	
345.0	000.3300	0110.5	014.5	213.6	016.5000	0117.8	112.0	39.07	
346.0	000.3300	0110.0	014.5	213.5	016.5000	0117.8	111.8	39.11	
347.0	000.3300	0109.7	014.4	213.4	016.5000	0117.8	111.6	39.14	
348.0	000.3300	0110.4	014.5	213.3	016.5000	0117.9	111.4	39.18	
349.0	000.3300	0110.6	014.5	213.2	016.5000	0117.9	111.2	39.22	
350.0	000.3300	0110.1	014.5	213.1	016.5000	0118.0	111.1	39.25	
351.0	000.3300	0109.5	014.4	213.0	016.5000	0118.0	110.9	39.28	
352.0	000.3300	0109.0	014.4	212.9	016.5000	0118.1	110.8	39.31	
353.0	000.3300	0108.9	014.4	212.8	016.5000	0118.1	110.6	39.34	
354.0	000.3300	0108.6	014.4	212.7	016.5000	0118.2	110.5	39.37	
355.0	000.3300	0108.3	014.4	212.6	016.5000	0118.2	110.4	39.40	
356.0	000.3300	0108.6	014.4	212.5	016.5000	0118.2	110.2	39.43	
357.0	000.3300	0108.8	014.4	212.4	016.5000	0118.3	110.0	39.46	
358.0	000.3300	0108.8	014.4	212.3	016.5000	0118.3	109.9	39.50	
359.0	000.3300	0109.0	014.4	212.2	016.5000	0118.4	109.7	39.53	
000.0	000.3300	0109.0	014.4	212.1	016.5000	0118.4	109.6	39.56	
001.0	000.3300	0108.8	014.4	211.9	016.5000	0118.5	109.5	39.58	
002.0	000.3300	0108.7	014.4	211.8	016.5000	0118.5	109.4	39.61	
003.0	000.3300	0108.3	014.4	211.7	016.5000	0118.5	109.3	39.63	
004.0	000.3300	0107.7	014.3	211.6	016.5000	0118.5	109.2	39.64	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
005.0	000.3300	0107.0	014.3	211.5	016.5000	0118.5	109.1	39.66
006.0	000.3300	0106.6	014.2	211.3	016.5000	0118.5	109.0	39.67
007.0	000.3300	0106.2	014.2	211.2	016.5000	0118.5	109.0	39.69
008.0	000.3300	0105.9	014.2	211.1	016.5000	0118.4	108.9	39.70
009.0	000.3300	0105.4	014.2	210.9	016.5000	0118.4	108.8	39.71
010.0	000.3300	0105.1	014.1	210.8	016.5000	0118.4	108.7	39.73
011.0	000.3300	0104.7	014.1	210.7	016.5000	0118.4	108.7	39.74
012.0	000.3300	0104.3	014.1	210.6	016.5000	0118.3	108.6	39.75
013.0	000.3300	0104.0	014.1	210.4	016.5000	0118.3	108.6	39.76
014.0	000.3300	0103.8	014.0	210.3	016.5000	0118.3	108.5	39.77
015.0	000.3300	0103.5	014.0	210.2	016.5000	0118.3	108.5	39.78
016.0	000.3300	0103.2	014.0	210.1	016.5000	0118.3	108.4	39.79
017.0	000.3300	0102.9	014.0	209.9	016.5000	0118.2	108.4	39.79
018.0	000.3300	0102.8	014.0	209.8	016.5000	0118.2	108.4	39.80
019.0	000.3300	0102.7	014.0	209.7	016.5000	0118.3	108.3	39.81
020.0	000.3300	0102.6	014.0	209.5	016.5000	0118.3	108.3	39.82
021.0	000.3300	0102.6	014.0	209.4	016.5000	0118.4	108.2	39.83
022.0	000.3300	0102.6	014.0	209.3	016.5000	0118.4	108.2	39.84
023.0	000.3300	0102.5	013.9	209.2	016.5000	0118.4	108.2	39.84
024.0	000.3300	0102.3	013.9	209.0	016.5000	0118.5	108.2	39.85
025.0	000.3300	0102.1	013.9	208.9	016.5000	0118.5	108.2	39.85
026.0	000.3300	0102.1	013.9	208.8	016.5000	0118.5	108.2	39.85
027.0	000.3300	0102.5	013.9	208.6	016.5000	0118.6	108.1	39.86
028.0	000.3300	0102.8	014.0	208.5	016.5000	0118.7	108.1	39.87
029.0	000.3300	0103.1	014.0	208.4	016.5000	0118.8	108.1	39.88
030.0	000.3300	0103.3	014.0	208.3	016.5000	0118.9	108.1	39.88
031.0	000.3300	0103.7	014.0	208.1	016.5000	0119.0	108.1	39.89
032.0	000.3300	0104.2	014.1	208.0	016.5000	0119.1	108.0	39.90
033.0	000.3300	0104.8	014.1	207.9	016.5000	0119.2	108.0	39.91
034.0	000.3300	0105.3	014.1	207.7	016.5000	0119.4	108.0	39.91
035.0	000.3300	0105.6	014.2	207.6	016.5000	0119.6	108.0	39.92
036.0	000.3300	0106.0	014.2	207.5	016.5000	0119.7	108.0	39.92
037.0	000.3300	0106.5	014.2	207.3	016.5000	0119.9	108.0	39.92
038.0	000.3300	0106.8	014.2	207.2	016.5000	0120.1	108.1	39.92
039.0	000.3300	0107.1	014.3	207.1	016.5000	0120.2	108.1	39.92
040.0	000.3300	0107.5	014.3	206.9	016.5000	0120.3	108.1	39.92
041.0	000.3300	0107.8	014.3	206.8	016.5000	0120.4	108.1	39.92
042.0	000.3300	0108.0	014.3	206.7	016.5000	0120.4	108.2	39.91
043.0	000.3300	0108.2	014.3	206.5	016.5000	0120.5	108.3	39.90
044.0	000.3300	0108.2	014.3	206.4	016.5000	0120.5	108.3	39.88
045.0	000.3300	0108.2	014.3	206.3	016.5000	0120.5	108.4	39.86
046.0	000.3300	0108.0	014.3	206.2	016.5000	0120.5	108.5	39.85
047.0	000.3300	0107.9	014.3	206.0	016.5000	0120.6	108.6	39.83
048.0	000.3300	0107.8	014.3	205.9	016.5000	0120.6	108.7	39.81
049.0	000.3300	0107.7	014.3	205.8	016.5000	0120.6	108.8	39.79
050.0	000.3300	0107.7	014.3	205.7	016.5000	0120.7	108.9	39.77
051.0	000.3300	0107.9	014.3	205.6	016.5000	0120.7	109.0	39.75
052.0	000.3300	0108.1	014.3	205.4	016.5000	0120.8	109.1	39.74
053.0	000.3300	0108.2	014.3	205.3	016.5000	0120.9	109.2	39.71
054.0	000.3300	0108.4	014.4	205.2	016.5000	0120.9	109.3	39.69
055.0	000.3300	0108.7	014.4	205.1	016.5000	0121.0	109.4	39.68

