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June 17, 2014

## **BY HAND DELIVERY**

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

Re: Amendment to AM Method of Moments License Application Radio License Holding CBC, LLC Station KKOH(AM), Reno, Nevada Facility Identifier Number 11236 File Number BMML-20140206AJY

Enconty.

2014 JUN 19 A 5: 51

Dear Ms. Dortch:

Transmitted herewith on behalf of Radio License Holding CBC, LLC ("RLH-CBC") is an amendment to its pending license application identified above. On April 4, 2014, the FCC issued a letter noting several discrepancies in this Form 302-AM that need to be addressed before processing could continue – measurements to establish that sampling devices agree with the manufacturer's rated accuracy as well as correction of a typographical error in Exhibit # 1 which contradicted the actual measurement procedure. RLH-CBC believes that this amendment resolves these discrepancies.

If there are any questions about this Amendment, please contact undersigned counsel for Radio License Holding CBC, LLC..

Sincerely,

Tail Mark N. Li

cc: Mr. Jerome Manarchuck, Media Bureau, Audio Division, FCC

ORIGINAL

#11236

Mark N. Lipp 202.719.7503 mlipp@wileyrein.com

6619721638

Accepted/Filed

JUN 17 2014

FCC Office of the Secretary

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 walves 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	Signature	
Richard S. Denning	Cichert SD comment	
TINe	Date	Telephone Humber
Sr. Vice President, Secretary & General Counsel	06/17/14	404.949.0700

#### 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 1034, 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 II 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 colloction 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 Managoment 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(4)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3597.

FOC 302-AM (Page 3) August 1995

Yes No

Yes 🗸 No

Exhibit No.

# GRAHAM BROCK, INC.

BROADCAST TECHNICAL CONSULTANTS

AMEND BMML-20140206AJY RADIO LICENSE HOLDING CBC, LLC KKOH AM RADIO STATION 780 kHz - 50.0 kW DAN RENO, NEVADA June 2014

#### **TECHNICAL EXHIBIT**

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5971 B New Jesup Highway • Brunswick, GA 31523 • P.O. Box 24466 • St. Simons Island, GA 31522-7466 912-638-8028 • Fax 912-275-8869 www.grahambrock.com

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This Technical Statement was prepared on behalf of Radio License Holding CBC, LLC ("RLH"), licensee of radio station KKOH, 780 kHz, Reno, Nevada and is in response to FCC letter of April 4, 2014 noting several discrepancies in the application for license. Specifically the original application did not include the actual measurements to establish that sampling devices agree within the manufacturer's rated accuracy in accordance with Section 73.151(2)(I) and a typographical error in Paragraph 2 of Exhibit #1 which contradicted the actual measurement proceedure.

Attached as Exhibit #6E1 is a description of the measurement procedure which was used to determine the sampling devices agree within the manugacturer's rated accuracy. Exhibits #6E2 through #6E7 are graphic representations of the measurements of each sample toroidial transformer with the sample of Tower #2 as reference.

Also attached is a corrected Exhibit #1 properly referencing the towers as each measured with the other towers open circuited.

We have tried to be as accurate as possible in the preparation of this application. All information contained in this application was extracted from the CDBS database. We assume no liability for omissions or errors in this source. Should there be any questions concerning the

information contained herein, we welcome the opportunity to discuss the matter by phone at 912-638-8028 or by email at <u>rsg@grahambrock.com</u>.

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#### EXHIBIT #1

#### Analysis of Tower Impedance Measurements to Verify Method of Moments Model

Tower base impedance measurements were made at the final J-plugs within the Antenna Tuning Units ("ATU's") using an Agilent 8753ES Vector Network Analyzer with an ENI 411 LA RF Power Amplifier and Tunwall Directional Couplers, utilized as a calibrated measurement system. The other towers were open circuited at the same points where impedance measurements were made ("reference points"), in compliance with Section 73.151(c)(1).

The reference point in each ATU is followed by the feed-line that exits the ATU enclosure and is connected to the tower above the base insulator. Circuit calculations were performed to relate the Method of Moments modeled impedances of the tower feed points to the ATU output measurement (reference) points, as shown on the following pages. The XL shown for each tower, which was calculated for the assumed stray inductance, was less than 10 uH, in compliance with Section 73.151(c)(1)(vii).

The modeled and measured base impedances at the ATU output jacks, with the other towers open circuited at their ATU output jacks agree within +/- 2 ohms and +/- 4 percent for resistance, as required by Section 73.151(c)(2) of the FCC's rules.

#### EXHIBIT #6E1

The three KKOH sample toroids were removed from service and tested out of circuit by means of an Agilent 8753ES Vector Network Analyzer with external ENI 411LA linear amplifier and Tunwall Radio directional coupler, which operated as calibrated measuring system. An amplified, unmodulated current at carrier frequency was circulated to all three toroids, such that the same current passed through each sample transformer simultaneously. The output of the reference-tower (Tower #2) toroid was selected as the reference sample and coupled to the "A" receiver of the VNA. The "B" receiver of the VNA was then first connected to the #1 toroid and then connected to the #3 toroid in sequence. Utilizing the measurement capabilities of the VNA and analyzing the signals present at the "A" (reference toroid) and "B" (toroid under test) inputs of the unit, it was determined that the magnitude and phase responses of the toroids under test were virtually identical.

