| Federal Communications Commission Washington, D.C. 20554 Approved by OMB Washington, D.C. 20554 3060-0034(March 2001) | FOR FCC USE ONLY |
|---|--|
| FCC 340 | |
| EOD DECEDVED CITARNET | FOR COMMISSION USE ONLY FILE NO. BMPED - 20011114ABR |

| | ection I - General Information | | | | | | |
|---------|--|---|---|---|------------------------------|--|--|
| 1. | Legal Name of the Licensee/Pern MINNESOTA PUBLIC RADIO | nittee | | | | | |
| | Mailing Address 45 EAST 7TH ST. | | | | | | |
| | City ST. PAUL | State or Countr MN | y (if foreign address) | | ZIP Code 55101 - | | |
| | Telephone Number (include area code) 6512901259 | E-Mail Address | , | | | | |
| | | Call Sign KNBJ | | | Facility Identifier 42966 | | |
| 2. | Contact Representative (if other to TODD STANSBURY | han licensee/Per | mittee) | Firm or Comp WILEY REIN | ipany Name N & FIELDING | | |
| | Telephone Number (include area 2027194948 | code) | | E-Mail Address (if available) TSTANSBURY@WRF.COM | | | |
| اا | | | AMERICAN | / | | | |
| 3. | Is this application being filed in re If Yes, specify closing date and/or | | | 1 | · C Yes No | | |
| | | | | | · C Yes No | | |
| | If Yes, specify closing date and/or | | | truction permi | | | |
| | If Yes, specify closing date and/or Application Purpose | r window numbe | er: | _ | t | | |
| | Application Purpose New station | r window numbe | Major Modification of cons | struction permi | t t | | |
| | Application Purpose New station Major Change in licensed facility | r window numbe | Major Modification of cons Minor Modification of cons | struction permi | t it | | |
| | Application Purpose New station Major Change in licensed facility | r window numbe | Major Modification of cons Minor Modification of cons Major Amendment to pendi | struction permi | t it | | |
| 3. 4 | Application Purpose New station Major Change in licensed facil | r window numbe | Major Modification of cons Minor Modification of cons Major Amendment to pendi | struction permi | t it | | |
| | Application Purpose New station Major Change in licensed facil Minor Change in licensed facil (a) File number of original construt (b) Service Type: (c) Community of License: City: BEMIDJI State: N | lity Lity Lity Lity Lity Lity Lity Lity L | Major Modification of cons Minor Modification of cons Major Amendment to pendi Minor Amendment to pendi | struction permi | t it | | |
| | Application Purpose New station Major Change in licensed facil Minor Change in licensed facil a) File number of original construction (b) Service Type: (c) Community of License: | lity Lity Lity Lity Lity Lity Lity Lity L | Major Modification of cons Minor Modification of cons Major Amendment to pendi Minor Amendment to pendi | struction permi | t it | | |

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 C 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 educationl institution; or | C Yes C No |
| | b. a governmental entity other than a school; or | ⊂ Yes ⊂ No |
| | c. a nonprofit educationl organization, other than described in a. or b. | C Yes C No |
| 3. | For applicants checking "Yes" to question 2(c) and applying for a new noncommercial educationl 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. | C Yes C No |
| 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. | Yes No FCC FileNumber |
| | 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). | [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. | C Yes C 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] | |
| | 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 | See Explanation in [Exhibit 5] |
| | b. any pending broadcast application in which character issues have been raised. | |
| 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 See Explanation in [Exhibit 6] |
|---------------------------------|---|--|
| | 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. | |
| 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 and foreign governments. | Yes No |
| | | [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 |
| | 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. | C Yes C No |
| QU PR | ESTIONS 15, 16 AND 17 APPLY ONLY TO APPLICANTS FOR NEW STATIONS. OTHER AI OCEED TO QUESTION 18. | PPLICANTS CAN |
| 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? | C Yes C 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? | C Yes C No |
| app app Coi app and | TE: If Yes to 16. or 17., the application cannot be granted unconditionally until all of the necessary function repriated. In the case of grants from the National Telecommunications and Information Administration, licant's part is required. If the applicant relies on funds from a source specified in Question 17., the applicants when the funds are committed or appropriated. This should be accomplished by letter amelication. Applicants should take note that the Commission's construction period is not considered "tolled that any permit granted conditionally on funding will expire if the station is not constructed for any reasiding. | no further action on the licant must advise the endment to the "by funding difficulties" |
| QU STA IV. | ESTIONS 18 AND 19 DO NOT APPLY TO APPLICATIONS FOR NEW STATIONS. APPLICA ATIONS CAN PROCEED TO SECTION III. APPLICANTS FOR NEW TV STATIONS CAN PR | NTS FOR NEW FM ROCEED TO SECTION |
| Hol | ding 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). | • 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).

| 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 |
|---|--------|
| 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 |

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.

| | 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. | C Yes C 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. | CYes CNo |
| | (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? | C Yes C No |
| | 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). | [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. | C Yes C No |
| 14 | Technical Parameters: Applicant certifies that the numbers in the boxes below accurately reflect the new | C Yes C No |

| 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) | |
|---|--|
| New area served in square kilometers (excluding areas of water): | |
| Population served based on the most recent census block data from the United States Bureau of Census using the centroid method: | |

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.

(number of commercial and non-commercial licenses and construction permits)

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. (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 Title of Person Signing EXECUTIVE VICE PRESIDENT |
|-----------|---|
| Signature | Date 06/24/2002 |

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., Consultir | Relationship to Applicant (e.g., Consulting Engineer) | | | | |
|--|--|---|--|--|--|--|
| Signature | Date 06/13/2002 | | | | | |
| Mailing Address 1600 PICTURESQUE DRIVE | | | | | | |
| 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).