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
056.0	000.3300	0109.0	014.4	205.0	016.5000	0121.0	109.5	39.66
057.0	000.3300	0109.2	014.4	204.8	016.5000	0121.1	109.7	39.63
058.0	000.3300	0109.2	014.4	204.7	016.5000	0121.1	109.8	39.61
059.0	000.3300	0109.3	014.4	204.6	016.5000	0121.1	109.9	39.58
060.0	000.3300	0109.3	014.4	204.5	016.5000	0121.2	110.1	39.55
061.0	000.3300	0109.4	014.4	204.4	016.5000	0121.2	110.2	39.52
062.0	000.3300	0109.4	014.4	204.3	016.5000	0121.2	110.4	39.50
063.0	000.3300	0109.4	014.4	204.2	016.5000	0121.3	110.5	39.47
064.0	000.3300	0109.5	014.4	204.1	016.5000	0121.3	110.7	39.44
065.0	000.3300	0109.5	014.4	204.0	016.5000	0121.3	110.8	39.40
066.0	000.3300	0109.5	014.4	203.9	016.5000	0121.4	111.0	39.37
067.0	000.3300	0109.7	014.4	203.8	016.5000	0121.4	111.2	39.34
068.0	000.3300	0109.8	014.5	203.7	016.5000	0121.4	111.3	39.31
069.0	000.3300	0110.3	014.5	203.6	016.5000	0121.4	111.5	39.28
070.0	000.3300	0110.6	014.5	203.5	016.5000	0121.4	111.7	39.25
071.0	000.3300	0110.7	014.5	203.4	016.5000	0121.5	111.8	39.21
072.0	000.3300	0111.0	014.5	203.3	016.5000	0121.5	112.0	39.18
073.0	000.3300	0111.2	014.6	203.2	016.5000	0121.5	112.2	39.15
074.0	000.3300	0111.5	014.6	203.1	016.5000	0121.5	112.4	39.11
075.0	000.3300	0111.7	014.6	203.1	016.5000	0121.5	112.6	39.08
076.0	000.3300	0111.9	014.6	203.0	016.5000	0121.6	112.8	39.04
077.0	000.3300	0112.2	014.6	202.9	016.5000	0121.6	113.0	39.01
078.0	000.3300	0112.5	014.6	202.8	016.5000	0121.6	113.2	38.97
079.0	000.3300	0112.6	014.7	202.7	016.5000	0121.7	113.4	38.93
080.0	000.3300	0112.7	014.7	202.7	016.5000	0121.7	113.6	38.89
081.0	000.3300	0112.9	014.7	202.6	016.5000	0121.7	113.8	38.86
082.0	000.3300	0112.9	014.7	202.5	016.5000	0121.7	114.0	38.82
083.0	000.3300	0113.0	014.7	202.4	016.5000	0121.8	114.2	38.78
084.0	000.3300	0113.2	014.7	202.4	016.5000	0121.8	114.5	38.74
085.0	000.3300	0113.4	014.7	202.3	016.5000	0121.8	114.7	38.70
086.0	000.3300	0113.7	014.7	202.3	016.5000	0121.9	114.9	38.66
087.0	000.3300	0114.0	014.7	202.2	016.5000	0121.9	115.1	38.62
088.0	000.3300	0114.4	014.8	202.1	016.5000	0121.9	115.3	38.58

11-24-2008 USGS 03 SEC Terrain Data

KVSC BLED19921103KB
Channel = 201C2
Max ERP = 16.5 kW
RCAMSL = 463 M
N. Lat. 45 31 00.0
W. Lng. 94 13 52.0
Protected
60 dBu

KRFI
Channel = 201A
Max ERP = 0.33 kW
RCAMSL = 428 M
N. Lat. 44 32 59.0
W. Lng. 94 58 00.0
Interfering
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
149.0	016.5000	0150.2	042.4	047.9	000.3300	0107.8	107.1	22.73	
150.0	016.5000	0149.9	042.4	047.8	000.3300	0107.8	106.3	22.89	
151.0	016.5000	0150.0	042.4	047.8	000.3300	0107.8	105.6	23.04	
152.0	016.5000	0150.1	042.4	047.7	000.3300	0107.8	104.8	23.20	
153.0	016.5000	0150.2	042.4	047.6	000.3300	0107.8	104.1	23.35	
154.0	016.5000	0150.7	042.5	047.5	000.3300	0107.8	103.4	23.51	
155.0	016.5000	0150.4	042.5	047.4	000.3300	0107.8	102.7	23.67	
156.0	016.5000	0149.7	042.4	047.2	000.3300	0107.8	102.0	23.82	
157.0	016.5000	0149.1	042.3	047.0	000.3300	0107.9	101.3	23.97	
158.0	016.5000	0148.2	042.2	046.8	000.3300	0107.9	100.7	24.13	
159.0	016.5000	0147.1	042.1	046.6	000.3300	0107.9	100.1	24.28	
160.0	016.5000	0146.4	042.0	046.4	000.3300	0108.0	099.4	24.43	
161.0	016.5000	0146.2	041.9	046.2	000.3300	0108.0	098.7	24.59	
162.0	016.5000	0145.6	041.9	046.0	000.3300	0108.0	098.1	24.74	
163.0	016.5000	0142.1	041.4	045.6	000.3300	0108.1	097.7	24.85	
164.0	016.5000	0137.0	040.8	045.1	000.3300	0108.2	097.3	24.94	
165.0	016.5000	0134.5	040.4	044.7	000.3300	0108.2	096.9	25.06	
166.0	016.5000	0133.3	040.3	044.4	000.3300	0108.2	096.3	25.19	
167.0	016.5000	0131.3	040.0	044.1	000.3300	0108.2	095.9	25.31	
168.0	016.5000	0129.6	039.8	043.7	000.3300	0108.2	095.4	25.43	
169.0	016.5000	0128.6	039.7	043.4	000.3300	0108.2	094.9	25.56	
170.0	016.5000	0128.5	039.7	043.2	000.3300	0108.2	094.4	25.70	
171.0	016.5000	0128.9	039.7	043.0	000.3300	0108.2	093.8	25.85	
172.0	016.5000	0128.9	039.7	042.7	000.3300	0108.1	093.2	25.99	
173.0	016.5000	0128.1	039.7	042.4	000.3300	0108.1	092.8	26.11	
174.0	016.5000	0127.4	039.6	042.1	000.3300	0108.0	092.3	26.23	
175.0	016.5000	0126.9	039.5	041.8	000.3300	0107.9	091.8	26.36	
176.0	016.5000	0126.0	039.4	041.4	000.3300	0107.9	091.4	26.47	
177.0	016.5000	0125.4	039.3	041.1	000.3300	0107.8	091.0	26.58	
178.0	016.5000	0124.6	039.2	040.7	000.3300	0107.7	090.6	26.69	
179.0	016.5000	0123.7	039.1	040.4	000.3300	0107.6	090.2	26.79	
180.0	016.5000	0122.9	039.0	040.0	000.3300	0107.5	089.8	26.88	
181.0	016.5000	0122.1	038.9	039.6	000.3300	0107.4	089.4	26.98	
182.0	016.5000	0121.5	038.9	039.3	000.3300	0107.3	089.1	27.07	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
183.0	016.5000	0121.3	038.8	038.9	000.3300	0107.1	088.7	27.17
184.0	016.5000	0121.1	038.8	038.5	000.3300	0106.9	088.3	27.26
185.0	016.5000	0121.2	038.8	038.2	000.3300	0106.8	087.9	27.37
186.0	016.5000	0121.5	038.9	037.8	000.3300	0106.7	087.5	27.47
187.0	016.5000	0121.9	038.9	037.5	000.3300	0106.6	087.1	27.58
188.0	016.5000	0122.1	038.9	037.1	000.3300	0106.5	086.8	27.67
189.0	016.5000	0122.3	038.9	036.7	000.3300	0106.4	086.4	27.76
190.0	016.5000	0122.4	039.0	036.3	000.3300	0106.2	086.1	27.85
191.0	016.5000	0122.4	039.0	035.9	000.3300	0106.0	085.8	27.92
192.0	016.5000	0122.5	039.0	035.5	000.3300	0105.8	085.5	28.00
193.0	016.5000	0122.3	038.9	035.1	000.3300	0105.7	085.3	28.06
194.0	016.5000	0121.8	038.9	034.6	000.3300	0105.5	085.1	28.10
195.0	016.5000	0122.0	038.9	034.2	000.3300	0105.4	084.8	28.17
196.0	016.5000	0121.8	038.9	033.8	000.3300	0105.2	084.6	28.22
197.0	016.5000	0121.6	038.9	033.3	000.3300	0105.0	084.4	28.26
198.0	016.5000	0121.9	038.9	032.9	000.3300	0104.8	084.2	28.31
199.0	016.5000	0122.1	038.9	032.5	000.3300	0104.5	084.0	28.35
200.0	016.5000	0122.3	038.9	032.0	000.3300	0104.3	083.8	28.39
201.0	016.5000	0122.2	038.9	031.6	000.3300	0103.9	083.7	28.41
202.0	016.5000	0122.0	038.9	031.1	000.3300	0103.7	083.6	28.43
203.0	016.5000	0121.5	038.9	030.6	000.3300	0103.5	083.6	28.43
204.0	016.5000	0121.3	038.8	030.2	000.3300	0103.3	083.5	28.44
205.0	016.5000	0121.0	038.8	029.7	000.3300	0103.2	083.5	28.44
206.0	016.5000	0120.6	038.7	029.3	000.3300	0103.1	083.5	28.44
207.0	016.5000	0120.3	038.7	028.8	000.3300	0103.0	083.5	28.43
208.0	016.5000	0119.1	038.5	028.3	000.3300	0102.9	083.6	28.39
209.0	016.5000	0118.5	038.5	027.9	000.3300	0102.8	083.7	28.36
210.0	016.5000	0118.2	038.4	027.4	000.3300	0102.6	083.7	28.34
211.0	016.5000	0118.4	038.5	027.0	000.3300	0102.5	083.8	28.33
212.0	016.5000	0118.5	038.5	026.5	000.3300	0102.3	083.8	28.31
213.0	016.5000	0118.0	038.4	026.1	000.3300	0102.2	083.9	28.27
214.0	016.5000	0117.7	038.4	025.6	000.3300	0102.1	084.1	28.23
215.0	016.5000	0117.4	038.3	025.2	000.3300	0102.1	084.2	28.19
216.0	016.5000	0117.4	038.3	024.7	000.3300	0102.2	084.3	28.16
217.0	016.5000	0117.4	038.3	024.3	000.3300	0102.3	084.4	28.13
218.0	016.5000	0116.8	038.3	023.9	000.3300	0102.3	084.7	28.06
219.0	016.5000	0116.6	038.2	023.4	000.3300	0102.4	084.9	28.01
220.0	016.5000	0117.0	038.3	023.0	000.3300	0102.5	085.0	27.98
221.0	016.5000	0117.5	038.3	022.5	000.3300	0102.5	085.1	27.94
222.0	016.5000	0117.5	038.4	022.1	000.3300	0102.5	085.4	27.89
223.0	016.5000	0116.7	038.2	021.7	000.3300	0102.6	085.7	27.79
224.0	016.5000	0115.9	038.1	021.3	000.3300	0102.6	086.0	27.70
225.0	016.5000	0115.4	038.1	021.0	000.3300	0102.6	086.4	27.61
226.0	016.5000	0113.6	037.8	020.6	000.3300	0102.6	086.8	27.47
227.0	016.5000	0112.1	037.6	020.3	000.3300	0102.6	087.3	27.34
228.0	016.5000	0112.1	037.6	019.9	000.3300	0102.6	087.6	27.26
229.0	016.5000	0111.8	037.6	019.5	000.3300	0102.6	088.0	27.17
230.0	016.5000	0110.0	037.3	019.3	000.3300	0102.7	088.5	27.02
231.0	016.5000	0108.7	037.1	019.0	000.3300	0102.7	089.0	26.88
232.0	016.5000	0110.1	037.3	018.5	000.3300	0102.7	089.2	26.84
233.0	016.5000	0113.6	037.8	018.0	000.3300	0102.8	089.1	26.85

