194

Received & Inspected NOV 142013

2013 NOV 18 A 6:05

SIVED

FCC Mail Room

Ms. Marlene H. Dortch, Secretary Federal Communications Commission 445 12th St. SW Washington, DC 20554

Dear Ms. Dortch,

7650m

Enclosed is the original and two copies of an amendment to FCC form 302-AM application for station license BMML-20121005AGV for WBHR, Facility ID 26980 as requested by FCC staff.

0004200978

Sincerely, Gary E. Hoppe

Marine Constant

ORIGINAL

Mueller Broadcast Design 613 S. La Grange Road La Grange, Illinois 60525 (708) 352-2166

2013 NOV 18 A 6: 05

TEDEVED

Engineering Exhibit For Herbert M. Hoppe W B H R (A M) Sauk Rapids, Minnesota October 2013 Received & Inspected NOV 1 4 2013 FCC Mail Room

This engineering exhibit was prepared in response to an FCC staff letter dated September 11, 2013 requesting an amendment to the pending license application BMML-20121005AGV for WBHR, Sauk Rapids, Minnesota (FCC facility ID 26980). Specifically, the letter requests that the ASRNs f or towers 1 and 3 be corrected, the daytime operating parameters be amended and that the calibration information for the field intensity meter use be supplied.

The FCC form 302 section III operating parameters (question 8) has been corrected to show the correct ASRNs for towers 1 and 3, which were reversed. We apologize for this error.

In order to achieve a more equal power distribution between the two towers the phasing system was designed in 1984 with the reference being tower 4. There is no difference in the pattern between tower 2 at $1.00/0^{\circ}$ with tower 4 at $0.78/+90^{\circ}$ and tower 2 at $0.78/0^{\circ}$ with tower 4 at $1.00/+90^{\circ}$. Similarly, there is no difference in the pattern between tower 2 at $1.00/0^{\circ}$ with tower 4 at $0.78/+90^{\circ}$ and tower 2 at $0.78/-90^{\circ}$ with tower 4 at $1.00/-0^{\circ}$. The model pattern parameters on page 10 of the engineering report has been amended to show tower 2 at -90° and tower 4 at 0° to correspond with the operating parameters and FCC form 302 numbers. Nothing else is affected.

The field intensity meter used to collect the readings shown on the Reference Point Readings pages (19 and 20) of the Antenna System Verification report is the WBHR Potomac Instruments FIM-21 s/n 606. It was checked against the writer's FIM-41 s/n 1655 prior to taking these measurements and was found to agree within the manufacturer's specifications. The writer's FIM-41 had been previously checked against an FIM-41 in March 2012 and that meter had been recalibrated by Potomac Instruments in February 2012. At the time the meters agreed within 0.5%. The writer's meter has since been factory calibrated in June 2013 and the WBHR

meter was again checked in July 2013 and agrees with the writer's meter to within 1%.

This engineering exhibit was prepared by me and is true and correct to the best of my knowledge and belief.

October 21, 2013

Male C. Muelle

Mark A. Mueller

Mueller Broadcast Design

613 S. La Grange Road La Grange, Illinois 60525 (708) 352-2166

Received & inspected

NOV 142013

TOWER DRIVE INFORMATION - DAY

FCC Mail Room

	Field Ratios	Field Phase	Drive Imped. (Ω)	Current	Antenna Monitor*	Power (W)
Tower 1	0.0000	0.0000	-28.35 - j794.41	0.58 ∡ 5.93	(detuned)	-9.6014
Tower 2	0.7800	-90.000	37.98 - j52.26	12.37 ∡ -88.43	75.2% ∡ -88.4°	5815.3140
Tower 3	0.0000	0.0000	-31.58 - j793.83	0.57 ∡ 14.19	(detuned)	-10.3177
Tower 4	1.0000	0.0000	15.59 - j78.46	16.46 ∡ 0.00	100.0% ∡ 0.0°	4226.1239
Tower 5	0.0000	0.0000	-31.06 - j1086.88	0.31 ∡ 19.45	(detuned)	-3.0802
Tower 6	0.0000	0.0000	-71.11 - j1054.38	0.40 ∡ 12.32	(detuned)	-11.1214
Tower 7	0.0000	0.0000	-19.74 - j764.44	0.61 ∡ -15.41	(detuned)	-7.3171
TOWER 1	0.0000	0.0000	-13.74-1704.44	0.01 2 - 13.41	(detuned)	-7.01

Towers 1, 3, 5-7 are detuned using the appropriate series reactance.

