

Federal Communications Commission Washington, D.C. 20554	Approved by OMB 3060-0405 (March 2001)	FOR FCC USE ONLY
<b>FCC 349</b>		
<b>APPLICATION FOR AUTHORITY TO CONSTRUCT                  OR MAKE CHANGES IN AN FM TRANSLATOR OR                  FM BOOSTER STATION</b>		FOR COMMISSION USE ONLY FILE NO. BMPFT - 20060419ACP
Read INSTRUCTIONS Before Filling Out Form		

**Section I - General Information**

1. Legal Name of the Applicant 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	
	Call Sign W226AY	Facility Identifier 141839	
2. Contact Representative (if other than Applicant) TODD STANSBURY		Firm or Company Name WILEY REIN & FIELDING	
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) TSTANSBU@WRF.COM	
3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114): <input type="radio"/> Governmental Entity <input checked="" type="radio"/> Noncommercial Educational Licensee/Permittee <input type="radio"/> Other			
4. Facility information: a. <input checked="" type="radio"/> FM Translator <input type="radio"/> FM Booster b. Community or communities to which the proposed facility will be licensed:			
Community(ies) HINCKLEY	State MN		
5. Application Purpose			
<input type="radio"/> New station  <input type="radio"/> Major Change in licensed facility		<input type="radio"/> Major Modification of construction permit <input checked="" type="radio"/> 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:

BNPFT-20030827AMT

If an amendment, **submit as an Exhibit** a listing by Section and Question Number the portions of the pending application that are being revised.

[Exhibit 1]

**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. See General Instruction J.**

**Section II - Legal**

1. **Certification.** Applicant certifies that it has answered each question in this application



**NOTE: If No to a. and b., and no waiver has been requested in an Exhibit, this application is unacceptable for filing.** See 47 C.F.R. Section 74.1232(d).

If No to a. and Yes to b. applicant is prohibited from receiving any support, before or after construction, either directly or indirectly from the commercial primary station being rebroadcast or from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties include group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. See 47 C.F.R. Section 74.1232(e).

<p>4. The applicant, if for a commercial FM translator station with a coverage contour extending beyond the protected contour of the commercial primary station being rebroadcast, certifies that it has not received any support, before or after constructing, directly or indirectly, from the licensee/permittee of the primary station or any person with an interest in or connection with the licensee or permittee of the primary station, except for technical assistance as provided for under 47 C.F.R. Section 74.1232(e).</p>	<p><input type="radio"/> Yes <input type="radio"/> No  <input checked="" type="radio"/> N/A</p> <p>See Explanation in [Exhibit 5]</p>
<p>5. For applicants proposing translator rebroadcasts that are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. <b>If No, this application is unacceptable for filing.</b></p>	<p><input type="radio"/> Yes <input type="radio"/> No  <input checked="" type="radio"/> N/A</p>
<p>6. <b>Character Issues.</b> Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with:</p> <p>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</p> <p>b. any pending broadcast application in which character issues have been raised.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 6]</p>
<p>7. <b>Adverse Findings.</b> 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 the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination.</p> <p>If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of 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 date of filing; and (ii) the disposition of the previously reported matter.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 7]</p>
<p>8. <b>Alien Ownership and Control.</b> 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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 8]</p>
<p>9. <b>Program Service Certification.</b> 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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
<p>10. <b>Local Public Notice.</b> Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>

<p>11. <b>Auction Authorization.</b> If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable.</p> <p>An exhibit is required unless this question is inapplicable.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p> <p>See Explanation in [Exhibit 9]</p>
<p>12. <b>Anti-Drug Abuse Act Certification.</b> 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.</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>
<p>13. <b>Equal Employment Opportunity (EEO).</b> 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.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p>

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.)