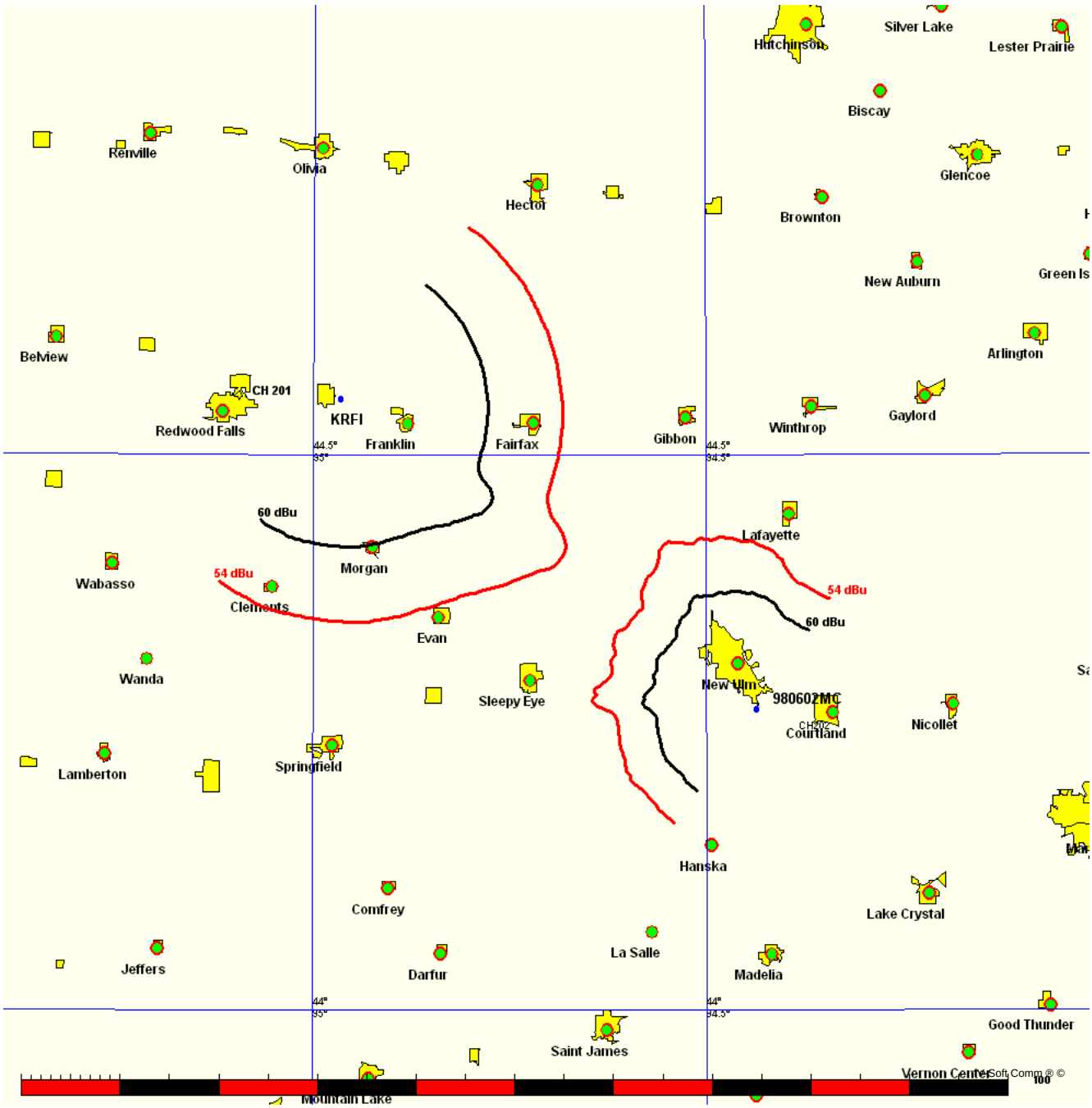
Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
234.0	016.5000	0116.6	038.2	017.5	000.3300	0102.9	089.2	26.84
235.0	016.5000	0117.8	038.4	017.1	000.3300	0102.9	089.5	26.76
236.0	016.5000	0117.7	038.4	016.8	000.3300	0103.0	089.9	26.65
237.0	016.5000	0118.3	038.5	016.4	000.3300	0103.1	090.3	26.56
238.0	016.5000	0119.5	038.6	016.1	000.3300	0103.2	090.6	26.47
239.0	016.5000	0120.6	038.7	015.7	000.3300	0103.3	091.0	26.38
240.0	016.5000	0122.3	038.9	015.3	000.3300	0103.4	091.3	26.30
241.0	016.5000	0124.5	039.2	014.9	000.3300	0103.5	091.6	26.23
242.0	016.5000	0126.9	039.5	014.5	000.3300	0103.7	091.9	26.15
243.0	016.5000	0128.4	039.7	014.1	000.3300	0103.8	092.3	26.06
244.0	016.5000	0129.7	039.9	013.7	000.3300	0103.8	092.7	25.95
245.0	016.5000	0130.6	040.0	013.4	000.3300	0103.9	093.2	25.83
246.0	016.5000	0130.2	039.9	013.2	000.3300	0104.0	093.7	25.68
247.0	016.5000	0129.4	039.8	013.0	000.3300	0104.0	094.4	25.52
248.0	016.5000	0128.1	039.7	012.8	000.3300	0104.1	095.0	25.36
249.0	016.5000	0126.9	039.5	012.6	000.3300	0104.1	095.7	25.19
250.0	016.5000	0125.1	039.3	012.5	000.3300	0104.1	096.4	25.02
251.0	016.5000	0123.5	039.1	012.4	000.3300	0104.2	097.0	24.85
252.0	016.5000	0122.0	038.9	012.3	000.3300	0104.2	097.7	24.69
253.0	016.5000	0119.8	038.6	012.2	000.3300	0104.3	098.4	24.52
254.0	016.5000	0117.9	038.4	012.2	000.3300	0104.3	099.1	24.35
255.0	016.5000	0116.8	038.3	012.0	000.3300	0104.3	099.8	24.20
256.0	016.5000	0116.2	038.2	011.9	000.3300	0104.4	100.4	24.05
257.0	016.5000	0115.5	038.1	011.8	000.3300	0104.4	101.1	23.91
258.0	016.5000	0114.5	038.0	011.7	000.3300	0104.4	101.7	23.76
259.0	016.5000	0113.3	037.8	011.6	000.3300	0104.4	102.4	23.61
260.0	016.5000	0112.1	037.6	011.6	000.3300	0104.4	103.1	23.46
261.0	016.5000	0111.1	037.5	011.5	000.3300	0104.5	103.7	23.32
262.0	016.5000	0110.6	037.4	011.4	000.3300	0104.5	104.4	23.18
263.0	016.5000	0111.1	037.5	011.3	000.3300	0104.5	105.0	23.05
264.0	016.5000	0111.9	037.6	011.1	000.3300	0104.6	105.6	22.93
265.0	016.5000	0112.4	037.7	011.0	000.3300	0104.7	106.2	22.81
266.0	016.5000	0113.1	037.8	010.8	000.3300	0104.7	106.8	22.68
267.0	016.5000	0114.0	037.9	010.7	000.3300	0104.8	107.4	22.56
268.0	016.5000	0114.9	038.0	010.5	000.3300	0104.8	108.0	22.44
269.0	016.5000	0115.5	038.1	010.4	000.3300	0104.9	108.6	22.31

