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MAR - 5 2018

Federal Communications Commission  
Office of the Secretary

Please reply to MELODIE A. VIRTUE  
mvirtue@gsblaw.com TEL EXT 2527

OUR FILE NO. 22436-00100-65

2018 MAR - 6 PM 2: 21

March 5, 2018

**By Hand Delivery**

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

Re: Broadcast Station KING-FM (NCE), Seattle, WA  
Facility ID No. 11755, FRN # 0020868501  
Request for Extension of Experimental Authority to Operate with  
Asymmetrical Hybrid Digital Sideband Power  
FCC File No. 20150403ABZ

Dear Ms. Dortch:

On behalf of Classic Radio ("Classic"), licensee of non-commercial educational FM radio station KING-FM, Seattle, Washington, pursuant to FCC Rule 5.203, this letter is written to request an extension of its experimental authority for one year to operate KING-FM full-time with asymmetrical hybrid digital sideband power. The initial authorization was granted by letter dated April 13, 2015, from Susan N. Crawford in the Audio Division of the Media Bureau. A copy of that letter is attached along with the report from KING-FM Operations Manager, Rachele Hales, 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  
Enclosures (3)  
cc: Susan Crawford ([Susan.Crawford@fcc.gov](mailto:Susan.Crawford@fcc.gov))

**FEDERAL COMMUNICATIONS COMMISSION**  
**445 12<sup>th</sup> STREET, SW**  
**WASHINGTON, DC 20554**

**MEDIA BUREAU**  
**AUDIO DIVISION**  
**APPLICATION STATUS: (202) 418-2730**  
**HOME PAGE: [www.fcc.gov/mb/audio/](http://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](mailto:Susan.Crawford@fcc.gov)**

April 13, 2015

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

Re: KING-FM, Seattle, Washington  
Classic Radio  
Facility ID No. 11755  
File No. 20150403ABZ

**Request for Experimental Authority**

Dear Counsel:

The staff has under consideration the April 3, 2015, request for experimental authority submitted on behalf of Classic Radio, licensee of commercial FM Station KING-FM, Seattle, Washington,<sup>1</sup> to permit Station KING-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.<sup>2</sup>

The request states that Classic Radio is seeking experimental authority to operate Station KING-FM with lower sideband ("LSB") digital effective radiated power ("ERP") of -10 dBc<sup>3</sup> and upper sideband ("USB") digital ERP of -14 dBc. In support of its request, Classic Radio 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. 99-325<sup>4</sup> for operation with -10 dBc LSB digital ERP.

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<sup>1</sup> File Number BMLED-20110502AEJ.

<sup>2</sup> 47 C.F.R. § 5.203 ("Section 5.203").

<sup>3</sup> Decibels relative to analog carrier.

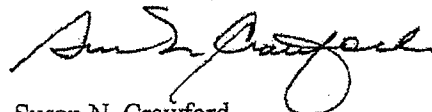
<sup>4</sup> See *Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service*, Order, 25 FCC Rcd 1182 (2010) ("Order").

Our review indicates that the proposed Station KING-FM operation complies with the contour nonoverlap and other technical requirements of the *Order*<sup>5</sup> and the request for experimental authority meets the requirements for experimental operations set forth in Section 5.203. Accordingly, the request is HEREBY GRANTED. Station KING-FM may operate with increased digital ERP as follows:

Analog ERP:	68 kilowatts ("kW") Max-DA, H&V
Digital LSB ERP:	6.8 kW
Digital USB ERP:	2.7 kW.

This experimental authority expires on **April 13, 2016**. 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: Classic Radio  
Erik C. Swanson P.E. (via email)

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<sup>5</sup> *Id.*

98.1 KING FM

10 Harrison St., Ste 100

Seattle, WA 98109

RE: Renewal of Experimental Request 20150403ABZ

February 27, 2018

Regarding 98.1 KING FM's Experimental Authorization granted by the FCC on April 13, 2015, KING FM respectfully submits the following report and request pursuant to the conditions of the Experimental Authority.

KING FM has operated with Asymmetrical Hybrid IBOC sidebands fulltime since authority was granted on April 13, 2015 for a total of 25,164 hours. The transmitter used is a Nautel GV-30 with 68 Kilowatts ERP of analog power, Digital LSB of -10dBc (6.8 kW) and -14dBc (2.7 kW). KING FM operates with three IBOC channels with data streams of 64kbps, 32kbps and 24kbps.