TOWER DRIVE INFORMATION - NIGHT

	Field Ratios	Field Phase	Drive Imped. (Ω)	Current	Antenna Monitor*	Power (W)
Tower 1	1.0000	0.0000	18.92 - j77.55	3.52 ∡ 0.00	100.0% ∡ 0.0°	234.3421
Tower 2	0.0000	0.0000	-54.31 - j811.06	0.14 ∡ 52.10	(detuned)	-1.0965
Tower 3	0.6800	-49.0000	42.78 - j78.18	2.39 ∡ -47.11	67.9% ∡ -47.1°	244.8501
Tower 4	0.1000	-30.0000	121.12 - j227.63	0.43 ∡ -19.41	12.2% ∡ -19.4°	22.8265
Tower 5	0.0000	0.0000	-97.62 - j1142.47	0.06 ∡ 54.75	(detuned)	-0.3552
Tower 6	0.0000	0.0000	-45.99 - j1074.89	0.09 ∡ 38.33	(detuned)	-0.3605
Tower 7	0.0000	0.0000	-13.86 - j775.57	0.12 ∡ 27.28	(detuned)	-0.2066

Towers 2, 5-7 are detuned using the appropriate series reactance.

* = These are the pattern parameters used to tune the array and are on the Form 302.

Federal Communications Commission Washington, D. C. 20554 Approved by OMB 3060-0627 Expires 01/31/98

FOR FCC USE ONLY

FOR COMMISSION USE ONLY

BROADCAST STATION LICENSE (Please read instructions before filling out form.

FCC 302-AM

FILE NO.

SECTION I - APPLICANT FEE INFORMATION		Received & Inspect			
1. PAYOR NAME (Last, First, Middle Initial)					
Tri-County Broadcasting Inc.		NOV 1 4 2013			
MAILING ADDRESS (Line 1) (Maximum 35 characters) 1010 Second Street North		FCC Mail Roor			
MAILING ADDRESS (Line 2) (Maximum 35 characters)					
CITY Sauk Rapids	STATE OR COUNTRY (if fo	reign address) ZIP CODE 56379			
TELEPHONE NUMBER (include area code) (320) 252-6200	CALL LETTERS WBHR	OTHER FCC IDENTIFIER (If applicable) Facility ID 26980			
2. A. Is a fee submitted with this application?		Yes 🖌 No			
B. If No, indicate reason for fee exemption (see 47 C.F.R. Section					
Governmental Entity Noncommercial edu	cational licensee 🚺 O	ther (Please explain):			
C. If Yes, provide the following information: Amendment to pending applicatio					
Enter in Column (A) the correct Fee Type Code for the service you Fee Filing Guide." Column (B) lists the Fee Multiple applicable for th					
(-),					
(A) <u>(B)</u>	(C)				
FEE TYPE FEE MULTIPLE	FEE DUE FOR FE TYPE CODE IN	E FOR FCC USE ONLY			
	COLUMN (A)				
To be used only when you are requesting concurrent actions which re		re than one Fee Type Code.			
	(C) \$	FOR FCC USE ONLY			
0 0 1	L.				
ADD ALL AMOUNTS SHOWN IN COLUMN C,	TOTAL AMOUNT REMITTED WITH TH APPLICATION	IS FOR FCC USE ONLY			
AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED	\$				
REMITTANCE.	· ·				