<p>Typed or Printed Name of Person Signing THOMAS J KIGIN</p>	<p>Typed or Printed Title of Person Signing EXECUTIVE VICE PRESIDENT</p>
<p>Signature</p>	<p>Date 4/17/2006</p>

### SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (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.

<p>Name KATE MICHLER</p>	<p>Relationship to Applicant (e.g., Consulting Engineer) TECHNICAL CONSULTANT</p>	
<p>Signature</p>	<p>Date 4/6/2006</p>	
<p>Mailing Address DOUG VERNIER TELECOMMUNICATION CONSULTANTS 721 WEST 1ST STREET, SUITE A</p>		
<p>City CEDAR FALLS</p>	<p>State or Country (if foreign address) IA</p>	<p>Zip Code 50613 -</p>
<p>Telephone Number (include area code) 3192668402</p>	<p>E-Mail Address (if available) KMICHLER@V-SOFT.COM</p>	

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 III-A - 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: 226

2. Primary Station:

Call Sign	City	State	Channel
WSCN	CLOQUET	MN	263

3. Delivery Method (Select One):

Off-air  Microwave  Satellite  Via  Other

4. Antenna Location Coordinates: (NAD 27)

Latitude:

Degrees 46 Minutes 0 Seconds 51  North  South

Longitude:

Degrees 92 Minutes 56 Seconds 35  West  East

5. Antenna Structure Registration Number:

Not Applicable  Notification filed with FAA

6. Antenna Location Site Elevation Above Mean Sea Level: 315 meters

7. Overall Tower Height Above Ground Level: 46 meters

8. Height of Radiation Center Above Ground Level: 45 meters(H) 45 meters(V)

9. Effective Radiated Power: 0.055 kW(H) 0.055 kW(V)

10. Transmitting Antenna:

Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under [CDBS Public Access](http://svartifoss2.fcc.gov/prod/cdbbs/pubacc/prod/cdbbs_pa.htm) ([http://svartifoss2.fcc.gov/prod/cdbbs/pubacc/prod/cdbbs\\_pa.htm](http://svartifoss2.fcc.gov/prod/cdbbs/pubacc/prod/cdbbs_pa.htm)). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search.

Nondirectional  Directional "Off-the-shelf"  Directional composite

Manufacturer ERI Model 100

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

11. For FM Boosters and Fill-in translators only. Applicant certifies that the proposal is for a fill-in translator or booster station entirely within the primary station's protected contour.  Yes  No

N/A

See Explanation in [Exhibit 10];

12. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply:

Yes  No

See Explanation in [Exhibit 11]

**Overlap Requirements.**

a) 47 C.F.R. Section 74.1204

[Exhibit 12]

**Exhibit Required.**

**Television Channel 6 Protection.**

b) 47 C.F.R. Section 74.1205 with respect to station(s)

[Exhibit 13]

**Exhibit Required.**

13. **Unattended operation.** Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.

Yes  No

See Explanation in [Exhibit 14]

14. **Multiple Translators.** Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.

Yes  No

See Explanation in [Exhibit 15]

15. **Environmental Protection Act.** Applicant certifies that 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 Appendix A, an **Exhibit is required.**

Yes  No

See Explanation in [Exhibit 16]

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.

**PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.**

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

**Preliminary Matter:** Does this application provide fill-in service only?

Yes  No

<p>1. <b>Established Local Applicant:</b> 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.</p>	<p><input type="radio"/></p>
<p>2. <b>Diversity of Ownership:</b> Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) 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 qualification in a local public inspection file and has submitted to the Commission copies of the documentation.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>3. <b>State-wide Network:</b> 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.</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>4. <b>Technical Parameters:</b> Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) 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 the station's existing service area). (Points, if any, will be determined by FCC)</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>New (increased) 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:</p>	
<p><b>Tie Breakers</b></p>	
<p>5. <b>Existing Authorizations.</b> a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations.</p> <p>(number of attributable commercial and non-commercial licenses and construction permits)</p> <p>b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.</p>	
<p>6. <b>Pending Applications.</b> a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations.</p> <p>(number of attributable commercial and non-commercial applications)</p> <p>b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.</p>	

**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 4/17/2006

**Exhibits**

**Exhibit 1**

**Description:** ENGINEERING STATEMENT

**Attachment 1**

Description
<u>Exhibit #1, Engineering Statement</u>

**Exhibit 12**

**Description:** OVERLAP REQUIREMENTS

**Attachment 12**

Description
<u>Exhibit #12, Overlap Requirements</u>

**Exhibit 16**

**Description:** RF EMISSIONS COMPLIANCE STATEMENT

**Attachment 16**

Description
<u>Exhibit #16, RF Emissions Compliance Statement</u>



## **ENGINEERING STATEMENT**

Concerning the Application of  
Minnesota Public Radio  
To Make a Minor Modification to a  
Construction Permit  
W226AY  
BNPFT-20030827AMT  
A Non-Commercial FM Translator  
Serving Hinckley, Minnesota

April 2006

**Channel 226D**

**0.055 kW ERP H & V**

This engineering statement supports the application filed by Minnesota Public Radio to make a minor modification to the construction permit for W226AY, a non-commercial FM translator serving Hinckley, Minnesota. The instant proposal moves the transmitter location, decreases antenna height above mean sea level and average terrain, increases the ERP to 0.055 kW and changes the primary station to WSCN, Channel 263, Cloquet, Minnesota.

