# WILEY, REIN & FIELDING

1776 K STREET, N. W. WASHINGTON, D. C. 20006 (202) 429-7000 DUPLICATE

Stanso 1/2 -1/

Public fele WGGL

CP/licenses

WRITER'S DIRECT DIAL NUMBER

November 8, 1996

FACSIMILE (202) 429-7049

(202) 828-4948

PECENTED

NOV = 8 .1996

FEDERAL COMMUNICATIONS COMMISSIC. OFFICE OF SEGRETARY

## BY HAND DELIVERY

William F. Caton Acting Secretary Federal Communications Commission Room 222 1919 M Street, N.W. Washington, DC 20554

> Re: WGGL(FM), Houghton, MI Minnesota Public Radio

Application for License

Dear Mr. Caton:

On behalf of Minnesota Public Radio, licensee of WGGL(FM), Houghton, Michigan, enclosed for filing, in triplicate, is an application on Form 302-FM for a license. This application is being submitted pursuant to Section 73.1690(c) of the Commission's Rules, following the replacement of certain transmission equipment of the station. No fee is required for this filing.

Please contact this office if there are any questions.

Respectfully submitted,

Todd M. Stansbury

TMS:ems Enclosure

#### 3060-0506 Expires 01/31/97

FOR FCC USE ONLY

## **FCC 302-FM**

# APPLICATION FOR FM BROADCAST STATION LICENSE

(Please read instructions before completing this form.)

FOR MASS MEDIA BUREAU USE ONLY	
FILE NO.	

#### Section I - GENERAL INFORMATION

I. APPLICANT NAME	<del></del>		
1. Afficiant teams	Minnesota Public	Radio	
VIAILING ADDRESS (Line 1) (V			<u> </u>
VIAILING ADDRESS (Line 2) (V	45 East Seventh laximum 35 characters)	Street	
;ny		STATE OR COUNTRY (if foreign address)	ZIP CODE
Saint Paul	L	MN	55101
relephone NUMBER (include (612) 290-	ares code) -1259	CALL LETTERS OTHE WGGL FM	R FCC IDENTIFIER OF APPLICABLE
OR MAILING THIS APPLIC	ATION, SEE INSTRUCTIONS FO	R SECTION I	
2. A. Is a fee submitted with thi	s application?	· · · · · · · · · · · · · · · · · · ·	Yes XX No
	ate box to indicate reason for fee exe	reption (see 47 C.F.R. Section 1.1112) or resso	n a fee is not applicable and go to
Question 3.	==		
Governmental Entity	X Noncommercial ed	acational licurates Other (Please e	oplain):
C. If Yes, provide the followi	ng Informations		
Enter in Column (A) the correct	t Fee Type Code for the service you	are applying for. Fee Type Codes may be fo application. Enter in Column (C) the result of	und in the "Mass Media Services Fed
the Fee Type Code in Column (	A) by the number listed in Column (8)	P	Manage Hotel Households the search
W		(0	
(1) FEE TYPE CODE	FEE MULTIPLE (if required)	FRE DUE FOR FRE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
`"  <del></del>	0 0 0 1	<b>S</b> .	· · · · · · · · · · · · · · · · · · ·
To be used only when you are	requesting concurrent actions which	result in a requirement to list more than one F	ee Type Code.
ω			
			COR POCUME ONLY
(2)	0 0 0 1	\$	FOR FCC USE ONLY
(2)	0 0 0 1	\$	FOR FCC USE ONLY
		TOTAL AMOUNT REMITTED	FOR FCC USE ONLY
ADD ALL AMOUNTS SHOWN THROUGH (3), AND ENTER T	I IN COLUMN C, LINES (1) HE TOTAL HERE.	TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
ADD ALL AMOUNTS SHOWN 1'HROUGH (5), AND ENTER F	I IN COLUMN C, LINES (1) HE TOTAL HERE.		

FCC 302-FM August 1992 edition usable FCC 302-June 1988 edition cannot be used to obtain an FM license FCC 302-FM February 1995