| Se | Section VII - FM Engineering on Channels 200-220 | | | | | | | | | | | | |
|------|--|----------|-----------------------|-------------------|--------------------------|--------------|---------------|------------------|------------|----------|------------|---------------------------------|---|
| | TECHNICAL SPECIFICATIONS | | | | | | | | | | | | |
| En | Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All | | | | | | | | | | | | |
| ite | items must be completed. The response "on file" is not acceptable. | | | | | | | | | | | | |
| TE | Channel Number: 217 | | | | | | | | | | | | |
| 1. | | | | | | | | | | | | | |
| 2. | Class (sel | ect one |): | | 6 . | _ | | | | | | | |
| | CDCACB1CBCC3CC2 © C1 CC | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | |
| | Latitude: Degrees 47 Minutes 42 Seconds 21 North South | | | | | | | | | | | | |
| | Degrees 4/ Minutes 42 Seconds 21 ' North ' South | | | | | | | | | | | | |
| | Longitud | e: | | | | | | | | | | | |
| | Degrees 9 | 94 Minu | ites 29 Sec | onds 9 | • Wes | st C | East | | | | | | |
| 4. | | | e Registrat | | | | | | | | | | |
| L | Not A | pplicabl | le 🔽 Noti | fication | filed with | FAA | | | | | | | |
| 5. | Antenna : | Location | n Site Elev | ration A | bove Mea | n Sea L | evel: | | 437 | meters | | | |
| 6. | Overall T | ower H | eight Abo | ve Grou | nd Level: | | | | 305 | meters | | | |
| 7. | | | on Center | | | | | | 283 | meters(| H) 283 m | eters(V) | |
| 8. | | | on Center | Above | Average 7 | Cerrain: | | | 301 | meters(] | H) 301 m | eters(V) | |
| 9. | Effective | | | | | | | | 65 k | W(H) | 65 kW(| (V) | |
| 10. | • | | ive Radiat ma ONLY | | er: | K | Not App | licable | kW(| (H) | kW(V) | | |
| 11. | | | | | | ₩ Not | applicable | Nondir | ectional) | | | | ᅱ |
| | Direction | nal Ante | nna Relati | ive Field | 1 Values: | 1100 | | (11011411 | ootionai) | | | | |
| | Rotation | (Degre | es): | | | ┌ No F | Rotation | | | | | | |
| | Degrees | Value | Degrees | Value | Degrees | Value | Degrees | Value | Degrees | Value | Degrees | Value | |
| | 0 | | 10 | | 20 | | 30 | Ī | 40 | | 50 | | |
| | 60 | | 70 | j | 80 | 1 | 90 | ĺ | 100 | ĺ | 110 | | |
| | 120 | | 130 | Ī | 140 | 1 | 150 | 1 | 160 | | 170 | | |
| | 180 | | 190 | | 200 | ĺ | 210 | Ī | 220 | | 230 | | |
| | 240 | | 250 | | 260 | | 270 | 1 | 280 | | 290 | | |
| | 300 | | 310 | | 320 |] | 330 |] | 340 | | 350 | | |
| | Additional Azimuths | | | | | | | | | | | • | |
| NO | | | a tha infa | | applied for | r in thi | sootion | n ovnlo | notow: or | hihi4 | | ıll particulars must be | |
| sub | mitted for | each q | uestion fo | rmauon r which | i caneu 10 i a "No" i | espons | e is provid | ın expıa led. | патогу ех | nibit pr | oviding 11 | ill particulars must be | |
| | RTIFICA | | | | | | | | | | | | ᆿ |
| AU | XILIARY | ANTE | NNA APP | LICA | NTS ARE | NOT R | EQUIRE | D TO R | ESPOND | TO IT | EMS 12-1 | 6. | |
| 12. | Main Stu | dio Loc | ation. T | he prop | osed main | studio | location co | mplies v | with 47 C. | F.R. Sec | tion | ← Yes ← No | |
| | 73.1125. | | | | | | | | | | | | |
| | | | | | | | | | | | | See Explanation in [Exhibit 13] | |
| 13 | Interfere | 100 T | ha nranas | od fosili | ty compli | .a. vy.:4L - | 11 0645 - 6 | llowin - | | | -4: | | |
| ١٠٠. | Check all | | | ou lacill | ty compile | s with 8 | all of the fo | niowing | аррисави | ruie se | cuons. | • Yes C No | |
| | | * 1 | , | | | | | | | | | | |

| | | See Explanation in [Exhibit 14] |
|-----|---|--|
| | Contour Overlap Requirements. | |
| | a. 47 C.F.R. Section 73.509 | |
| | Exhibit Required. Spacing Requirements. | [Exhibit 15] |
| | 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 16] |
| | Contour Protection. | [EXHIBIT 10] |
| | d. 47 C.F.R. Section 73.215(a) with respect to station(s) Exhibit Required. | [Exhibit 17] |
| | Television Channel 6 Protection. | |
| | e. 47 C.F.R. Section 73.525 with respect to station(s) Exhibit Required. | [Exhibit 18] |
| 14. | Reserved Channels Above 220. | |
| | | |
| | a. Allotment. The proposed facility complies with the allotment requirements of 47 C.F.R. Section 73.203. | Yes No See Explanation in |
| | b. Community Coverage. The proposed facility complies with 47 C.F.R. Section 73.315. | [Exhibit 19] Yes No See Explanation in [Exhibit 20] |
| 15. | | |
| 13. | International Borders. The proposed antenna location is not within 320 kilometers of the common border between the United States and Canada or Mexico. | Yes No Canada |
| | If "No," specify the country and provide an exhibit of compliance with all provisions of the relevant International Agreement. | Mexico [Exhibit 21] |
| 16. | 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 | e Yes No |
| | 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 . | See Explanation in [Exhibit 22] |
| | 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. | |
| PR | EPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED. | |
| | | |
| | | |

Exhibits

Attachment 1

| Description | Туре |
|-----------------------------------|-----------------------|
| Exhibit #1, Engineering Statement | Adobe Acrobat File |

Exhibit 13

Description: MAIN STUDIO LOCATION

THE MAIN STUDIO FOR KNBJ IS LOCATED IN THE CITY OF LICENSE, BEMIDJI, MN, IN COMPLIANCE WITH SECTION 73.1125(A)(1).

Attachment 13

| Description | Туре |
|-----------------------------------|-----------------------|
| Exhibit #13, Main Studio Location | Adobe Acrobat File |

Attachment 15

| Description | Туре |
|---------------------------------|-----------------------|
| Exhibit #15, Interference Study | Adobe Acrobat File |

Attachment 21

| Descriptio | 1] | Туре |
|-----------------------------|--------------|----------------|
| Exhibit #21, Canada Showing | Adol Acro | be bat File |

Attachment 22

| Description | Туре |
|----------------------------------|-----------------------|
| Exhibit #22, RF Hazard Statement | Adobe Acrobat File |



EXHIBIT #1ENGINEERING STATEMENT

Concerning the Application of Minnesota Public Radio To Make a Minor Amendment to The Pending Application for KNBJ, A Non-Commercial FM Station Serving Bemidji, Minnesota

BMPED20011114ABR

June 2002

Channel 217C1 65 kW H & V

This engineering statement supports the application filed by Minnesota Public Radio to make a minor amendment to the pending application for KNBJ, a non-commercial, educational FM station serving Bemidji, Minnesota.

The applicant proposes to amend its pending application (BMPED20011114ABR) to change Section VII, Questions 3, 5, 6, 7, 8 and 9. The instant proposal, while responding in the same manner to Section VII, Questions 12, 13, 14, 15 and 16, modifies the supporting engineering exhibits for those questions. Minnesota Public Radio (MPR) proposes to change the antenna location, antenna height and effective radiated power. No other changes are being proposed at this time.

Exhibit #13 is a map of the proposed 1 mV/m (60 dBu) signal contour. Bemidji, Minnesota, the city of licensee, is shown to be fully encompassed by this contour. The main studio is located in Bemidji. The coverage map was computer generated using the U.S.G.S. World Map database. Three hundred and sixty evenly spaced radials were used to plot the 60 dBu contour. The area within the proposed one mV/m contour amounts to 14,561 square kilometers. This figure was determined using numerical calculus. The distance to the one mV/m signal contour along each of 360 evenly spaced radial azimuths was squared and then the average of the sum of these distances was calculated. The resulting average radius squared was then multiplied by π to determine the area within the contour. The population within the 60 dBu service contour was determined to be 61,326 people through the use of a computer program which extracts a population count based on population centroids defined by U.S. Census 2000 (PL-94-171) digital census block data.