Minnesota Public Radio
KRFI (New) v. 980602MC

FMCommander Single Allocation Study - 11-24-2008 - USGS 03 SEC
KRFI's Overlaps (In= 18.38 km, Out= 13.63 km)

KRFI CH 201 A
Lat= 44 32 59.0, Lng= 94 58 00.0
0.33 kW 120.5 M HAAT, 428 M COR
Prot.= 60 dBu, Intef.= 54 dBu

980602MC CH 202 A BPED19980602MC
Lat= 44 16 11.0, Lng= 94 26 22.0
0.4 kW 54 M HAAT, 351 M COR
Prot.= 60 dBu, Intef.= 54 dBu



11-24-2008 USGS 03 SEC Terrain Data FMOver Analysis

KRFI
Channel = 201A
Max ERP = 0.33 kW
RCAMSL = 428 M
N. Lat. 44 32 59.0
W. Lng. 94 58 00.0
Protected
60 dBu

980602MC BPED19980602MC
Channel = 202A
Max ERP = 0.4 kW
RCAMSL = 351 M
N. Lat. 44 16 11.0
W. Lng. 94 26 22.0
Interfering
54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
066.0	000.3300	0109.5	014.4	322.3	000.4000	0065.0	046.9	37.79	
067.0	000.3300	0109.7	014.4	322.3	000.4000	0065.0	046.6	37.87	
068.0	000.3300	0109.8	014.5	322.2	000.4000	0065.0	046.4	37.96	
069.0	000.3300	0110.3	014.5	322.1	000.4000	0065.0	046.1	38.04	
070.0	000.3300	0110.6	014.5	322.1	000.4000	0064.9	045.9	38.12	
071.0	000.3300	0110.7	014.5	322.0	000.4000	0064.9	045.6	38.21	
072.0	000.3300	0111.0	014.5	321.9	000.4000	0065.0	045.4	38.29	
073.0	000.3300	0111.2	014.6	321.8	000.4000	0065.0	045.2	38.38	
074.0	000.3300	0111.5	014.6	321.7	000.4000	0065.1	044.9	38.47	
075.0	000.3300	0111.7	014.6	321.6	000.4000	0065.1	044.7	38.56	
076.0	000.3300	0111.9	014.6	321.5	000.4000	0065.1	044.4	38.64	
077.0	000.3300	0112.2	014.6	321.3	000.4000	0065.2	044.2	38.74	
078.0	000.3300	0112.5	014.6	321.2	000.4000	0065.3	044.0	38.83	
079.0	000.3300	0112.6	014.7	321.1	000.4000	0065.3	043.7	38.92	
080.0	000.3300	0112.7	014.7	320.9	000.4000	0065.4	043.5	39.00	
081.0	000.3300	0112.9	014.7	320.8	000.4000	0065.3	043.3	39.08	
082.0	000.3300	0112.9	014.7	320.6	000.4000	0065.3	043.0	39.16	
083.0	000.3300	0113.0	014.7	320.4	000.4000	0065.3	042.8	39.24	
084.0	000.3300	0113.2	014.7	320.2	000.4000	0065.3	042.6	39.31	
085.0	000.3300	0113.4	014.7	320.1	000.4000	0065.3	042.4	39.40	
086.0	000.3300	0113.7	014.7	319.9	000.4000	0065.1	042.2	39.46	
087.0	000.3300	0114.0	014.7	319.7	000.4000	0064.9	042.0	39.52	
088.0	000.3300	0114.4	014.8	319.5	000.4000	0064.7	041.7	39.57	
089.0	000.3300	0114.9	014.8	319.3	000.4000	0064.4	041.5	39.63	
090.0	000.3300	0115.4	014.8	319.1	000.4000	0064.1	041.3	39.67	
091.0	000.3300	0115.9	014.9	318.9	000.4000	0063.7	041.1	39.70	
092.0	000.3300	0116.2	014.9	318.7	000.4000	0063.2	040.9	39.73	
093.0	000.3300	0116.5	014.9	318.4	000.4000	0062.8	040.7	39.76	
094.0	000.3300	0116.8	014.9	318.2	000.4000	0062.6	040.5	39.81	
095.0	000.3300	0117.0	014.9	317.9	000.4000	0062.4	040.3	39.86	
096.0	000.3300	0117.3	015.0	317.7	000.4000	0062.2	040.1	39.91	
097.0	000.3300	0117.4	015.0	317.4	000.4000	0062.0	039.9	39.96	
098.0	000.3300	0117.4	015.0	317.1	000.4000	0061.8	039.8	40.00	
099.0	000.3300	0117.5	015.0	316.8	000.4000	0061.7	039.6	40.04	
100.0	000.3300	0117.7	015.0	316.5	000.4000	0061.5	039.4	40.08	
101.0	000.3300	0118.1	015.0	316.2	000.4000	0061.4	039.3	40.14	
102.0	000.3300	0118.5	015.0	315.9	000.4000	0061.2	039.1	40.19	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
103.0	000.3300	0118.8	015.1	315.6	000.4000	0060.9	038.9	40.22
104.0	000.3300	0119.1	015.1	315.3	000.4000	0060.6	038.8	40.23
105.0	000.3300	0119.4	015.1	315.0	000.4000	0060.0	038.6	40.22
106.0	000.3300	0119.8	015.1	314.7	000.4000	0059.4	038.5	40.21
107.0	000.3300	0120.1	015.1	314.3	000.4000	0058.7	038.3	40.18
108.0	000.3300	0120.3	015.2	314.0	000.4000	0057.8	038.2	40.10
109.0	000.3300	0120.4	015.2	313.6	000.4000	0056.8	038.1	40.02
110.0	000.3300	0120.6	015.2	313.3	000.4000	0055.8	038.0	39.92
111.0	000.3300	0120.8	015.2	312.9	000.4000	0055.2	037.9	39.88
112.0	000.3300	0121.3	015.2	312.6	000.4000	0054.8	037.7	39.88
113.0	000.3300	0122.0	015.3	312.2	000.4000	0054.3	037.6	39.85
114.0	000.3300	0122.7	015.3	311.8	000.4000	0054.0	037.5	39.85
115.0	000.3300	0123.3	015.4	311.4	000.4000	0053.7	037.4	39.86
116.0	000.3300	0125.0	015.5	311.1	000.4000	0053.5	037.2	39.89
117.0	000.3300	0128.2	015.7	310.8	000.4000	0053.4	036.9	39.99
118.0	000.3300	0131.8	015.9	310.4	000.4000	0053.4	036.6	40.11
119.0	000.3300	0138.0	016.4	310.1	000.4000	0053.5	036.1	40.31
