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June 22, 2017

Accepted / Filed

OUR FILE NO. 21616-00500-65

By Hand Delivery

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, S.W.
Room TW-A325
Washington, DC 20554

JUN 22 2017

Federal Communications Commission
Office of the Secretary

2017 JUN 26 P 1:38

RECEIVED

Re: Broadcast Station KQHR(FM), The Dalles, OR
Facility ID No. 175508, FRN # 0005853098
Request for Extension of Experimental Authority to Operate with
Asymmetrical Hybrid Digital Sideband Power
FCC File No. 20160707ACN

Dear Ms. Dortch:

On behalf of All Classical Public Media, Inc., licensee of noncommercial educational FM radio station KQHR(FM), The Dalles, Oregon, pursuant to FCC Rule 5.203, this letter is written to request an extension of its experimental authority for one year to operate KQHR(FM) full-time with asymmetrical hybrid digital sideband power. The initial authorization was granted by letter dated August 1, 2016, from Susan N. Crawford in the Audio Division of the Media Bureau. A copy of that letter is attached along with the report from KQHR(FM) Vice President of Technology, Larry Holtz, detailing the methodology employed and the results obtained.

Also enclosed is the Anti-Drug Abuse Certification of the licensee. No filing fee is required for this type of request.

Please direct any questions regarding this matter to the undersigned.

Respectfully submitted,

Melodie A. Virtue

MAV:cll

cc: Susan N. Crawford (pdf copy via email Susan.Crawford@fcc.gov)

GSB:8791116.1



June 15, 2017

P O R T L A N D

Federal Communications Commission
Office of the Secretary
445 12th Street, SW. Room TW-A325
Washington, DC 20554

RE: Renewal of Experimental Request 20160707ACN for KQHR(FM) Hood River, Facility ID No. 175508

Regarding KQHR FM's Experimental Authorization granted by the FCC on August 1, 2016, KQHR FM respectfully submits the following report and request pursuant to the conditions of the Experimental Authority.

KQHR FM has operated fulltime with Asymmetrical Hybrid IBOC sidebands since authority was granted on August 1, 2016 for a total of over 7600 hours. The transmitter used is a Nautel NV-3.5 with 4.0 Kilowatts ERP of analog power, Digital LSB of -10dBc (0.200 kW) and -14dBc (.125 kW). KQHR FM operates in MP1 mode with two IBOC channels with data streams of 48kbps each.

In August 2016, KQHR FM announced to the public that it had made increases to its HD signal and KQHR FM continues to promote the HD signal both on-air and online. During the experimental HD broadcasts, we have notice a pronounced reduction in audio dropout rate within the primary coverage contour and an increased useable reception distance when monitoring our HD signals. HD signal quality and range now compares favorably with the FM analog signal.

Using several receivers, we have observed that HD coverage has increased by 2-8 miles in the four compass directions. Please refer to the submitted map Exhibit A in this interim report showing the range of reliable HD reception both before and after commencement of operation with Asymmetrical Hybrid IBOC sidebands under the granted experimental authorization.

Listening tests have continued and were conducted using three test receivers: 1) an HD automobile receiver, Kenwood model DNN990HD; 2) a small software-defined portable radio, Sangean HDR-16; and 3) a tabletop radio, Insignia NS-HDRAD – all of which demonstrated a marked improvement in outdoor reception especially in terrain-shielded locations as well as improved indoor building penetration.

Further testing has also shown that no broadcast interference or, degradation has been caused during the course of these experimental broadcasts. An extension of KQHR FM's experimental authorization will allow KQHR FM to conduct further tests. These tests include 1) improving HD MER (modulation error ratio) performance in our transmission; 2) testing in HD MP3 mode with an HD3 audio channel – in all tests comparing error rates with Asymmetrical Hybrid IBOC sidebands to our nominal -14dBc IBOC sidebands.

In light of these results and findings, KQHR FM proposes to the Federal Communications Commission that we continue operating with asymmetrical sidebands at the ERP granted in our original experimental license. During this operation, KQHR FM will continue to closely monitor signal reports and ensure that its transmissions remain within the parameters of our license.