Thirty-six evenly spaced radials were used to determine the antenna height above average terrain. The N.G.D.C. 30 arc-second terrain database was used to determine the radial elevations at 0.1 kilometer increments from 3 to 16 kilometers. The elevation points were averaged using the required four-point interpolation method and then the average was employed to project antenna heights above average terrain and the consequent distances to signal contours along the pertinent radials. (See a tabular listing of these contour distances on page #3 of this exhibit.)

Exhibit #E15 is a single channel, contour to contour, allocation study showing that interference is neither caused nor received by an FM radio station, application for facilities or construction permit. Page #2 is a description of the methods used to prepare this study. Pages 3-6 are a map and FMOVER table of the relationship between the proposed KNBJ and KUWS, co-channel Superior, Wisconsin. The first-adjacent channel relationship between the new KNBJ and KQMN, Thief River Falls, is shown on the map and FMOVER table on pages 7-9. There are no I.F. relationships.

There are no Television Channel 6 stations within the 174 kilometer cutoff distance for FM Channel 217.

Exhibit #21 shows that although the proposal is within 320 kilometers of the U.S. border with Canada, however all Working Agreement minimum separation spacings are met or exceeded.

Exhibit #22 shows compliance with the Commission's R.F. emission's standards.

Page #4 of this exhibit (Ex. # 1) is a declaration made by the preparer, Kate Michler, attesting to her qualifications.

Doug Vernier Telecommunications Consultants KNBJ.A, Minnesota Public Radio, Amendment to BMPED20011114ABR ERP = 65 kW Channel = 217

| | | | Channel = 217 | | |
|---|--|--|---|---|--|
| _ | Azimuth Deg.T. | Ave. Elev. 3 to 16 km Meters AMSL | Effective Antenna Height Meters AAT | ERP 60 (dBk) | F(50-50) Distance to dBu Contour km |
| | 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 | 425.5 428.5 427.6 432.0 436.2 430.8 428.2 424.6 420.0 415.3 408.8 406.9 407.3 410.1 415.4 420.9 419.8 418.6 413.7 406.3 406.4 407.9 415.0 423.2 426.6 427.4 424.8 415.8 410.4 417.1 414.4 419.6 418.7 423.1 | 294.4 291.4 292.6 292.3 287.9 283.7 289.1 291.7 295.3 299.9 304.6 311.1 313.0 312.6 309.8 304.5 299.0 300.1 301.3 306.2 313.5 312.0 304.9 296.7 293.3 292.5 295.1 304.1 309.5 309.8 309.8 309.8 309.8 | 18.129 | 67.60 67.36 67.45 67.43 67.08 66.75 67.18 67.66 68.02 68.37 68.86 69.00 68.97 68.76 68.37 67.95 68.49 69.04 68.39 67.51 67.44 67.65 68.39 67.51 67.44 67.65 68.39 67.78 |
| | | · · · | 233.0 | | |

Antenna Radiation Center AMSL =719.9 M NGDC 30 Arc Sec.

Geographic Coordinates:

N. Lat. 47 42 21 W. Lng. 94 29 09

Declaration:

I, Katherine A. Michler, have received a Bachelor of Science degree from the University of Northern Iowa, and;

That, I declare that I have received training as a technical consultant as a member of the staff of Doug Vernier Telecommunications Consultants, and;

That, I have apprenticed under Douglas Vernier for over four years, and;

That, he has been active in broadcast consulting for over 25 years, and;

That, his qualifications are a matter of record with the Federal Communications Commission, and;

That, I am an Associate Member (#20792) of the Society of Broadcast Engineers, Indianapolis, Indiana, and;

That, the consulting firm of Doug Vernier Telecommunications Consultants has been retained by Minnesota Public Radio, St. Paul, Minnesota;

That, I have personally prepared these engineering showings, the technical information contained in same and the facts stated within are true to my knowledge, and;

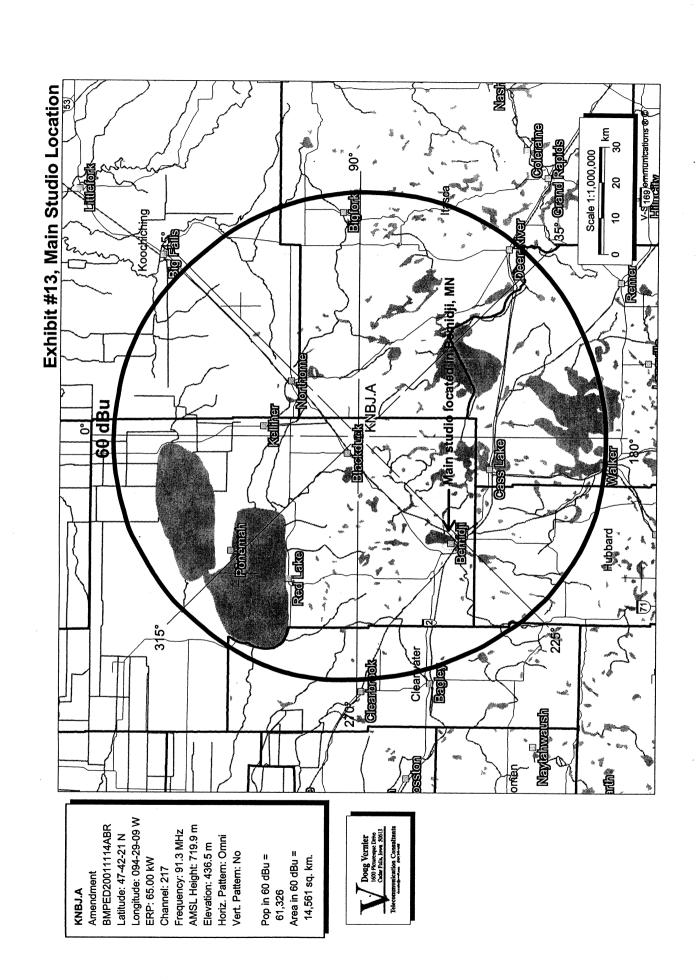
That, under penalty of perjury, I declare that the foregoing is correct.

exercise A. Michler Katherine A. Michler

Executed on June 12, 2002

Subscribed and sworn before me this 12th day of June, 2002.