A 60 dBu change area map is included as Page #2. A total of 12 evenly spaced radials were used to determine the antenna height above average terrain. The N.G.D.C. 30 arc second database was employed to determine the elevations along the radials that were averaged using the required four-point interpolation method. The resulting averaged radial antenna heights were employed using the Commission's own TVFMINT algorithm to project the distances to signal contours. A tabular listing of the distance to the one mV/m contour of the modified facility can be found on page #3 of this exhibit.

Exhibit #12 is an Allocation Report. The first page is a computer channel study of all stations having a frequency and distance relationship. The exhibit gives current operating powers, HAAT's bearings and distances. (All distances were computed according to the method described under Section 73.208 of the Commission's Rules.) The second page is a narrative of the methods and conventions used in the report.

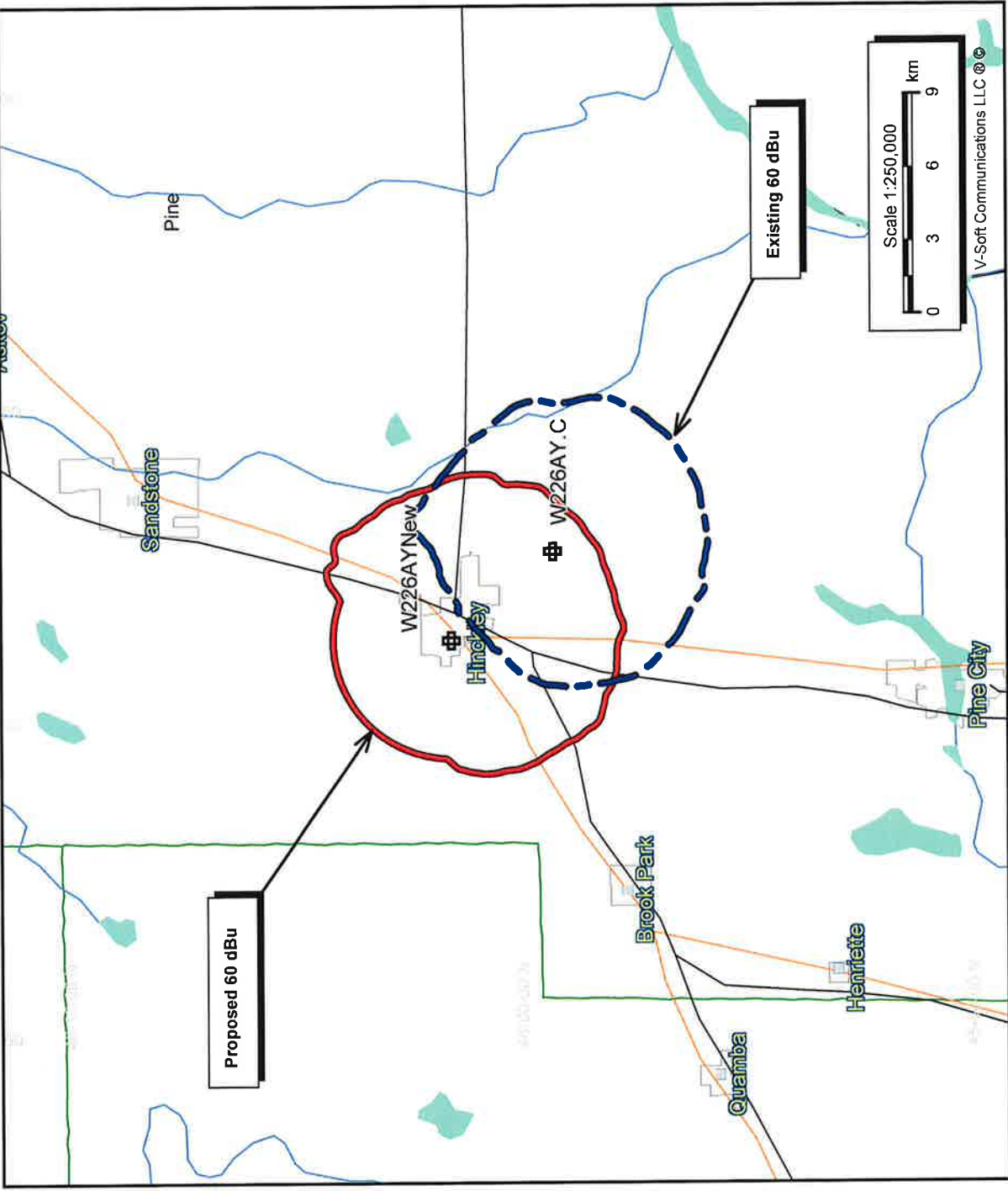
The proposed translator is located 249.8 kilometers from the US border with Canada and the 34 dBu interference contour does not extend past 60 kilometers in any direction. See distance to contour table on Page #3 of Exhibit #12. There are no pertinent I.F. relationships and the translator is okay with regard to Mexico, AM stations, FCC monitoring stations, Table Mountain and the West Virginia Quiet Zone.