Thank you for your consideration,

Larry Holtz

Vice President of Technology KQHR(FM)

Facility ID No. 175508

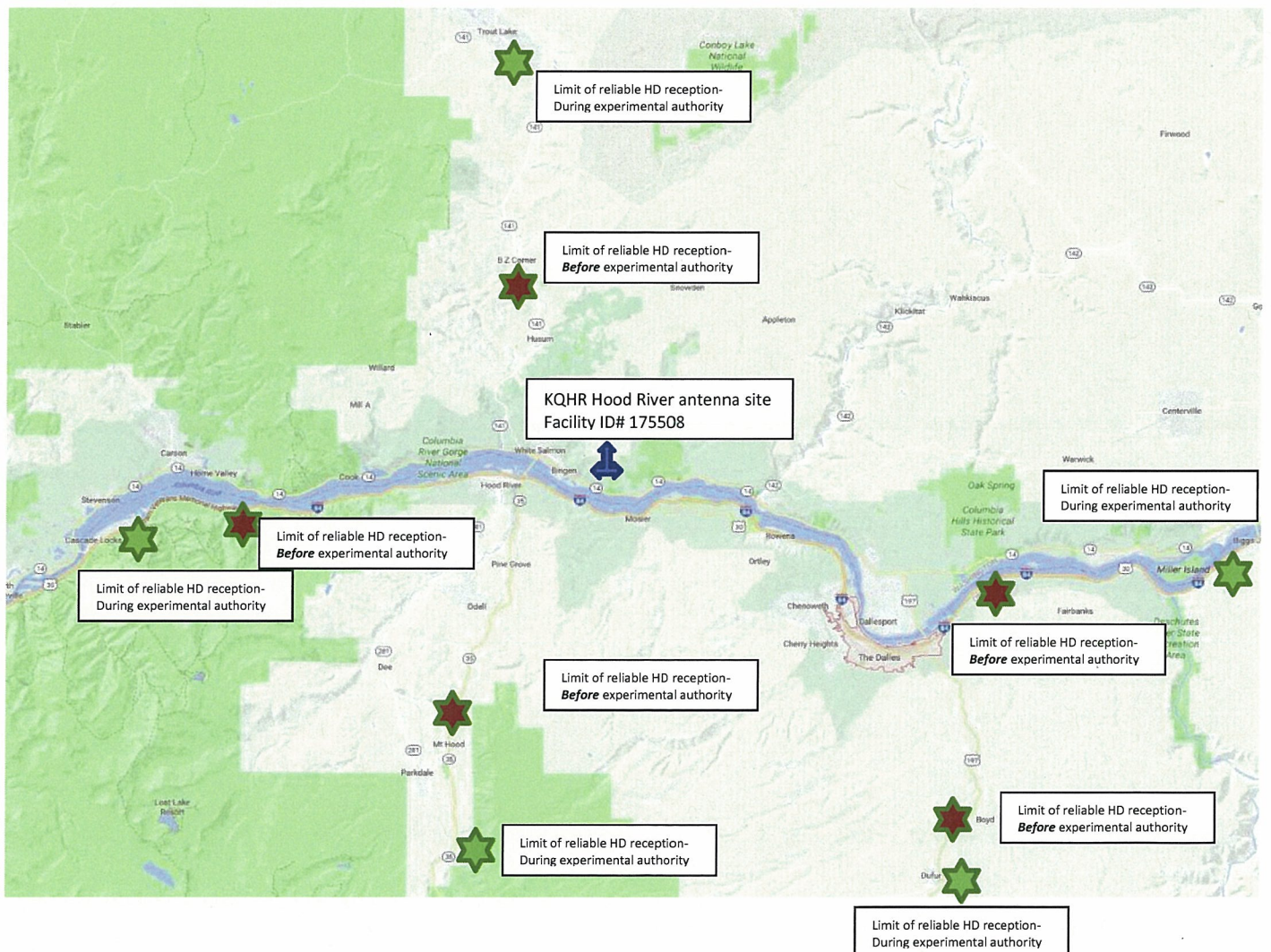
89.9 FM in Portland
@ allclassical.org

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suite 200
Portland, OR 97214
503 943 5828