Notary Public in and for the State of Iowa



Amendment to BMPED20011114ABR

CH# 217C1 - 91.3 MHz, Pwr= 65 kw, HAAT=300.8 M, COR= 720 M

Average Protected F(50-50)= 68.09 km

Ave. F(50-10) 40 dBu= 161.2 54 dBu= 99.1 80 dBu= 30.2 100 dBu= 9.0 REFERENCE **DISPLAY DATES** 47 42 21 N 94 29 09 W DATA 06-12-02 SEARCH 06-13-02 Pwr(kw) COR(M) PRO(km) *IN* *OUT* HAAT(M) INT(km) LICENSEE (Overlap in km) CH TYPF AZI. DIST CITY STATE <-- FILE # LNG. ----------LIC CN 192.7 0.57 MN 12.7 BLED19940711KY 47 42 03 94 29 15 217C1 KNBJ 60.000 717 67.0 -226.38< -227.64< Bemidji 297 158.9 Minnesota Public Radio 217C1 KNBJ.C Bemidji 680 66.8 -227.71< -2 162.5 Minnesota Public Radio CP 236.6 47 41 29 94 31 06 80.000 56.6 BPED20010208AAN MN 259 269.3 12.38 47 42 16 89.3 BMPED200111114ABR 94 39 03 217C1 KNBJ.A ΔPP CX 713 72.2 -227.48< -2 171.8 Minnesota Public Radio 100.000 -221.07< Bemidii MN 298 217C1 *KUWS LIC CN 118.8 206.46 WI 298.8 BLED19910122KA 46 47 21 92 06 51 83.000 83.000 501 42.8 0.76 1.0 69 136.7 Bd. of Regents, Univ. of W = 68.99 km, Int Dist. = 162.64 km Superior > Reference HAAT at 118.8°= 312.9 M, Pwr= 65.0 kW, Pro. Dist. 218C1 *KQMN.A APP DCX 281.6 161.76
Thief River Falls MN 101.6 BPED20020130ACE
> Reference HAAT at 281.6°= 305.3 M, PWr= 65.0 kW, 47 58 38 96 36 32 473 44.9 27.02 66.3 Minnesota Public Radio 15.030 180 Pro. Dist. = 68.43 km, Int Dist. = 99.58 km 218C1 *KOMN LIC CN 281.6 161.76 MN 101.6 BLED19901205KF 84.000 474 60.4 3.63 181 89.7 Minnesota Public Radio = 68.43 km, Int Dist. = 99.58 km 47 58 38 96 36 32 Thief River Falls MN 101.6 BLED19901205KF > Reference HAAT at 281.6°= 305.3 M, PWr= 65.0 kW, Pro. Dist. LIC CN 122.0 93.80 47 15 17 93 26 03 100.000 140 546 57.1 27.66 **Grand Rapids** 302.0 BLED1533 6.9 Northern Community Radio 216C1 KCCMFM 237.5 192.02 57.5 BLED19811119AL 46 45 35 96 36 26 LIC CN 60.1 67.000 486 34.95 Moorhead 201 MN 89.0 Minnesota Public Radio 202.9 305.23 22.9 BLED19891031KB 217C KRSU 45 10 03 96 00 02 LIC CN 648 75.000 72.5 67.13 Appleton MN 341 170.0 Minnesota Public Radio 270с2 кокк 166.7 74.48 346.7 BLH19990802KA LIC C 47 03 14 94 15 32 50.000 524 47.8 27.0R 47.5M walker MN 119 0.0 Carol J. Delahunt 220A KXBR 38.5 123.80 218.5 BLED20000626AEO LIC C 48 34 15 93 26 19 1.500 384 102.16 International Falls MN 39 1.6 Heartland Christian Broadc 99.7 130.03 279.7 BLED19850827KC 215C2 WIRR Virginia-hibbing LIC CN 47 29 46 92 47 05 21.000 615 46 7 56.96 MN 168 5.0 Minnesota Public Radio 214C1 KBPR 179.2 142.68 359.2 BLED19880222KG LTC CN 46 25 21 94 27 41 34.000 597 54.5 68.34 79.19 Brainerd MN 207 6.2 Minnesota Public Radio Inc 218A KNWF.A 219.0 196.57 39.0 BMPED20020416AAE APP 46 19 16 96 05 36 0.500 480 104.58 16.0 Fergus Falls MN 107 23.9 Minnesota Public Radio 218A KNWF.C CP 219.0 196.57 46 19 16 96 05 36 0.100 445 8.6 116,40 Fergus Falls MN 39.0 BPED19981120MC 12.1 Minnesota Public Radio 69 06+2C KBJRTV 118.8 206.46 LI 46 47 21 100.000 603 103.7 To Grd B = 102.75Superior 298.8 BLCT20000517AEX WT 92 06 51 0.0 Kbjr License, Inc. 302

Minnesota Public Radio

[&]quot;*" = ERP and HAAT on direct line to and from reference station. "<" = Contour Overlap

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 and the DA power, if applicable, along the straight line azimuths between the reference station and the database station are used and visa versa. The column labeled "* OUT *" shows the distance in 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 overlap interference.

Under the "AZIMUTH" 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.

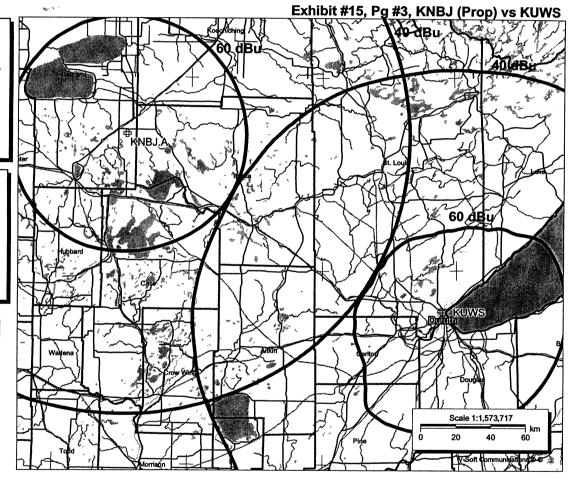
For I.F. relationships the "IN" and "OUT" columns change their significance. The letter "R" stands for the minimum **required** distance in kilometers, while the letter "M" in the next column follows the **available clear space** separation in kilometers. Minimum separation distances when displayed are 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 FCC 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.