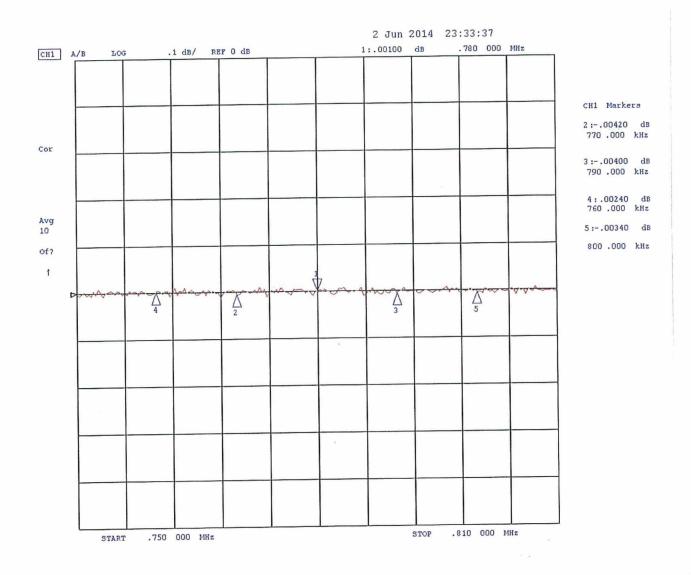
A tabulation of these measurements is included below.

Sample Transformer	dB / (۵)dB	Phase / (A)Phase
Tower #2 (calibration reference)	0.001 / 0.000	-0.018° / 0.000°
Tower #1	002 / 0.003	0.140° / 0.122°
Tower #3	0.004 / 0.003	0.081° / 0.099°

These tolerances are well within the manufacturer's rated accuracy of +/-2% and  $+/-2^\circ$ .

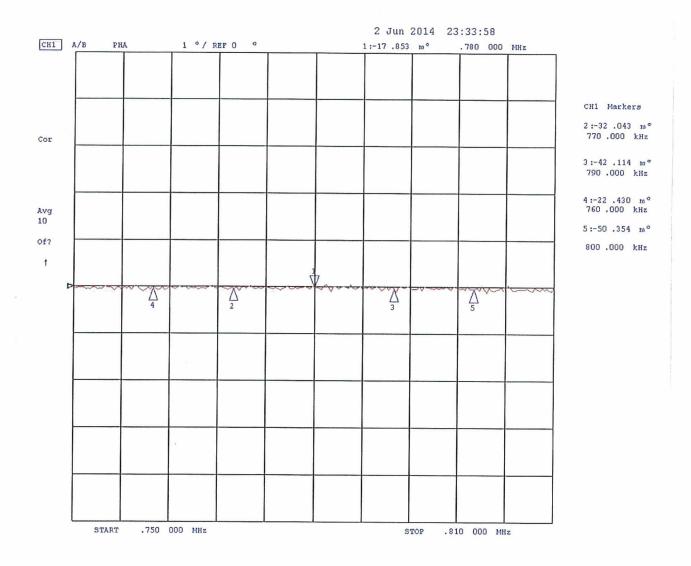
## EXHIBIT #6E(2)

### **Calibration Magnitude - Tower #2**



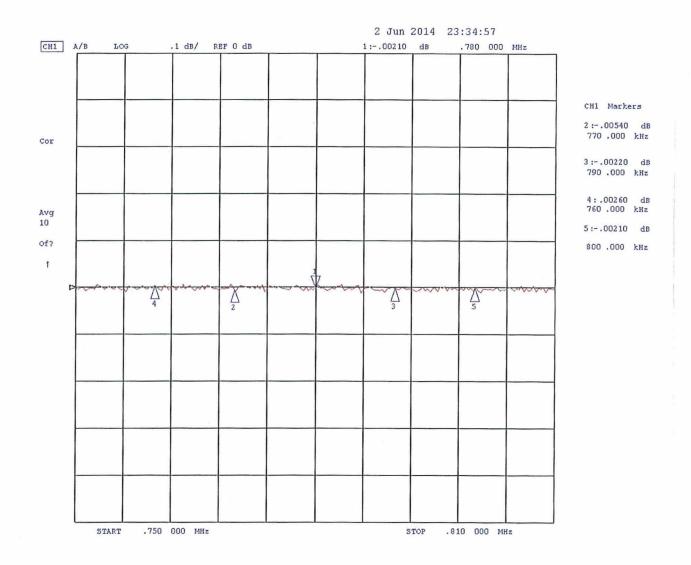
#### EXHIBIT #6E(3)