120.0	000.3300	0147.4	017.0	309.9	000.4000	0053.6	035.4	40.61
121.0	000.3300	0157.1	017.6	309.5	000.4000	0053.7	034.8	40.90
122.0	000.3300	0163.7	018.0	309.1	000.4000	0053.9	034.3	41.10
123.0	000.3300	0168.2	018.3	308.6	000.4000	0053.9	034.0	41.23
124.0	000.3300	0170.7	018.4	308.1	000.4000	0053.9	033.9	41.30
125.0	000.3300	0171.4	018.5	307.6	000.4000	0054.0	033.8	41.34
126.0	000.3300	0171.5	018.5	307.0	000.4000	0054.1	033.8	41.35
127.0	000.3300	0170.9	018.5	306.5	000.4000	0054.1	033.8	41.34
128.0	000.3300	0169.7	018.4	305.9	000.4000	0054.0	033.9	41.30
129.0	000.3300	0166.6	018.2	305.4	000.4000	0054.1	034.1	41.23
130.0	000.3300	0163.7	018.0	304.9	000.4000	0054.1	034.3	41.15
131.0	000.3300	0159.5	017.8	304.4	000.4000	0054.2	034.6	41.05
132.0	000.3300	0157.1	017.6	303.9	000.4000	0054.3	034.8	40.98
133.0	000.3300	0154.1	017.4	303.5	000.4000	0054.3	035.0	40.89
134.0	000.3300	0151.9	017.3	303.1	000.4000	0054.3	035.2	40.80
135.0	000.3300	0149.6	017.2	302.6	000.4000	0054.2	035.4	40.71
136.0	000.3300	0147.3	017.0	302.2	000.4000	0054.2	035.6	40.62
137.0	000.3300	0145.2	016.9	301.8	000.4000	0054.3	035.9	40.54
138.0	000.3300	0143.6	016.7	301.4	000.4000	0054.4	036.0	40.48
139.0	000.3300	0142.2	016.7	301.0	000.4000	0054.6	036.2	40.45
140.0	000.3300	0139.7	016.5	300.7	000.4000	0055.1	036.5	40.41
141.0	000.3300	0137.6	016.3	300.3	000.4000	0055.6	036.7	40.39
142.0	000.3300	0135.2	016.2	300.0	000.4000	0056.1	037.0	40.36
143.0	000.3300	0132.9	016.0	299.7	000.4000	0056.5	037.2	40.32
144.0	000.3300	0131.4	015.9	299.4	000.4000	0056.8	037.4	40.28
145.0	000.3300	0130.1	015.8	299.1	000.4000	0057.0	037.6	40.22
146.0	000.3300	0128.1	015.7	298.8	000.4000	0057.1	037.9	40.14
147.0	000.3300	0126.1	015.5	298.5	000.4000	0057.2	038.1	40.06
148.0	000.3300	0124.4	015.4	298.3	000.4000	0057.3	038.4	39.98
149.0	000.3300	0123.5	015.4	298.0	000.4000	0057.4	038.6	39.92
150.0	000.3300	0122.9	015.3	297.7	000.4000	0057.4	038.7	39.86
151.0	000.3300	0122.0	015.3	297.4	000.4000	0057.5	038.9	39.79
152.0	000.3300	0121.2	015.2	297.1	000.4000	0057.5	039.1	39.72
153.0	000.3300	0120.7	015.2	296.8	000.4000	0057.5	039.3	39.65

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
154.0	000.3300	0120.3	015.2	296.5	000.4000	0057.5	039.5	39.57
155.0	000.3300	0119.9	015.1	296.3	000.4000	0057.4	039.7	39.49
156.0	000.3300	0119.2	015.1	296.0	000.4000	0057.3	039.9	39.40
157.0	000.3300	0118.7	015.1	295.7	000.4000	0057.2	040.1	39.31
158.0	000.3300	0118.1	015.0	295.5	000.4000	0057.0	040.3	39.22
159.0	000.3300	0117.6	015.0	295.3	000.4000	0056.9	040.5	39.13
160.0	000.3300	0117.3	015.0	295.0	000.4000	0056.8	040.7	39.04
161.0	000.3300	0117.1	014.9	294.8	000.4000	0056.7	040.9	38.95
162.0	000.3300	0117.1	014.9	294.5	000.4000	0056.6	041.1	38.87
163.0	000.3300	0117.2	015.0	294.3	000.4000	0056.4	041.3	38.77
164.0	000.3300	0117.3	015.0	294.0	000.4000	0056.2	041.4	38.67
165.0	000.3300	0117.3	015.0	293.8	000.4000	0056.0	041.6	38.57
166.0	000.3300	0116.9	014.9	293.6	000.4000	0055.8	041.9	38.47
167.0	000.3300	0116.6	014.9	293.4	000.4000	0055.7	042.1	38.37
168.0	000.3300	0116.4	014.9	293.2	000.4000	0055.5	042.3	38.27
169.0	000.3300	0116.2	014.9	293.1	000.4000	0055.3	042.5	38.17
170.0	000.3300	0116.3	014.9	292.9	000.4000	0055.1	042.7	38.05
171.0	000.3300	0116.4	014.9	292.7	000.4000	0054.8	043.0	37.95
172.0	000.3300	0116.6	014.9	292.5	000.4000	0054.6	043.2	37.84
173.0	000.3300	0116.7	014.9	292.3	000.4000	0054.4	043.4	37.73
174.0	000.3300	0116.4	014.9	292.2	000.4000	0054.2	043.6	37.63
175.0	000.3300	0116.4	014.9	292.0	000.4000	0054.0	043.9	37.52
176.0	000.3300	0115.9	014.9	291.9	000.4000	0053.9	044.1	37.42
177.0	000.3300	0115.7	014.9	291.8	000.4000	0053.8	044.4	37.33
178.0	000.3300	0115.3	014.8	291.7	000.4000	0053.7	044.6	37.23
179.0	000.3300	0115.0	014.8	291.6	000.4000	0053.6	044.9	37.14
180.0	000.3300	0114.6	014.8	291.5	000.4000	0053.5	045.1	37.05
181.0	000.3300	0114.3	014.8	291.4	000.4000	0053.5	045.4	36.96
182.0	000.3300	0114.0	014.7	291.3	000.4000	0053.4	045.6	36.88
183.0	000.3300	0114.0	014.7	291.2	000.4000	0053.4	045.8	36.79
184.0	000.3300	0113.8	014.7	291.1	000.4000	0053.4	046.1	36.71
185.0	000.3300	0113.7	014.7	291.0	000.4000	0053.4	046.3	36.63
186.0	000.3300	0113.6	014.7	291.0	000.4000	0053.4	046.6	36.55