KNBJ.A
Amendment
BMPED20011114ABR
Latitude: 47-42-21 N
Longitude: 094-29-09 W
ERP: 65.00 kW
Channel: 217
Frequency: 91.3 MHz
AMSL Height 719.9 m
Elevation: 436.5 m
Horiz. Pattern: No

KUWS
BLED19910122KA
Latitude: 46-47-21 N
Longitude: 092-06-51 W
ERP: 83.00 kW
Channel: 217
Frequency: 91.3 MHz
AMSL Height 501.0 m
Elevation: 337.44 m
Horiz. Pattern: Omni
Vert. Pattern: No

Doug Vernier
1600 Formages Drive
Calie Palls, loca 30613
Telecommunication Consultants



KNBJ.A BMPED20011114ABR

Channel = 217C1 Max ERP = 65 kW RCAMSL = 719.9 M N. Lat = 47 42 21

 $W. \text{ Lng} = 94 \ 29 \ 09$

60 dBu

Protected

KUWS BLED19910122KA

Channel = 217C1
Max ERP = 83 kW
RCAMSL = 501 M
N. Lat = 46 47 21
W. Lng = 92 06 51

Interfering 40 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|--|--|--|--|---|---|--|---|--|
| 102.0 103.0 104.0 105.0 106.0 107.0 108.0 109.0 110.0 111.0 112.0 113.0 114.0 115.0 | 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 | 0306.4 0307.3 0308.0 0308.6 0309.2 0309.6 0310.1 0310.6 0311.1 0311.6 0311.9 0312.1 | 068.5 068.6 068.6 068.7 068.8 068.8 068.8 068.9 068.9 068.9 | 308.5 308.1 307.6 307.2 306.7 306.3 305.8 305.8 305.3 304.9 304.4 303.9 303.4 302.9 302.4 | 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 | 0067.3 0067.6 0067.6 0068.2 0068.2 0069.1 0069.1 0070.2 0071.2 0071.2 | 142.8 142.3 141.8 141.3 140.8 140.4 140.0 139.7 139.3 139.0 138.8 138.5 138.4 | 38.8 38.9 39.0 39.1 39.2 39.3 39.4 39.5 39.5 39.7 39.7 39.7 |
| 118.0 119.0 120.0 121.0 122.0 123.0 124.0 125.0 126.0 127.0 128.0 129.0 130.0 131.0 132.0 133.0 134.0 135.0 | 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 065.0000 | 0312.7 0312.8 0312.8 0312.8 0313.0 0313.4 0313.9 0314.2 0314.4 0314.3 0314.2 0313.9 0313.6 0313.1 0312.6 0313.1 0312.5 0311.5 0311.5 0310.8 0310.8 | 069.0 069.0 069.0 069.0 069.1 069.1 069.1 069.1 069.1 069.0 069.0 069.0 068.9 068.9 068.8 068.8 | 296.4 296.0 295.5 295.0 294.5 294.1 293.6 293.2 292.7 | 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 083.0000 | 0071.5 0070.8 0070.0 0070.0 0069.2 0069.2 0068.8 0068.7 0068.7 0068.7 0068.7 0068.7 0068.7 0068.7 | 138.1 138.0 137.9 137.9 137.9 138.0 138.2 138.4 138.6 138.8 139.1 139.4 139.8 140.2 140.6 141.0 141.5 142.0 142.5 | 39.8 39.8 39.8 39.8 39.8 39.7 39.7 39.7 39.6 39.6 39.5 39.5 39.5 39.2 39.2 39.2 |

KUWS BLED19910122KA

Channel = 217C1
Max ERP = 83 kW
RCAMSL = 501 M
N. Lat = 46 47 21
W. Lng = 92 06 51

. Protected

Protected 60 dBu KNBJ.A BMPED20011114ABR

Channel = 217C1 Max ERP = 65 kW RCAMSL = 719.9 M N. Lat = 47 42 21 W. Lng = 94 29 09

Interfering 40 dBu

| Azimuth | | ТААН | Dist | Azimuth | ERP | НААТ | Dist | Actual |
|----------|----------|--------|-------|-----------|----------|--------|-------|--------|
| (degrees |) (kW) | (m) | (km) | (degrees) |) (kW) | (m) | (km) | (dBu) |
| 271.0 | 083.0000 | 0097.8 | 048.8 | 127.1 | 065.0000 | 0313.9 | 165.3 | 39.6 |
| 272.0 | 083.0000 | 0096.9 | 048.6 | 126.9 | 065.0000 | 0313.9 | 164.9 | 39.6 |
| 273.0 | 083.0000 | 0095.7 | 048.4 | 126.6 | 065.0000 | 0313.9 | 164.6 | 39.7 |
| 274.0 | 083.0000 | 0094.3 | 048.1 | 126.3 | 065.0000 | 0314.2 | 164.4 | 39.7 |
| 275.0 | 083.0000 | 0092.7 | 047.8 | 126.0 | 065.0000 | 0311.2 | 164.2 | 39.8 |
| 276.0 | 083.0000 | 0091.2 | 047.5 | 125.7 | 065.0000 | 0314.2 | 164.0 | 39.8 |
| 277.0 | 083.0000 | 0089.8 | 047.2 | 125.4 | 065.0000 | 0314.3 | 163.8 | 39.8 |
| 278.0 | 083.0000 | 0088.4 | 046.9 | 125.1 | 065.0000 | 0314.3 | 163.7 | 39.9 |
| 279.0 | 083.0000 | 0087.0 | 046.6 | 124.8 | 065.0000 | 0314.3 | 163.5 | 39.9 |
| 280.0 | 083.0000 | 0085.4 | 046.3 | 124.5 | 065.0000 | 0314.4 | 163.5 | 39.9 |
| 281.0 | 083.0000 | 0083.8 | 046.0 | 124.2 | 065.0000 | 0314.4 | 163.4 | 39.9 |
| 282.0 | 083.0000 | 0082.3 | 045.6 | 123.9 | 065.0000 | 0314.4 | 163.4 | 39.9 |
| 283.0 | 083.0000 | 0081.0 | 045.4 | 123.6 | 065.0000 | 0314.4 | 163.4 | 39.9 |
| 284.0 | 083.0000 | 0079.6 | 045.1 | 123.3 | 065.0000 | 0314.2 | 163.4 | 39.9 |
| 285.0 | 083.0000 | 0078.2 | 044.8 | 123.0 | 065.0000 | 0314.2 | 163.4 | 39.9 |
| 286.0 | 083.0000 | 0076.8 | 044.5 | 122.7 | 065.0000 | 0314.2 | 163.4 | 39.9 |
| 287.0 | 083.0000 | 0075.5 | 044.2 | 122.4 | 065.0000 | 0313.9 | 163.5 | 39.9 |
| 288.0 | 083.0000 | 0074.1 | 043.9 | 122.1 | 065.0000 | 0313.9 | 163.6 | 39.9 |
| 289.0 | 083.0000 | 0072.8 | 043.6 | 121.8 | 065.0000 | 0313.9 | 163.6 | 39.8 |
| 290.0 | 083.0000 | 0071.6 | 043.3 | 121.5 | 065.0000 | 0313.9 | 163.7 | 39.8 |
| 291.0 | 083.0000 | 0070.5 | 043.0 | 121.3 | 065.0000 | 0313.4 | 163.8 | 39.8 |
| 292.0 | 083.0000 | 0069.5 | 042.8 | 121.0 | 065.0000 | 0313.4 | 163.9 | 39.8 |
| 293.0 | 083.0000 | 0068.9 | 042.7 | 120.7 | 065.0000 | 0313.4 | 163.9 | 39.8 |
| 294.0 | 083.0000 | 0068.7 | 042.6 | 120.5 | 065.0000 | 0313.0 | 163.8 | 39.8 |
| 295.0 | 083.0000 | 0068.7 | 042.6 | 120.2 | 065.0000 | 0313.0 | 163.8 | 39.8 |
| 296.0 | 083.0000 | 0068.7 | 042.6 | 120.0 | 065.0000 | 0313.0 | 163.7 | 39.8 |
| 297.0 | 083.0000 | 0068.7 | 042.6 | 119.7 | 065.0000 | 0313.0 | 163.6 | 39.8 |
| 298.0 | 083.0000 | 0068.8 | 042.7 | 119.4 | 065.0000 | 0312.8 | 163.5 | 39.8 |
| 299.0 | 083.0000 | 0069.2 | 042.8 | 119.2 | 065.0000 | 0312.8 | 163.4 | 39.9 |
| 300.0 | 083.0000 | 0070.0 | 042.9 | 118.9 | 065.0000 | 0312.8 | 163.2 | 39.9 |
| 301.0 | 083.0000 | 0070.8 | 043.1 | 118.6 | 065.0000 | 0312.8 | 163.1 | 39.9 |
| 302.0 | 083.0000 | 0071.5 | 043.3 | 118.4 | 065.0000 | 0312.8 | 162.9 | 39.9 |
| 303.0 | 083.0000 | 0071.7 | 043.3 | 118.1 | 065.0000 | 0312.8 | 162.9 | 39.9 |
| 304.0 | 083.0000 | 0071.2 | 043.2 | 117.8 | 065.0000 | 0312.8 | 163.1 | 39.9 |
| 305.0 | 083.0000 | 0070.2 | 043.0 | 117.6 | 065.0000 | 0312.8 | 163.4 | 39.9 |
| 306.0 | 083.0000 | 0069.1 | 042.7 | 117.3 | 065.0000 | 0312.8 | 163.7 | 39.8 |