#### **Calibration Phase - Tower #2**



#### EXHIBIT #6E(4)

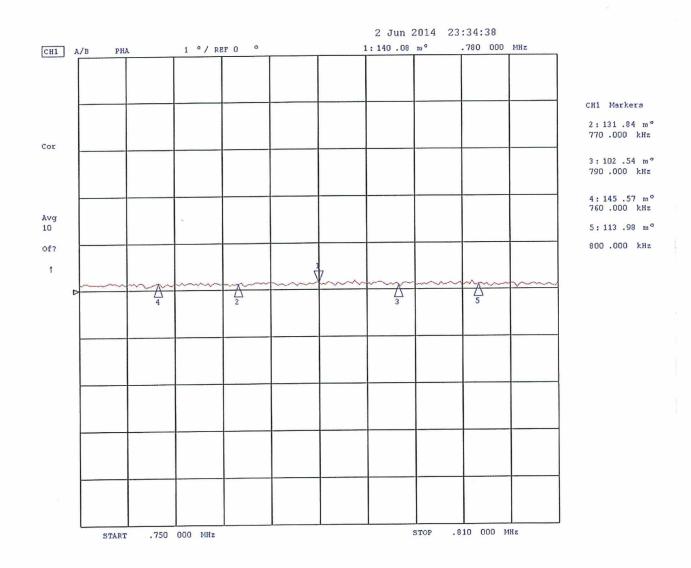
#### Calibration Magnitude - Tower #1



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### EXHIBIT #6E(5)

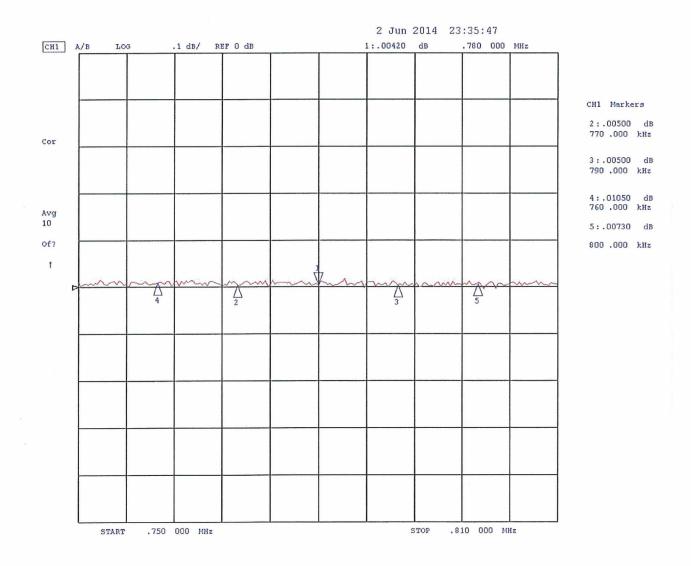
## Calibration Phase - Tower #1



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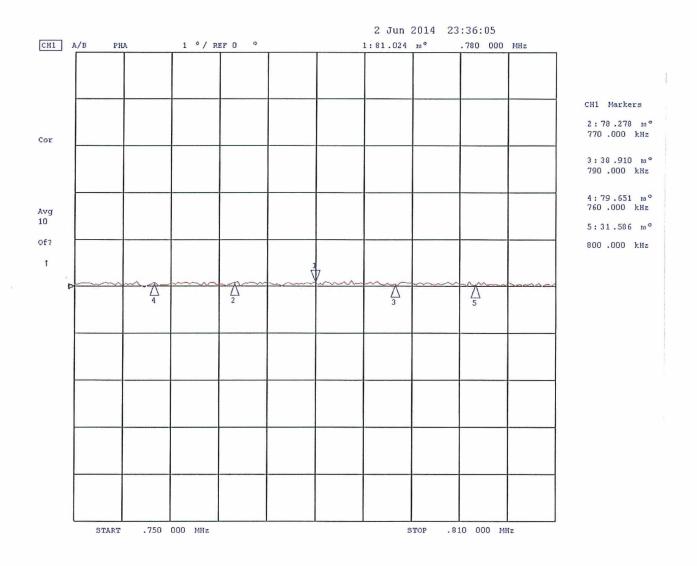
## EXHIBIT #6E(6)

#### **Calibration Magnitude - Tower #3**



### EXHIBIT #6E(7)

#### **Calibration Phase - Tower #3 Toroid**



#### AFFIDAVIT AND QUALIFICATIONS OF CONSULTANT

State of Georgia ) St. Simons Island ) ss: County of Glynn )

**R. STUART GRAHAM**, being duly sworn, deposes and says that he is an officer of Graham Brock, Inc. Graham Brock has been engaged by Radio License Holding CBC, LLC to prepare the attached Technical Exhibit.

His qualifications are a matter of record before the Federal Communications Commission. He has been active in Broadcast Engineering since 1979.

The attached report was either prepared by him or under his direction and all material and exhibits attached hereto are believed to be true and correct.

This the 17th day of June 2014.

R. Stuart Graham Affiant

Sworn to and subscribed before me this the 17th day of June 2014

Notary Public, State of Georgia () My Commission Expires: March 14, 2015