Exhibit #16 is an R.F. emissions compliance statement.

Page #4 of Exhibit #1 is a statement of the qualifications of the preparer.

Kate Michler

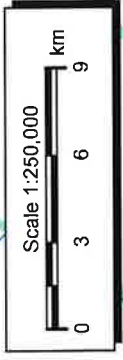
Ex #1, Pg #2  
**W226AY Proposed 60 dBu Change Area**



**W226AYNew**  
 Latitude: 46-00-51 N  
 Longitude: 092-56-35 W  
 ERP: 0.055 kW  
 Channel: 226  
 Frequency: 93.1 MHz  
 AMSL Height: 360.0 m  
 HAAT: 45.75 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No  
 Pop = 2,281

**W226AY.C**  
 BNPFT20030827AMT  
 Latitude: 45-58-36 N  
 Longitude: 092-53-47 W  
 ERP: 0.027 kW  
 Channel: 226  
 Frequency: 93.1 MHz  
 AMSL Height: 365.0 m  
 HAAT: 60.17 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No  
 Pop = 471

4/6/2006



V-Soft Communications LLC ©

N. Lat. = 46 00 51 W. Lng. = 92 56 35  
 HAAT and Distance to Contour - FCC Method - 30 Arc. Sec.  
 W226AY - Minor change application

Azi.	AV EL	HAAT	ERP kw	dBk	Field	60-F5
000	339.0	21.0	0.0550	-12.60	1.000	4.83
030	316.2	43.8	0.0550	-12.60	1.000	5.84
060	312.7	47.3	0.0550	-12.60	1.000	6.07
090	303.0	57.0	0.0550	-12.60	1.000	6.68
120	292.0	68.0	0.0550	-12.60	1.000	7.26
150	294.8	65.2	0.0550	-12.60	1.000	7.11
180	299.1	60.9	0.0550	-12.60	1.000	6.89
210	299.3	60.7	0.0550	-12.60	1.000	6.88
240	313.8	46.2	0.0550	-12.60	1.000	6.00
270	327.5	32.5	0.0550	-12.60	1.000	5.02
300	336.9	23.1	0.0550	-12.60	1.000	4.83
330	336.7	23.3	0.0550	-12.60	1.000	4.83

Ave El= 314.25 M HAAT= 45.75 M AMSL= 360 M

**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 eight years, and;

That, he has been active in broadcast consulting for over 30 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, and;

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.



\_\_\_ Katherine A. Michler

Executed on April 6, 2006

Exhibit #12

Minnesota Public Radio  
 Hinckley, MN Channel 226  
 CH# 226D - 93.1 MHz, Pwr= 0.055 kw, HAAT=45.75 M, COR= 360 M  
 Average Protected F(50-50)= 5.97 km  
 Ave. F(50-10) 40 dBu= 19.9 54 dBu= 8.5 80 dBu= 2.0 100 dBu= .5  
 REFERENCE 46 00 51 N. 97 56 35 W.  
 DISPLAY DATES DATA 04-06-06 SEARCH 04-06-06