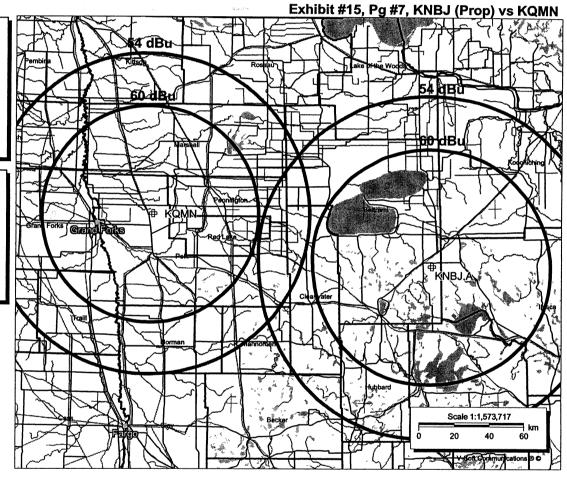
| Azimuth (degrees | | HAAT (m) | Dist (km) | Azimuth (degrees) | | | Dist (km) | Actual (dBu) |
|---------------------|----------|-------------|--------------|-----------------------|----------|--------|--------------|-----------------|
| 307.0 | 083.0000 | 0068.2 | 042.5 | 117.1 | 065.0000 | 0312.8 | 164.0 | 39.8 |
| 308.0 | 083.0000 | 0067.6 | 042.4 | 116.8 | 065.0000 | 0312.8 | 164.3 | 39.7 |
| 309.0 | 083.0000 | 0067.3 | 042.3 | 116.6 | 065.0000 | 0312.8 | 164.5 | 39.7 |
| 310.0 | 083.0000 | 0067.5 | 042.4 | 116.3 | 065.0000 | 0312.7 | 164.6 | 39.7 |
| 311.0 | 083.0000 | 0068.3 | 042.6 · | 116.1 | 065.0000 | 0312.7 | 164.6 | 39.7 |
| 312.0 | 083.0000 | 0069.4 | 042.8 | 115.8 | 065.0000 | 0312.7 | 164.5 | 39.7 |
| 313.0 | 083.0000 | 0070.5 | 043.1 | 115.5 | 065.0000 | 0312.7 | 164.5 | 39.7 |
| 314.0 | 083.0000 | 0071.5 | 043.3 | 115.2 | 065.0000 | 0312.5 | 164.5 | 39.7 |
| 315.0 | 083.0000 | 0072.3 | 043.5 | 115.0 | 065.0000 | 0312.5 | 164.6 | 39.7 |
| 316.0 | 083.0000 | 0072.8 | 043.6 | 114.7 | 065.0000 | 0312.5 | 164.7 | 39.6 |
| 317.0 | 083.0000 | 0073.1 | 043.6 | 114.5 | 065.0000 | 0312.3 | 164.9 | 39.6 |
| 318.0 | 083.0000 | 0073.2 | 043.7 | 114.2 | 065.0000 | 0312.3 | 165.2 | 39.5 |
| 319.0 | 083.0000 | 0073.4 | 043.7 | 114.0 | 065.0000 | 0312.3 | 165.4 | 39.5 |
| 320.0 | 083.0000 | 0073.9 | 043.8 | 113.7 | 065.0000 | 0312.3 | 165.6 | 39.5 |
| 321.0 | 083.0000 | 0074.5 | 044.0 | 113.4 | 065.0000 | 0312.1 | 165.8 | 39.4 |
| 322.0 | 083.0000 | 0074.9 | 044.0 | 113.2 | 065.0000 | 0312.1 | 166.1 | 39.4 |
| 323.0 | 083.0000 | 0075.1 | 044.1 | 112.9 | 065.0000 | 0312.1 | 166.4 | 39.3 |
| 324.0 | 083.0000 | 0075.3 | 044.1 | 112.7 | 065.0000 | 0312.1 | 166.8 | 39.3 |
| 325.0 | 083.0000 | 0076.0 | 044.3 | 112.5 | 065.0000 | 0311.9 | 167.0 | 39.2 |
| 326.0 | 083.0000 | 0076.5 | 044.4 | 112.2 | 065.0000 | 0311.9 | 167.4 | 39.2 |
| 327.0 | 083.0000 | 0076.7 | 044.4 | 112.0 | 065.0000 | 0311.9 | 167.7 | 39.1 |
| 328.0 | 083.0000 | 0076.8 | 044.5 | 111.7 | 065.0000 | 0311.9 | 168.2 | 39.0 |
| 329.0 | 083.0000 | 0077.1 | 044.5 | 111.5 | 065.0000 | 0311.9 | 168.6 | 38.9 |
| 330.0 | 083.0000 | 0077.3 | 044.6 | 111.3 | 065.0000 | 0311.6 | 169.0 | 38.9 |
| 331.0 | 083.0000 | 0077.6 | 044.6 | 111.1 | 065.0000 | 0311.6 | 169.4 | 38.8 |

KNBJ.A
Amendment
BMPED200111114ABR
Latitude: 47-42-21 N
Longitude: 094-29-09 W
ERP: 65.00 kW
Channel: 217
Frequency: 91.3 MHz
AMSL Height 719.9 m
Elevation: 436.5 m
Horiz. Pattern: No