11-24-2008 USGS 03 SEC Terrain Data

980602MC BPED19980602MC
Channel = 202A
Max ERP = 0.4 kW
RCAMSL = 351 M
N. Lat. 44 16 11.0
W. Lng. 94 26 22.0
Protected
   60 dBu

KRFI
Channel = 201A
Max ERP = 0.33 kW
RCAMSL = 428 M
N. Lat. 44 32 59.0
W. Lng. 94 58 00.0
Interfering
   54 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
247.0	000.4000	0049.5	010.4	137.2	000.3300	0144.7	047.9	42.46	
248.0	000.4000	0048.9	010.3	137.1	000.3300	0145.0	047.7	42.53	
249.0	000.4000	0048.4	010.3	137.0	000.3300	0145.2	047.6	42.60	
250.0	000.4000	0048.1	010.2	136.8	000.3300	0145.5	047.4	42.68	
251.0	000.4000	0048.2	010.2	136.8	000.3300	0145.6	047.2	42.75	
252.0	000.4000	0048.2	010.2	136.7	000.3300	0145.8	047.1	42.82	
253.0	000.4000	0048.2	010.2	136.6	000.3300	0146.0	046.9	42.90	
254.0	000.4000	0048.1	010.2	136.5	000.3300	0146.2	046.8	42.97	
255.0	000.4000	0048.2	010.2	136.4	000.3300	0146.4	046.6	43.05	
256.0	000.4000	0048.1	010.2	136.3	000.3300	0146.7	046.4	43.12	
257.0	000.4000	0047.9	010.2	136.1	000.3300	0147.0	046.3	43.20	
258.0	000.4000	0047.7	010.2	136.0	000.3300	0147.3	046.2	43.27	
259.0	000.4000	0047.6	010.2	135.9	000.3300	0147.6	046.0	43.35	
260.0	000.4000	0047.7	010.2	135.8	000.3300	0147.9	045.9	43.43	
261.0	000.4000	0047.7	010.2	135.6	000.3300	0148.3	045.7	43.50	
262.0	000.4000	0047.4	010.1	135.5	000.3300	0148.7	045.6	43.57	
263.0	000.4000	0047.1	010.1	135.3	000.3300	0149.0	045.5	43.64	
264.0	000.4000	0047.4	010.1	135.2	000.3300	0149.2	045.3	43.72	
265.0	000.4000	0047.5	010.1	135.1	000.3300	0149.5	045.2	43.79	
266.0	000.4000	0047.8	010.2	135.0	000.3300	0149.7	045.0	43.87	
267.0	000.4000	0048.4	010.2	134.9	000.3300	0149.9	044.8	43.96	
268.0	000.4000	0049.5	010.4	134.8	000.3300	0150.0	044.6	44.05	
269.0	000.4000	0051.5	010.6	134.9	000.3300	0149.9	044.3	44.17	
270.0	000.4000	0054.5	010.9	135.0	000.3300	0149.7	044.0	44.31	
271.0	000.4000	0057.8	011.2	135.1	000.3300	0149.4	043.6	44.45	
272.0	000.4000	0060.2	011.4	135.1	000.3300	0149.4	043.3	44.57	
273.0	000.4000	0061.2	011.5	135.0	000.3300	0149.7	043.2	44.67	
274.0	000.4000	0060.2	011.4	134.7	000.3300	0150.3	043.1	44.73	
275.0	000.4000	0058.6	011.3	134.4	000.3300	0151.2	043.1	44.79	
276.0	000.4000	0060.1	011.4	134.3	000.3300	0151.4	042.8	44.90	
277.0	000.4000	0060.1	011.4	134.1	000.3300	0151.8	042.7	44.97	
278.0	000.4000	0057.9	011.2	133.7	000.3300	0152.4	042.7	44.99	
279.0	000.4000	0056.4	011.1	133.4	000.3300	0153.0	042.7	45.02	
280.0	000.4000	0055.1	011.0	133.1	000.3300	0153.9	042.7	45.07	

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
281.0	000.4000	0053.4	010.8	132.7	000.3300	0154.9	042.8	45.10
282.0	000.4000	0052.7	010.7	132.5	000.3300	0155.6	042.7	45.16
283.0	000.4000	0052.2	010.7	132.2	000.3300	0156.4	042.7	45.22
284.0	000.4000	0052.0	010.6	132.0	000.3300	0157.1	042.6	45.29
285.0	000.4000	0052.2	010.7	131.8	000.3300	0157.6	042.5	45.36
286.0	000.4000	0053.0	010.7	131.6	000.3300	0158.0	042.4	45.45
287.0	000.4000	0053.7	010.8	131.4	000.3300	0158.4	042.2	45.54
288.0	000.4000	0054.2	010.9	131.2	000.3300	0158.8	042.1	45.61
289.0	000.4000	0054.1	010.9	131.0	000.3300	0159.6	042.0	45.68
290.0	000.4000	0053.6	010.8	130.7	000.3300	0160.7	042.0	45.75
291.0	000.4000	0053.4	010.8	130.4	000.3300	0161.7	042.0	45.82
292.0	000.4000	0054.0	010.9	130.2	000.3300	0162.7	041.8	45.92
293.0	000.4000	0055.2	011.0	130.0	000.3300	0163.5	041.7	46.04
294.0	000.4000	0056.1	011.1	129.8	000.3300	0164.4	041.5	46.15
295.0	000.4000	0056.8	011.1	129.6	000.3300	0165.2	041.4	46.24
296.0	000.4000	0057.3	011.2	129.3	000.3300	0165.8	041.3	46.31
297.0	000.4000	0057.5	011.2	129.1	000.3300	0166.4	041.3	46.37
298.0	000.4000	0057.4	011.2	128.8	000.3300	0167.1	041.2	46.42
299.0	000.4000	0057.1	011.1	128.5	000.3300	0167.9	041.2	46.46
300.0	000.4000	0056.1	011.1	128.2	000.3300	0168.8	041.3	46.48
301.0	000.4000	0054.7	010.9	128.0	000.3300	0169.8	041.4	46.48
302.0	000.4000	0054.2	010.9	127.7	000.3300	0170.3	041.4	46.49
303.0	000.4000	0054.3	010.9	127.4	000.3300	0170.6	041.4	46.51
304.0	000.4000	0054.3	010.9	127.2	000.3300	0170.8	041.4	46.53
305.0	000.4000	0054.1	010.9	126.9	000.3300	0171.0	041.4	46.54
306.0	000.4000	0054.0	010.9	126.6	000.3300	0171.2	041.4	46.55
307.0	000.4000	0054.1	010.9	126.4	000.3300	0171.4	041.4	46.56
308.0	000.4000	0053.9	010.8	126.1	000.3300	0171.5	041.4	46.55
309.0	000.4000	0053.9	010.8	125.9	000.3300	0171.5	041.4	46.55
310.0	000.4000	0053.6	010.8	125.6	000.3300	0171.5	041.5	46.53
311.0	000.4000	0053.4	010.8	125.3	000.3300	0171.5	041.5	46.52
312.0	000.4000	0054.1	010.9	125.1	000.3300	0171.4	041.4	46.54
313.0	000.4000	0055.3	011.0	124.8	000.3300	0171.3	041.4	46.57
314.0	000.4000	0057.8	011.2	124.5	000.3300	0171.2	041.2	46.66
315.0	000.4000	0060.0	011.4	124.2	000.3300	0170.9	041.0	46.71
316.0	000.4000	0061.3	011.5	123.9	000.3300	0170.4	040.9	46.72
317.0	000.4000	0061.8	011.5	123.6	000.3300	0169.8	040.9	46.69
318.0	000.4000	0062.4	011.6	123.3	000.3300	0169.1	040.9	46.65
319.0	000.4000	0063.9	011.7	123.0	000.3300	0168.0	040.9	46.62
320.0	000.4000	0065.3	011.8	122.6	000.3300	0166.7	040.8	46.58
321.0	000.4000	0065.4	011.8	122.4	000.3300	0165.4	040.9	46.49
322.0	000.4000	0064.9	011.8	122.1	000.3300	0164.2	041.0	46.38
323.0	000.4000	0065.4	011.8	121.8	000.3300	0162.6	041.0	46.29
324.0	000.4000	0066.0	011.9	121.5	000.3300	0160.8	041.1	46.18
325.0	000.4000	0067.9	012.0	121.2	000.3300	0158.5	041.0	46.08
326.0	000.4000	0069.2	012.1	120.8	000.3300	0155.7	041.0	45.94
327.0	000.4000	0072.2	012.3	120.4	000.3300	0151.7	040.9	45.78
328.0	000.4000	0075.4	012.6	120.0	000.3300	0147.4	040.8	45.61
329.0	000.4000	0076.5	012.7	119.7	000.3300	0144.1	040.8	45.41
330.0	000.4000	0077.2	012.7	119.4	000.3300	0141.1	040.9	45.22
331.0	000.4000	0078.1	012.8	119.1	000.3300	0138.4	040.9	45.04