CALL CITY	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*OUT* (Overlap in km)
226D W226AY Hinckley	CP C MN	139.1 319.2	5.52 BNPFT20030827AMT	45 58 36 92 53 47	0.027 36	365 14.1	4.4 Minnesota Public Radio	-22.82<
229C KXXR Minneapolis	LIC CN MN	187.6 7.5	107.17 BLH19910814KF	45 03 30 93 07 27	100.000 317	593 10.4	73.7 Kqrs, Inc.	32.97
223C KQRSFM Golden Valley	LIC CN MN	187.6 7.5	107.17 BLH19910814KB	45 03 30 93 07 27	100.000 317	593 10.4	73.7 Kqrs, Inc.	32.97
225C1 WSCDFM Duluth	LIC C MN	36.0 216.6	106.98 BMLED19940823KA	46 47 20 92 07 04	70.000 279	492 98.0	67.1 Minnesota Public Radio	31.55
227C1 KBLB Nisswa	LIC CX MN	293.8 112.8	120.80 BLH20020125AAX	46 26 34 94 22 55	100.000 189	554 93.2	62.8 Bl Broadcasting, Inc.	51.17
226A WJBL Ladysmith	LIC CN WI	112.7 294.0	154.18 BLH19941118KD	45 27 59 91 07 23	4.900 117	459 86.3	29.0 Roth Broadcasting, Inc.	101.89
225C3 KKJM St. Joseph	LIC CN MN	249.9 68.8	118.70 BLH19960510KA	45 38 19 94 22 23	25.000 118	448 63.4	41.8 Gabriel Communications Com	68.73
227C1 WBSZ Ashland	LIC NCN WI	68.0 249.5	171.74 BLH19940805KB	46 34 25 90 51 56	71.000 64	296 67.1	40.3 Heartland Comm. License, L	122.63
227D W227BF Shoreview	CP C MN	189.8 9.6	106.70 BNPFT20030819ADZ	45 04 05 93 10 29	0.010 121	401 9.0	6.4 Educational Media Foundati	90.36
226C1 KXLP New Ulm	LIC CN MN	205.4 24.6	231.30 BLH19890117KG	44 07 44 94 11 15	100.000 153	440 155.3	58.8 Cc Licenses, Llc	149.50

ERP and HAAT are on direct line to and from reference station.  
 Incoming contour overlap is ignored.  
 "\*"affixed to 'IN' or 'OUT' values = site inside protected contour. "<" = 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 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. (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 outgoing interference. Negative distance figures in this column indicate outgoing overlap 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.

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.

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.

N. Lat. = 46 00 51 W. Lng. = 92 56 35  
HAAT and Distance to Contour - FCC Method - 30 Arc. Sec.  
W226AY- Minor change application

Azi,	AV EL	HAAT	ERP kw	dbk	Field	34-F1
000	339.0	21.0	0.0550	-12.60	1.000	22.96
030	316.2	43.8	0.0550	-12.60	1.000	27.60
060	312.7	47.3	0.0550	-12.60	1.000	28.74
090	303.0	57.0	0.0550	-12.60	1.000	31.88
120	292.0	68.0	0.0550	-12.60	1.000	35.09
150	294.8	65.2	0.0550	-12.60	1.000	34.31
180	299.1	60.9	0.0550	-12.60	1.000	33.10
210	299.3	60.7	0.0550	-12.60	1.000	33.05
240	313.8	46.2	0.0550	-12.60	1.000	28.38
270	327.5	32.5	0.0550	-12.60	1.000	23.79
300	336.9	23.1	0.0550	-12.60	1.000	22.96
330	336.7	23.3	0.0550	-12.60	1.000	22.96

Ave E1= 314.25 M HAAT= 45.75 M AMSL= 360 M

## EXHIBIT #16

### R.F. EMISSION COMPLIANCE STATEMENT

Minnesota Public Radio  
W226AY  
BNPFT-20030827AMT  
Channel 226 – 0.055 kW H & V  
Hinckley, Minnesota  
April 2006

The applicant proposes to mount two 10' masts atop a 140' water tower. One antenna will be mounted on each mast. Each ERI 100 antenna will have 2 individual translator frequencies di-plexed through it. The total ERP of all 4 translators is 0.220 kW. The center of radiation is 45 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, 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 ERI 100 (Type #3) antenna is 0.2385 microwatts per square centimeter, which is 0.0239 percent of the maximum for a controlled area and 0.1193 percent of maximum for an uncontrolled area.

Since the predicted level of emissions is less than 5% of maximum, no further calculations were deemed necessary.

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

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