KQMN

BLED19901205KF Latitude: 47-58-38 N Longitude: 096-36-32 W ERP: 84.00 kW Channel: 218 Frequency: 91.5 MHz AMSL Height: 474.0 m Elevation: 274.0 m Horiz. Pattern: Omni Vert. Pattern: No

Doug Vernier
1600 Fiscantique Drive
Geier Pile, bora 20013
Teleconsumminatorion. Commissionita



KNBJ.A BMPED20011114ABR

Channel = 217C1Max ERP = 65 kWRCAMSL = 719.9 M

N. Lat = 47 42 21

 $W. \text{ Lng} = 94 \ 29 \ 09$

Protected 60 dBu

KQMN BLED19901205KF

Channel = 218C1

Max ERP = 84 kWRCAMSL = 474 M

N. Lat = 47 58 38

 $W. \text{ Lng} = 96 \ 36 \ 32$

Interfering 54 dBu

| Azimuth | ERP | наат | Dist | Azimuth | ERP | наат | Dist | Actual |
|----------|----------|--------|-------|-----------|----------|--------|-------|--------|
| (degrees |) (kW) | (m) | (km) | (degrees) | | (m) | (km) | (dBu) |
| | | | | | | | | |
| 265.0 | 065.0000 | 0292.2 | 067.4 | 111.0 | 084.0000 | 0182.4 | 098.6 | 51.4 |
| 266.0 | 065.0000 | 0292.8 | 067.5 | 110.4 | 084.0000 | 0182.1 | 098.1 | 51.6 |
| 267.0 | 065.0000 | 0293.5 | 067.5 | 109.8 | 084.0000 | 0182.1 | 097.6 | 51.7 |
| 268.0 | 065.0000 | 0294.1 | 067.6 | 109.2 | 084.0000 | 0181.9 | 097.1 | 51.9 |
| 269.0 | 065.0000 | 0294.6 | 067.6 | 108.5 | 084.0000 | 0181.9 | 096.6 | 52.0 |
| 270.0 | 065.0000 | 0295.1 | 067.7 | 107.9 | 084.0000 | 0181.8 | 096.1 | 52.1 |
| 271.0 | 065.0000 | 0295.7 | 067.7 | 107.2 | 084.0000 | 0181.7 | 095.7 | 52.2 |
| 272.0 | 065.0000 | 0296.5 | 067.8 | 106.6 | 084.0000 | 0181.7 | 095.3 | 52.4 |
| 273.0 | 065.0000 | 0297.7 | 067.9 | 105.9 | 084.0000 | 0181.5 | 094.9 | 52.5 |
| 274.0 | 065.0000 | 0298.8 | 067.9 | 105.2 | 084.0000 | 0181.4 | 094.6 | 52.6 |
| 275.0 | 065.0000 | 0299.9 | 068.0 | 104.5 | 084.0000 | 0181.3 | 094.3 | 52.6 |
| 276.0 | 065.0000 | 0300.9 | 068.1 | 103.8 | 084.0000 | 0181.3 | 094.0 | 52.7 |
| 277.0 | 065.0000 | 0301.9 | 068.2 | 103.1 | 084.0000 | 0181.3 | 093.7 | 52.8 |
| 278.0 | 065.0000 | 0302.7 | 068.2 | 102.4 | 084.0000 | 0181.2 | 093.5 | 52.9 |
| 279.0 | 065.0000 | 0303.3 | 068.3 | 101.6 | 084.0000 | 0181.2 | 093.4 | 52.9 |
| 280.0 | 065.0000 | 0304.1 | 068.3 | 100.9 | 084.0000 | 0181.0 | 093.3 | 52.9 |
| 281.0 | 065.0000 | 0304.6 | 068.4 | 100.2 | 084.0000 | 0180.9 | 093.2 | 52.9 |
| 282.0 | 065.0000 | 0305.2 | 068.4 | 099.4 | 084.0000 | 0180.8 | 093.2 | 52.9 |
| 283.0 | 065.0000 | 0306.1 | 068.5 | 098.7 | 084.0000 | 0180.8 | 093.2 | 53.0 |
| 284.0 | 065.0000 | 0306.8 | 068.5 | 098.0 | 084.0000 | 0180.7 | 093.2 | 52.9 |
| 285.0 | 065.0000 | 0307.5 | 068.6 | 097.2 | 084.0000 | 0180.7 | 093.3 | 52.9 |
| 286.0 | 065.0000 | 0308.2 | 068.6 | 096.5 | 084.0000 | 0180.5 | 093.4 | 52.9 |
| 287.0 | 065.0000 | 0308.8 | 068.7 | 095.8 | 084.0000 | 0180.5 | 093.5 | 52.8 |
| 288.0 | 065.0000 | 0309.3 | 068.7 | 095.0 | 084.0000 | 0180.3 | 093.7 | 52.8 |
| 289.0 | 065.0000 | 0309.5 | 068.7 | 094.3 | 084.0000 | 0180.1 | 093.9 | 52.7 |
| 290.0 | 065.0000 | 0309.5 | 068.7 | 093.6 | 084.0000 | 0180.1 | 094.2 | 52.6 |
| 291.0 | 065.0000 | 0309.4 | 068.7 | 092.9 | 084.0000 | 0179.9 | 094.6 | 52.5 |
| 292.0 | 065.0000 | 0309.2 | 068.7 | 092.2 | 084.0000 | 0179.7 | 095.0 | 52.4 |
| 293.0 | 065.0000 | 0309.1 | 068.7 | 091.5 | 084.0000 | 0179.7 | 095.4 | 52.3 |
| 294.0 | 065.0000 | 0309.1 | 068.7 | 090.9 | 084.0000 | 0179.6 | 095.8 | 52.1 |
| 295.0 | 065.0000 | 0308.9 | 068.7 | 090.2 | 084.0000 | 0179.5 | 096.3 | 52.0 |
| 296.0 | 065.0000 | 0308.6 | 068.7 | 090.4 | 084.0000 | 0179.5 | 096.8 | 51.9 |
| 297.0 | 065.0000 | 0308.2 | 068.6 | 088.9 | 084.0000 | 0179.4 | 097.3 | 51.7 |
| 298.0 | 065.0000 | 0307.7 | 068.6 | 088.3 | 084.0000 | 0179.3 | 097.9 | 51.5 |
| 299.0 | 065.0000 | 0307.2 | 068.6 | | 084.0000 | 0179.3 | 098.5 | 51.4 |
| | | | • | | | | | |