proceeding, brought under the provisions of any law media related antitrust or unfair competition; fradulent discrimination.	arties to the application in a civil or criminal relating to the following: any felony; mass t statements to another governmental unit; or	Lij Yes [X.] No
If the answer is Yes, attach as an Exhibit a full dis- linvolved, including an identification of the court or adn and file numbers), and the disposition of the litigation earlier disclosed in connection with another application the applicant need only provide: (i) an identification of file number in the case of an application, the call lette Section 1.65 information was filed, and the date of file reported matter.	ninistrative body and the proceeding (by dates in. Where the requisite information has been in or as required by 47 U.S.C. Section 1.65(c), if that previous submission by reference to the err of the station regarding the application or	Exhibit No.
For permittees of commercial FM stations only:		
Has permittee filed its Ownership Report (FCC Form 32 with 47 C.F.R. Section 73.3615(b). See Instructions.	3) or ownership certification in accordance	Yes No No No Does Not Apply
egulatory power of the United States because of the preventhorization in accordance with this application. (See 47 U. ive APPLICANT acknowledges that all the statements of presentations and that all the exhibits are a material part he	.S.C. Section 304.)  nade in this application and attached exhibit	ts are considered material
CE	RTIFICATIONS	
By checking Yes, the applicant certifies that, in the car subject to a denial of federal benefits that includes For Anti-Drug Abuse Act of 1988, 21 U.S.C. 862, or, in corporation, partnership or other unincorporated associate to a denial of federal benefits that includes FCC benefit of a "party" for these purposes, see 47 C.F.R. Section 1.	CC benefits pursuant to Section 5301 of the the case of a non-individual applicant (e.g., clation), no party to the application is subject to pursuant to that section. For the definition	X Yes No
1 certify that the statements in this application are true, made in good faith.	complete, and correct to the best of my knowle	edge and belief, and are
ame of Applicant	Signature / MMA C.A.	Kich
Minnesota Public Radio	Thomas J Kigin	75075
the Vice President	Date 11 - 7-96	$\bigcirc$
WILLFUL FALSE STATEMENTS MADE ON THIS	FORM ARE PUNISHABLE BY FINE AND/OR IM ECATION OF ANY STATION LICENSE OR CON	

(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

### FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT

"Ilsa solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of this application is in the public interest. In reaching that determination, or for law enforcement purposes, it may be necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, processing of the application may be delayed or the application may be returned without action pursuant to the Commission's Rules. Your response is required to obtain if a requested authority.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. SECTION 552±(4)(3).

FIC 302-FM (Page 2) Polymery 1995

Section 1 - GENERAL INFORMATION (Page 2)

RECEIVED FROM

10.29.1996 17118

SE	TION II - TECHNICAL D	)ATA					
1.	This license application is	for as (check all that apply)					
	Request for progra	am test authority.	Statio	n on automatic prog	ram test a	authority.	
	Commercial statio	m. į	X Nonce	ommercial station.			
	Directional antenu	na.	Non-d	lirectional antenna.			
	License to cover o	construction permit for an auxili	iary facility.				
	License to utilize	former licensed main facility as	an auxiliary facility	<b>/.</b>			
	SPECIAL OPERA	TING CONDITIONS MAY P	ROHIBIT AUTO	MATIC PROGRAM	I TEST A	UTHORIT	Y.
2.	Call Sign: WGGL	3. Frequen	cy or channel:	91.1	Class:		
4	Community of Licenses	City Houghton	<del></del>	Stat	e MI	7	
5	•	and enter the file number(s) on t	the appropriate line			_	
**		struction permit. Original file			•		
	<u> </u>	as modifie					
		as extende	ed by:			_	
		as replace	d by:			_	
	(b) XX modifies a li	conse, file number:BL	ED-937				
6.	Is this application being f See instructions.	iled pursuant to MM Docket N	o, 88-375 (Class A l	Upgrade)?		Yes	<b>₹X</b> №
	If Yes, attach the supplen	nental Exhibit to this application	n.			N/X	Na.
1F 7	YOU SELECTED 5(b), "M	ODIFIES A LICENSE," PROC	CEED TO ITEM 8.				
<i>5</i> .	Expiration date of constr	setion namity	Month	Day	Year.	<del></del>	
4.	copitation sale or commit	word hause		,	· ·	, l	N/A

THIS APPLICATION MUST BE ON FILE WITH THE COMMISSION BEFORE THE EXPIRATION DATE OF YOUR CONSTRUCTION PERMIT. SEE INSTRUCTIONS.

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## SECTION II - TECHNICAL DATA (Page 2)

	(a) Antenna coordinates: 47 02	08_	N. Lat.	88	41	43	W. Lon.
				orizontal		Vertical	
	(b) Effective radiated power:		100	)	. kW	100	kW
	(c) Beam tilt effective radiated power (if applicable):		<u>N/2</u>	Α	. kW	N/A	kW
	(d) Radiation center above ground:		103	3.6	. meters	103.6	meter
	(e) Radiation center above mean sea level:		415	5	. meters	415	meter
	(f) Antenna height above average terrain:		262	2.13	. meters	262.1	3 meter
	(g) Overall tower height above ground (including antenna, all other appurtenances, and lighting, if any):			2.5	. meters		
9.	Description of facilities as constructed:						
	(a) Antenna coordinates: 47 02	08	n N. Lat.	88	<u> 41</u>	43	W. Lon
	(h) Effective and interference		100	lorizontal		Vertical 100	5.44.4
	(b) Effective radiated power:				_ kW		kW
	(c) Beam tilt effective radiated power (if applicable):		N/A		. kW	N/A	kW
	(d) Radiation center above ground:		103	. 6	_ meters	103.6	meter
	(e) Radiation center above mean sea level:		415	•	_ meters	415	meter
	(f) Antenna height above average terrain:		256	.3	_ meters	256.3	mete
	(g) Overall tower height above ground (including antenna, all other appurtenances, and lighting, if any):		152	.09	_ meters		
10.	Are there any differences between the facilities described in	n Item	8 and those	in Item 97		X Yes	N
	IF YES, YOU MAY NOT BE ABLE TO USE THIS FORM	A. SEI	INSTRUC	TIONS.			
	Attach an Exhibit explaining in detail how these differences	occui	red.			Exhibit (	No.
11.	SPECIAL OPERATING CONDITIONS. Attach an Exhibi special operating conditions, terms, and obligations describ See Instructions.					Exhibit	No.