SECTION II - APPLICAN	TINFORMATION				
1. NAME OF APPLICANT	Tri-County Broadca	sting Inc.	Harden de Barbarten anna 130.		
MAILING ADDRESS	1010 Second Stre	et North			
CITY Sauk Rapi	ds	STATE MN	I	ZIP CODE 56379	
2. This application is for:	Commercial	Noncomm		This license applicatior includes a "method of oments" directional ante proof.	
Call letters	Community of License Constr Sauk Rapids n/	uction Permit File No. a	Modification of Construction Permit File No(s). n/a	Expiration Date of Last Construction Permit n/a	
3. Is the station m accordance with 47 C.F If No, explain in an Exhi		tomatic program	test authority in	Yes ✓ No Exhibit No. n/a	
 4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met? If No, state exceptions in an Exhibit. 					
 5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect? If Yes, explain in an Exhibit. 					
6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?					
If No, explain in an Exhibit.					
7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?					

was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

If Yes, provide particulars as an Exhibit.

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

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

CERTIFICATION

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

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

Name Herbert M. Hoppe	Signature Herbert M	Huppe
Title	Date	Telephone Number
Officer	10/21/2013	(320) 252-6200

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

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The 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 the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become 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, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including 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, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.



Yes No

Exhibit No. DNA

_		-	-	

	ant		Tri-Cour	nty Broadcastin	g, Inc.		
PURPOSE OF	AUTHORIZATI	ON APPLIED FOR	: (check one)				
X	Station License	e	Direct Me	asurement of Pov	wer		
1. Facilities au	thorized in const	truction permit					
Call Sign		onstruction Permit		Hours of Oper	ation	Power in	n kilowatts
WBHR	(if applicable)) n/a	(kHz) 660	Unlii	nited	Night 0.5	Day .
2. Station locat	 ion	100	<u>.</u>			J	
State	Minnesota			City or Town		Sauk Rapids	
3. Transmitter	ocation						
State	County			City or Town		Street address	
MN		Bentor	ı	Sauk Rapids		north of Gol	NE, 0.6 K den Spike
4. Main studio	 location					1	
State	County			City or Town		Street address	
MN	,	Bentor	า	-	Rapids	or other identific (or other identific	
5 Pomoto con		on (specify only if a	uthorized directio	l			
State	County	IT (Specify only if a	unonzed directio	City or Town		Street address	
MN	County	Bentor	1	(or other identification			
	MIN Benton Sauk Rapids 1010 Second St., North						
						-	
6. Has type-ap	proved stereo g	enerating equipme	nt been installed	?			/es X
		enerating equipme neet the requireme					
							/es
7. Does the sa	mpling system n		ents of 47 C.F.R.	Section 73.68?			/es
 Does the satisfies Attach as an I Operating co 	mpling system n Exhibit a detaile	neet the requireme	ents of 47 C.F.R.	Section 73.68?			Yes
 Does the satisfies Attach as an I Operating co 	mpling system n Exhibit a detailer onstants: int or antenna c	neet the requireme	ents of 47 C.F.R.	Section 73.68?			Yes Applica
 Does the satisfies the satisfies of the sati	mpling system n Exhibit a detailer onstants: int or antenna c night system	neet the requiremend d description of the urrent (in amperes) 3.25 point resistance (ir	ents of 47 C.F.R.	Section 73.68? n as installed. RF common p modulation for Measured ant operating freq	day system	Ext Current (in amper 14.5 n point reactance	Ves
 Does the satisfies the satisfies of the sati	mpling system n Exhibit a detailer onstants: int or antenna c night system	neet the requiremend d description of the urrent (in amperes) 3.25	ents of 47 C.F.R.	Section 73.68? n as installed. RF common p modulation for Measured ant	day system	Ext Current (in amper 14.5	Yes Applica Not Applica hibit No. EE es) without
 Does the same of the same of	mpling system n Exhibit a detailed onstants: int or antenna c night system nna or common ency	neet the requiremend d description of the urrent (in amperes 3.29 point resistance (in Day	ents of 47 C.F.R. e sampling system) without) n ohms) at	Section 73.68? n as installed. RF common p modulation for Measured ant operating freq Night	• day system enna or commo uency 0	Ext Current (in amper 14.5 n point reactance	Yes Not Applica
 Does the same of the same of	mpling system n Exhibit a detailed onstants: int or antenna c night system nna or common ency 50	neet the requiremend d description of the urrent (in amperes) 3.25 point resistance (in Day nal operation Antenna Phase reading	ents of 47 C.F.R. e sampling system) without) without) ohms) at 50 monitor	Section 73.68? n as installed. RF common p modulation for Measured ant operating freq Night Antenna mo current	day system enna or commo uency 0 onitor sample ratio(s)	Current (in ampereration 14.5 n point reactance Day Antenna I	Ves Not Applica Not Applica N
 Does the same of the same of	mpling system n Exhibit a detailed onstants: int or antenna c night system nna or common ency 50 ions for direction vers	neet the requiremend d description of the urrent (in amperes) 3.25 point resistance (in Day nal operation Antenna Phase reading Night	ents of 47 C.F.R. e sampling system) without) without) ohms) at 50 monitor	Section 73.68? n as installed. RF common p modulation for Measured ant operating freq Night Antenna mo current Night	• day system enna or commo uency 0 onitor sample ratio(s) Day	Ext Current (in ampere 14.5 n point reactance Day Antenna l Night	Ves Not Applica Not Applica
 Does the same of the same of	mpling system n Exhibit a detailed onstants: int or antenna c night system nna or common ency 50 ions for direction vers	neet the requiremend d description of the urrent (in amperes) 3.25 point resistance (in Day nal operation Antenna Phase reading	ents of 47 C.F.R. e sampling system) without) without) ohms) at 50 monitor (s) in degrees Day 	Section 73.68? n as installed. RF common p modulation for Measured ant operating freq Night Antenna mo current Night 100%	enna or commo uency 0 pnitor sample ratio(s) Day	Ext Current (in ampere 14.5 n point reactance Day Antenna l Night	Ves Not Applica Not Applica N
 Does the same of the same of	mpling system n Exhibit a detailed onstants: int or antenna c night system nna or common ency 50 ions for direction vers	neet the requiremend d description of the urrent (in amperes) 3.25 point resistance (in Day nal operation Antenna Phase reading Night	ents of 47 C.F.R. e sampling system) without) without) ohms) at 50 monitor (s) in degrees	Section 73.68? n as installed. RF common p modulation for Measured ant operating freq Night Antenna mo current Night	• day system enna or commo uency 0 onitor sample ratio(s) Day	Ext Current (in ampere 14.5 n point reactance Day Antenna l Night	Yes Diversified Applica