KQMN BLED19901205KF

Channel = 218C1 Max ERP = 84 kW RCAMSL = 474 M

N. Lat = 47 58 38

 $W. \text{ Lng} = 96 \ 36 \ 32$

Protected 60 dBu

KNBJ.A BMPED20011114ABR

Channel = 217C1 Max ERP = 65 kW

RCAMSL = 719.9 M

N. Lat = 47 42 21

 $W. \text{ Lng} = 94 \ 29 \ 09$

Interfering 54 dBu

| Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Azimuth (degrees) | ERP (kW) | HAAT (m) | Dist (km) | Actual (dBu) |
|--|--|--|---|--|--|--|--|--|
| 083.0 084.0 085.0 086.0 087.0 088.0 | 084.0000 084.0000 084.0000 084.0000 084.0000 | 0178.2 0178.6 0178.8 0179.0 0179.3 | 060.1 060.2 060.2 060.2 060.2 | 291.3 290.8 290.2 289.7 289.2 288.6 | 065.0000 065.0000 065.0000 065.0000 065.0000 | 0309.4 0309.4 0309.5 0309.5 0309.5 | 106.0 105.5 105.1 104.6 104.2 103.8 | 52.1 52.3 52.4 52.6 52.7 52.8 |
| 089.0 090.0 091.0 092.0 | 084.0000 084.0000 084.0000 084.0000 | 0179.4 0179.5 0179.6 0179.7 0179.9 | 060.2 060.2 060.2 060.3 | 288.1 287.5 287.0 286.4 285.8 | 065.0000 065.0000 065.0000 065.0000 | 0309.3 0309.3 0308.8 0308.2 0308.2 | 103.5 103.2 102.9 102.6 102.4 | 52.9 53.0 53.1 53.1 53.2 |
| 094.0 095.0 096.0 097.0 098.0 | 084.0000 084.0000 084.0000 084.0000 | 0180.1 0180.3 0180.5 0180.7 0180.7 | 060.3 060.3 060.4 060.4 | | 065.0000 065.0000 065.0000 065.0000 | 0307.5 0307.5 0306.8 0306.1 | 102.2 102.0 101.8 101.7 101.6 | 53.3 53.3 53.3 53.4 53.4 |
| 099.0 100.0 101.0 102.0 103.0 104.0 | 084.0000 084.0000 084.0000 084.0000 084.0000 | 0180.8 0180.9 0181.0 0181.2 0181.3 | 060.4 060.4 060.4 060.4 060.4 | 282.3 281.7 281.1 280.5 279.9 279.3 | 065.0000 065.0000 065.0000 065.0000 065.0000 | 0305.2 0305.2 0304.6 0304.6 0304.1 0303.3 | 101.6 101.5 101.5 101.5 101.6 101.7 | 53.4 53.4 53.4 53.4 53.3 |
| 105.0 106.0 107.0 108.0 109.0 | 084.0000 084.0000 084.0000 084.0000 084.0000 | 0181.3 0181.4 0181.5 0181.7 0181.8 0181.9 | 060.4 060.4 060.4 060.5 060.5 | 278.7 278.1 277.6 | 065.0000 065.0000 065.0000 065.0000 | 0303.3 0303.3 0302.7 0302.7 0301.9 0300.9 | 101.7 101.8 102.0 102.1 102.3 102.6 | 53.3 53.2 53.2 53.1 53.0 52.9 |
| 110.0 111.0 112.0 113.0 114.0 | 084.0000 084.0000 084.0000 084.0000 | 0182.1 0182.4 0182.7 0182.9 0183.0 | 060.5 060.5 060.5 060.6 | 275.8 275.2 274.7 274.1 273.6 | 065.0000 065.0000 065.0000 065.0000 | 0300.9 0299.9 0299.9 0298.8 0298.8 | 102.8 103.1 103.4 103.7 104.1 | 52.9 52.7 52.6 52.5 52.4 |
| 115.0 116.0 117.0 | 084.0000 084.0000 084.0000 | 0182.9 0182.9 0182.8 | 060.6 060.6 060.6 | | 065.0000 065.0000 065.0000 | 0297.7 0297.7 0296.5 | 104.5 104.9 105.4 | 52.2 52.1 51.9 |

Minnesota Public Radio Exhibit #21, Canada Showing

| Call | Channe] | Location | | Dist | Azi | FCC | Margin |
|--------|-----------|---------------------|----|--------|-------|-------|---------|
| KNBJ | LIC 217C1 | Bemidji | MN | 0.57 | 192.7 | 245.0 | -244.43 |
| KNBJ.C | CP 217C1 | Bemidji | MN | 2.92 | 236.6 | 245.0 | -242.08 |
| KNBJ.A | APP 217C1 | Bemidji | MN | 12.38 | 269.3 | 245.0 | -232.62 |
| KUWS | LIC 217C1 | Superior | WI | 206.46 | 118.8 | 245.0 | -38.54 |
| KQMN.A | APP 218C1 | Thief River Falls | MN | 161.76 | 281.6 | 177.0 | -15.24 |
| KQMN | LIC 218C1 | Thief River Falls | MN | 161.76 | 281.6 | 177.0 | -15.24 |
| KAXE | LIC 219C1 | Grand Rapids | MN | 93.80 | 122.0 | 82.0 | 11.80 |
| KCCMFM | LIC 216C1 | Moorhead | MN | 192.02 | 237.5 | 177.0 | 15.02 |
| KRSU | LIC 217C | Appleton | MN | 305.23 | 202.9 | 270.0 | 35.23 |
| KQKK | LIC 270C2 | Walker | MN | 74.48 | 166.7 | 27.0 | 47.48 |
| KXBR | LIC 220A | International Falls | MN | 123.80 | 38.5 | 75.0 | 48.80 |
| WIRR | LIC 215C2 | Virginia-hibbing | MN | 130.03 | 99.7 | 79.0 | 51.03 |
| KBPR | LIC 214C1 | Brainerd | MN | 142.68 | 179.2 | 82.0 | 60.68 |
| KNWF.A | APP 218A | Fergus Falls | MN | 196.57 | 219.0 | 133.0 | 63.57 |
| KNWF.C | CP 218A | Fergus Falls | MN | 196.57 | 219.0 | 133.0 | 63.57 |
| | | | | | | | |

Exhibit #22

R.F. RADIATION COMPLIANCE STATEMENT

KNBJ
Amendment to BMPED20011114ABR
Minnesota Public Radio

Channel 217 – 65 kW Omni-Directional

June 2002

The applicant's proposed power is 65 kW, however another application is being filed to use the same antenna in diplex that will raise the total ERP to 148 kW. The proposed antenna will have a center of radiation of 283.4 meters. 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, the proposed facility is predicted to produce a worst-case maximum R.F. non-ionization radiation level at a position six feet above the tower base (head level - based on the C.O.R. of 283.4 meters above ground minus 2 meters) of 124.976 microwatts per square centimeter. This figure is without regard for the antenna's vertical elevation field value toward the nadir, which will cause a reduction in the predicted "worst case" calculations. 124.976 microwatts per square centimeter is 12.5 percent of the maximum standard value for the frequency in use for a controlled area and 62.49 percent for an uncontrolled area.

Since "worst case" calculations were used and since it is well known that the actual RF power density level is considerably reduced at vertical angles toward the nadir the applicant is confident that there will be no exposure at the transmitter site greater than the maximum.

The applicant will protect workers on the tower by either reducing ERP or terminating transmission. A sign will be posted warning workers of the antenna, with a phone number to contact someone to reduce or terminate power.

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.