CONVERSION TO AND FROM METRIC: METERS = 0.3048 X FEET

FEET = 3.281 X METERS

	•	Make ERI	Model Number FMH12AC		Number of Sections 12BAY	Power Gain 6.8781			
	If the antenna utilizes bean the antenna is directional o	n tilt, null fill, reduced o er specialized, an exhibi	spacing (less that it must be attack	in one wav hed. SEE IN	elength) betw NSTRUCTION	reen bays or	Ezhibit Na. N/A		
43.	Transmission line system de	escription:							
	(a) Transmission Line(s):	·	<del> </del>	<del></del>	<del></del>				
	Make	Model Number	Length in A	Meters	Effici				
	Andrew	HJ850B	108.2	meters	89.7	7 %			
				meters		%			
	IF MORE SPACE IS NEEDE	D, PLEASE ATTACH EXI	HIBIT.			٢	Eshibit No. N/A		
	(b) Additional losses (Filter	, Isocouplers, Multiples	xers, etc.) in tra	nsmission l	ine system:	. L	N/A		
	Descript	tion	Loss in	d₿	Effici	ency			
i	N/A			ď8		- *			
				dB		*			
	IF MORE SPACE IS NEEDEL	D PLEASE ATTACH SY	HIŘIT	·· -			Exhibit No.		
						L_	N/A		
	(c) Total Efficiency of trans	mission line system:		39.7_	- ~				
11.	Transmitter power output (	in k <del>ilowatts):</del>	<u> </u>	L6.208	kW				
	SEE INSTRUCTIONS TO C	ALCULATE TPO.							
15.	Operating constants:								
	(a) D.C. plate current in las	t radio stage (amperes):	·	3.0	^				
	(b) Applied D.C. voltate in	last radio stage (volts):	74	100					
	(c) Efficiency of transmitter	at operating power (pe	ercent):	73.0	_ %		•		
	(d) RF transmission line me	ter reading (percent):	1	N/A	_%				
	SEE INSTRUCTIONS TO C	HECK OPERATING CO	NSTANTS.		<del>-</del> ~				
16.	strength contour of the main facility?  No. Is the main studio located within the city of license or the predicted 3.16 mV/m (70 dBu) field  X Yes No.								
	If NO, attach an Exhibit pursuant to the instructions.								
17.	Location of Main Studios (	P.O. BOXES ARE UNAC	CCEPTABLE)						
Stree	et Address or Location Descr	ription				· · · · · · · · · · · · · · · · · · ·			
	Academic Offic	ce Building,	Michiga	an Tec	hnolog	ical Unive	ersity		
City	Houghton	·	County	Houg	hton	<del></del>	State MI		

CONVERSION TO AND FROM METRIC: METERS = 0.3048 X FEET

SECTION II - TECHNICAL DATA (Page 3)

FEET = 3.281 X METERS

FCC 362-FM (Page 5) February 1998

RECEIVED FROM

#### SECTION II - TECHNICAL DATA (Page 4) 18. Location(s) of Remote Control Point(s): Street Address or Location Description (a) 45 East Seventh Street City County Saint Paul State Ramsey MN Street Address or Location Description **(b)** City County State If there are additional remote control points, attach an Exhibit which describes their locations. Exhibit No. 19. Location of Antenna Site: Street Address or Location Description .35 miles from SR26 SW City County State Painesdale Houghton MI CERTIFICATION OF PREPARER I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief. Name (please print or type) Signature riate box below) Ralph Hornberger Address (include ZIP Code) Date 45 East Seventh Street Telephone No. (include Area Code) Saint Paul, MN 55101 (612)290-1548 Technical Director Registered Professional Engineer Chief Operator **Technical Consultant**

#### FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PAPERWORK REDUCTION ACT

Public reporting burden for this collection of information is estimated to average 4 hours per response. This estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, AMD-IM, Paperwork Reduction Project (3060-0506), Washington, D. C. 20554.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

Other (specify)

FCC Form 302-FM Minnesota Public Radio WGGL(FM) Exhibit 1

On October 29, 1996 the antenna and associated equipment for WGGL(FM) moved from its "old" tower (FCC Antenna Structure Registration Number 1000704) to a "new" replacement tower that was constructed immediately adjacent to the old tower. The coordinates for the two towers are the same.

In addition to moving from the old to the new tower, as a part of the move WGGL acquired a new antenna and associated equipment for the facility, to replace the aging original antenna.

No other changes to the operations of WGGL have been made, other than the tower and antenna changes.