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)
332.0	000.4000	0078.0	012.8	118.8	000.3300	0136.3	041.1	44.87
333.0	000.4000	0076.4	012.7	118.6	000.3300	0135.1	041.3	44.71
334.0	000.4000	0074.7	012.5	118.5	000.3300	0134.2	041.5	44.55
335.0	000.4000	0073.9	012.5	118.3	000.3300	0133.1	041.7	44.41
336.0	000.4000	0072.8	012.4	118.1	000.3300	0132.3	041.9	44.28
337.0	000.4000	0071.3	012.3	118.0	000.3300	0131.7	042.1	44.15
338.0	000.4000	0069.9	012.2	117.8	000.3300	0131.2	042.3	44.03
339.0	000.4000	0069.2	012.1	117.7	000.3300	0130.6	042.5	43.92
340.0	000.4000	0069.7	012.2	117.4	000.3300	0129.7	042.6	43.82
341.0	000.4000	0071.0	012.3	117.1	000.3300	0128.7	042.7	43.73
342.0	000.4000	0071.3	012.3	116.9	000.3300	0127.8	042.8	43.62
343.0	000.4000	0069.8	012.2	116.8	000.3300	0127.4	043.1	43.50
344.0	000.4000	0068.6	012.1	116.7	000.3300	0127.0	043.3	43.39
345.0	000.4000	0067.7	012.0	116.6	000.3300	0126.6	043.5	43.28
346.0	000.4000	0067.5	012.0	116.4	000.3300	0126.1	043.6	43.18
347.0	000.4000	0067.9	012.0	116.2	000.3300	0125.5	043.8	43.09
348.0	000.4000	0068.0	012.0	116.0	000.3300	0125.0	043.9	43.00
349.0	000.4000	0067.5	012.0	115.9	000.3300	0124.7	044.1	42.90
350.0	000.4000	0066.8	011.9	115.8	000.3300	0124.5	044.3	42.81
351.0	000.4000	0066.4	011.9	115.7	000.3300	0124.3	044.5	42.72
352.0	000.4000	0066.1	011.9	115.6	000.3300	0124.1	044.7	42.63
353.0	000.4000	0064.9	011.8	115.5	000.3300	0124.0	044.9	42.53
354.0	000.4000	0063.6	011.7	115.5	000.3300	0123.9	045.2	42.43
355.0	000.4000	0062.7	011.6	115.4	000.3300	0123.8	045.4	42.34
356.0	000.4000	0062.6	011.6	115.3	000.3300	0123.7	045.6	42.26
357.0	000.4000	0062.8	011.6	115.2	000.3300	0123.5	045.7	42.18
358.0	000.4000	0062.9	011.6	115.0	000.3300	0123.4	045.9	42.10
359.0	000.4000	0062.1	011.6	115.0	000.3300	0123.3	046.1	42.02
000.0	000.4000	0060.8	011.5	115.0	000.3300	0123.3	046.3	41.93
001.0	000.4000	0059.7	011.4	115.0	000.3300	0123.3	046.6	41.84
002.0	000.4000	0059.1	011.3	114.9	000.3300	0123.3	046.8	41.76
003.0	000.4000	0058.5	011.3	114.9	000.3300	0123.2	047.0	41.68
004.0	000.4000	0058.1	011.2	114.9	000.3300	0123.2	047.2	41.60
005.0	000.4000	0057.6	011.2	114.8	000.3300	0123.2	047.3	41.52
006.0	000.4000	0057.0	011.1	114.8	000.3300	0123.2	047.6	41.44
007.0	000.4000	0055.8	011.0	114.9	000.3300	0123.2	047.8	41.35

Channel-Six TV Protection Study

KAAL LI 06- 2C Dom 100.000 kW 320 M HAAT VHN
Austin MN 696.0 M COR AMSL
Lat= 43 37 42.0, Lng= 93 09 12.0
Kaal-tv, Llc BLCT2236
Fac ID# 18285
Dist.=177.69 km, Azi=124.6°, Rev Azi=305.9°

Direct line HAAT Grade B, 47 dBu= 104.28 km & Grade A= 54.93 km

Distance from reference to Grade B = 73.41 km
Cutoff Dist from Full Service or Class CA= 265
Maximum Co-located power= 1.1 kW
KAAL Signal Contour at Reference location = 28.4 dBu
CH. 201, U/D ratio = 7.0 dB, Maximum FM signal = 54.0 dBu , 6 dB credit added

TV/FM D to U values

47.0	54.0	55.0	59.7	63.0	65.4	71.0	72.1	79.0	79.4	87.0	86.7
48.0	54.7	56.0	60.4	64.0	66.1	72.0	73.0	80.0	80.3	88.0	87.7
49.0	55.3	57.0	61.1	65.0	66.9	73.0	73.9	81.0	81.2	89.0	88.6
50.0	56.0	58.0	61.7	66.0	67.7	74.0	74.7	82.0	82.1	90.0	89.5
51.0	56.7	59.0	62.4	67.0	68.6	75.0	75.7	83.0	83.0	91.0	89.5
52.0	57.5	60.0	63.1	68.0	69.4	76.0	76.6	84.0	83.9	92.0	89.5
53.0	58.2	61.0	63.9	69.0	70.3	77.0	77.5	85.0	84.9	93.0	89.5
54.0	58.9	62.0	64.6	70.0	71.2	78.0	78.4	86.0	85.8	94.0	89.5