Manufacturer and type of antenna monitor:

Ś -95

Potomac Instruments AM-19 (204)

SECTION III - Page 2

9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator Vertical uniform cross section triangular steel insulated towers	Overall height in meters of radiator above base insulator, or above base, if grounded.	Overall height in meters above ground (without obstruction lighting)	Overall height in meters above ground (include obstruction lighting)	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.
Steel moduled towers	88.4	89.3	90.2	Exhibit No. n/a
Excitation	X Series	Shunt		

Excitation

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

	North Latitude	0 45	36	18	West Longitude	o 94	08	21
--	----------------	---------	----	----	----------------	---------	----	----

Exhibit No.

n/a

Exhibit No.

n/a

If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits.

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system.

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit? Tower numbers changed so all four stations on site use same numbering system.

11. Give reasons for the change in antenna or common point resistance.

No change

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) Mark A. Mueller	Signature (check appropriate box bedow)			
Address (include ZIP Code) Mueller Broadcast Design 613 S. La Grange Rd.	Date September 19, 2012 amended October 21, 2013			
La Grange, IL 60525 mark@muellerbroadcastdesign.com	Telephone No. (Include Area Code) (708) 352-2166			
Technical Director	Registered Professional Engineer			
Chief Operator	X Technical Consultant			
Other (specify)				