ALL CLASSICAL PORTLAND

Exhibit A

KQHR (FM) Hood River, Facility ID# 175508
HD Coverage Comparison
Pre/Post Asymmetrical Hybrid Digital Sideband Authorization 2016
Measurements taken from 7/15/2016 to 6/10/2017 by Larry Holtz,
VP of Technology, All Classical Public Media, Licensee of KQHR



FEDERAL COMMUNICATIONS COMMISSION
445 12th STREET, SW
WASHINGTON, DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

PROCESSING ENGINEER: Susan N. Crawford
TELEPHONE: (202) 418-2754
GROUP FACSIMILE: (202) 418-1411
INTERNET ADDRESS: Susan.Crawford@fcc.gov

August 1, 2016

Melodie A. Virtue, Esq.
Garvey Schubert Barer
1000 Potomac Street, NW
Suite 200
Washington, DC 20007-3501

Re: KQHR(FM), The Dalles, Oregon
All Classical Public Media, Inc.
Facility ID No. 175508
File No. 20160707ACN

Request for Experimental Authority

Dear Counsel:

The staff has under consideration the July 7, 2016, request for experimental authority submitted on behalf of All Classical Public Media, Inc. (ACPMI), licensee of noncommercial educational FM Station KQHR(FM), The Dalles, Oregon,¹ to permit KQHR(FM) to conduct testing of hybrid digital FM in-band on-channel (IBOC) operation with asymmetric power levels in the digital sidebands. The experimental authority is requested pursuant to Section 5.203 of the Commission's Rules.²

The request states that ACPMI is seeking experimental authority to operate KQHR(FM) with lower sideband (LSB) digital effective radiated power (ERP) of -10 dBc³ and upper sideband (USB) digital ERP of -12 dBc. In support of its request, ACPMI submitted an engineering study showing that the proposed operation complies fully with the contour nonoverlap requirements of the Media Bureau's *Order* adopted January 27, 2010, in MM Docket No. 99-325⁴ for operation with -10 dBc LSB digital ERP and -12 dBc USB digital ERP.

¹ File Number BLED-20120315ADV.

² 47 CFR § 5.203 (Section 5.203).

³ Decibels relative to analog carrier.

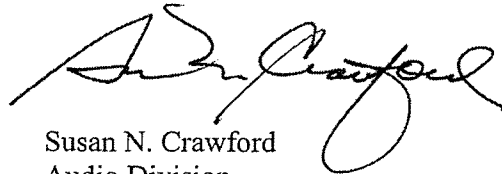
⁴ *Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service*, MM Docket No. 99-325, Order, 25 FCC Rcd 1182 (MB 2010) (Order).

Our review indicates that the proposed KQHR(FM) digital operation complies with the contour nonoverlap and other technical requirements of the Order, and the request for experimental authority meets the requirements for experimental operations set forth in Section 5.203. Accordingly, the request is **HEREBY GRANTED**. KQHR(FM) may operate with increased digital ERP as follows:

Analog ERP:	4.0 kilowatts (kW), H&V ⁵
Digital LSB ERP:	0.200 kW
Digital USB ERP:	0.125 kW.

This experimental authority expires on **August 1, 2017**. This authority is specifically conditioned on the lack of objectionable interference. A report detailing the methodology employed and the results obtained must be submitted within 90 days following the conclusion of the experimental operation. Any request for extension of this experimental authority should be filed at least 30 days prior to the expiration date of the authority. Additionally, an extension request must include an interim version of the aforementioned report that details the progress of the experimental operation as of the filing date of the request.

Sincerely,



Susan N. Crawford
Audio Division
Media Bureau

cc: All Classical Public Media, Inc.
Gray Frierson Haertig (via email)

⁵ All ERP values rounded in accordance with 47 CFR § 73.212(a).

ANTI -DRUG ABUSE CERTIFICATION

The applicant certifies that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. §862a, 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 pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. §1.2002(b).

☒ Yes

☐ No

Name of Applicant:

All Classical ~~Public~~ Media, Inc.

Signature:



Title:

President/CEO

Date:

06/21/17