Proposed KRFI Channel 6 TV Protection

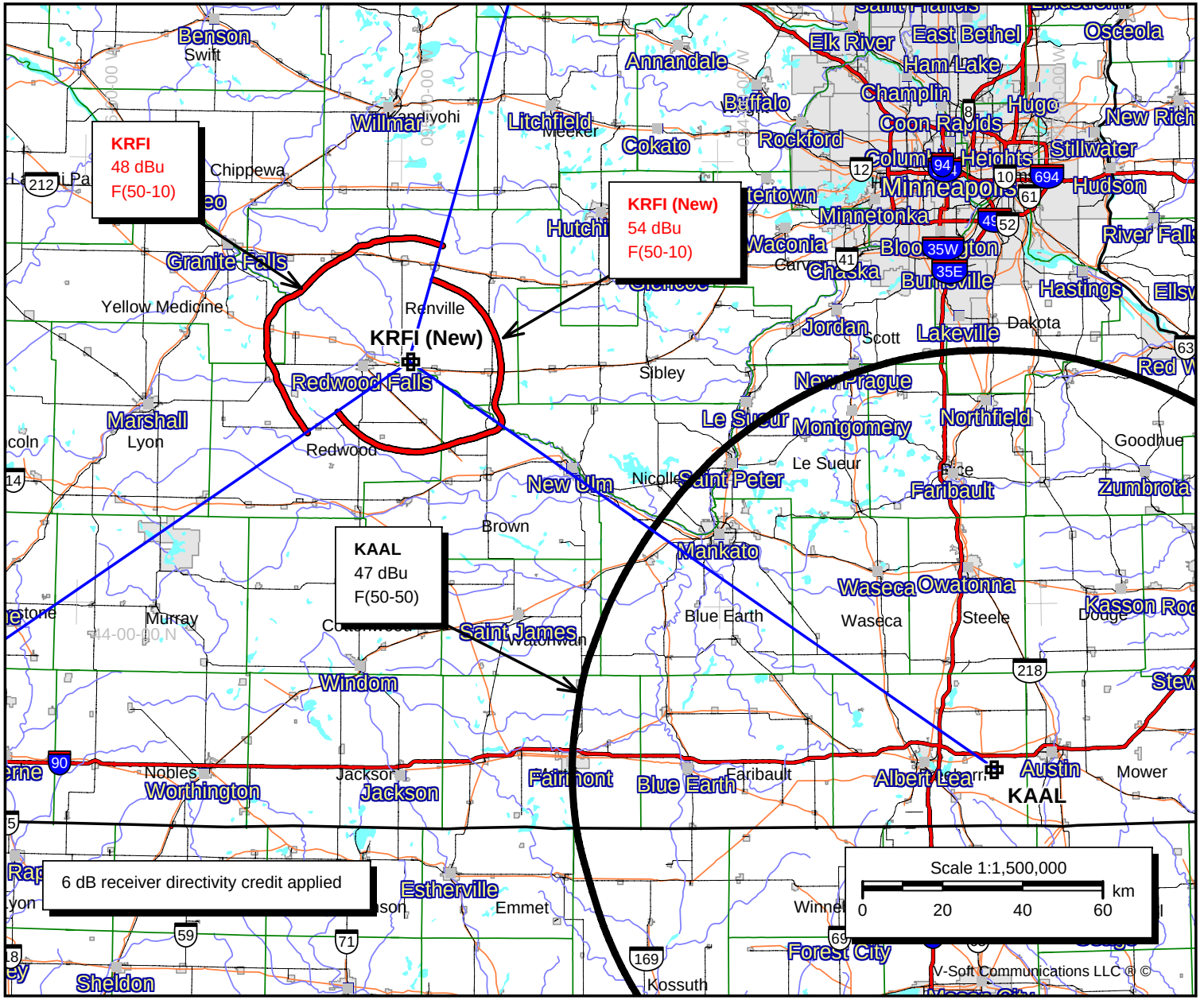
KRFI (New)

Latitude: 44-32-59 N
Longitude: 094-58-00 W
Study ERP: 0.3382 kW
Channel: 201
Frequency: 88.1 MHz
AMSL Height: 428.0 m
Elevation: 292.42 m
Horiz. Pattern: Omni
Vert. Pattern: No

KAAL
BLCT2236
Latitude: 43-37-42 N
Longitude: 093-09-12 W
ERP: 100.00 kW
Channel: 06-
Frequency: 84.5 MHz
AMSL Height: 696.0 m
Elevation: 394.0 m
Horiz. Pattern: Omni
Vert. Pattern: Yes
Elec Tilt: 0.0

11/24/2008

Doug Vernier
1600 Picturesque Drive
Cedar Falls, Iowa 50613
Telecommunication Consultants



N. Lat. = 443259.0 W. Lng. = 945800.0
HAAT and Distance to Contour
V-Soft 3-16 km, 131 pts Method - USGS 03 SEC
KRFI (New) Distance to Interference Contours for TV 6 Protection

Azi.	AV EL	HAAT	ERP kW	dBk	Field	48-F1	54-F1
000	319.0	109.0	0.3383	-4.71	1.000	30.93	21.85
045	319.8	108.2	0.3383	-4.71	1.000	30.80	21.77
090	312.6	115.4	0.3383	-4.71	1.000	31.89	22.52
135	278.4	149.6	0.3383	-4.71	1.000	36.21	25.67
180	313.4	114.6	0.3383	-4.71	1.000	31.77	22.44
225	317.0	111.0	0.3383	-4.71	1.000	31.22	22.06
270	284.7	143.3	0.3383	-4.71	1.000	35.47	25.09
315	312.9	115.1	0.3383	-4.71	1.000	31.83	22.48

Ave El= 307.23 M HAAT= 120.77 M AMSL= 428 M

N. Lat. = 433742.0 W. Lng. = 930912.0
HAAT and Distance to Contour
V-Soft 3.2-16.1 km, 130 pts Method - USGS 03 SEC
KAAL , Kaal-tv, Llc, BLCT2236

Azi.	AV EL	HAAT	ERP kW	dBk	Field	47-F5
000	381.1	314.9	100.0000	20.00	1.000	104.75
045	383.6	312.4	100.0000	20.00	1.000	104.56
090	367.9	328.1	100.0000	20.00	1.000	105.73
135	372.9	323.1	100.0000	20.00	1.000	105.36
180	382.3	313.7	100.0000	20.00	1.000	104.66
225	376.3	319.7	100.0000	20.00	1.000	105.12
270	373.2	322.8	100.0000	20.00	1.000	105.34
315	385.3	310.7	100.0000	20.00	1.000	104.43

Ave El= 377.82 M HAAT= 318.18 M AMSL= 696 M

EXHIBIT #22

ENVIRONMENTAL PROTECTION ACT

Minnesota Public Radio
KRFI
Minor Modification to Construction Permit
BNPED-20071016AHN
Channel 201A– 0.33 kW H & V
Redwood Falls, MN
November 2008

The applicant proposes the use of an existing registered tower (ASR #1037568), built in 1957. Since the tower was constructed prior to March 16, 2001, further environmental study was deemed unnecessary. Access to the site is restricted by a locked fence that is posted with RF warning signs and emergency contact information.

KRFI will be using a combined antenna with FM translator K216FZ, which operates with 0.115 kW ERP. The combined power is 0.445 kW.

The proposed one-bay, circularly polarized antenna will be energized such that it produces 0.445 kW effective radiated power from a center of radiation of 122 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 predicted level of RF non-ionization emissions at a position of 2 meters above ground (head-height) at the base of the tower for the proposed 1-bay Shively 6812 (Type #6) antenna is 0.01 microwatts per square centimeter ($\mu W/cm^2$), which is 0.001 percent of the maximum for this controlled area.

There are thirteen LPTV stations on the tower. A list of these stations is found attached. However, since the predicted level of emissions for the instant proposal is less than 1% of maximum, no further calculations were deemed necessary.

The applicant will protect workers on the tower by either reducing ERP or terminating transmission.

Consequently, it appears that the proposed FM station will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic field rules and regulations.