In April 2015, KING FM announced to the public that it had made increases to its HD signal and promotion of the HD signal has continued both on-air and online. During the experimental HD broadcasts, we have noted an increased public awareness of our HD signals. We submit this is due both to the improvement in our HD transmission and an increase in the number of HD receivers in the marketplace, especially in cars. (We currently know of only one major automaker that does not include HD receivers in a car dashboard as standard equipment: Ford Motor Company.)

Informal listening tests indicate that the increased HD signal strength allows the IBOC signal to more closely match the analog FM transmission (see Exhibit A.) Using an HD auto receiver as well as a small personal receiver, we continued our listening tests. Both receivers demonstrated a marked improvement in outdoor reception and building/tunnel permeation. Studio monitoring has also continued using one Inovonics 632 HD receiver and two consumer-grade tabletop receivers (one Boston and one Accurian).

Further testing has also shown that no broadcast interference or degradation was caused during the course of these experimental broadcasts. An extension of KING FM's experimental authorization will allow KING FM to continue providing feedback to Nautel on the efficacy of the asymmetrical sideband operation of its transmitter.

In light of these results and findings, KING 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, KING 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,



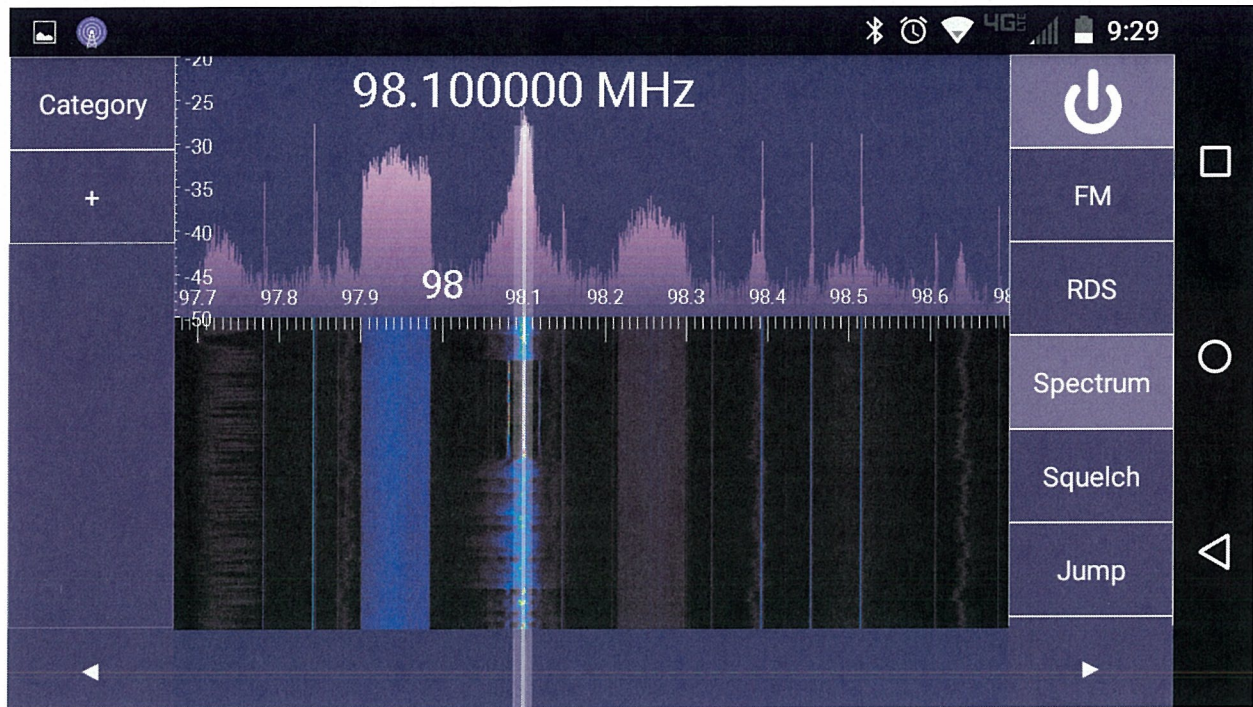
Rachele Hales

Operations Director

98.1 KING-FM

Facility ID No. 11755

## Exhibit A



*Spectrum analyzer image showing relationship between KING FM's main analog carrier and asymmetrical sidebands in Seattle, WA.*

## 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:              Classic Radio

Signature:

Brenda Barr

Title:

CEO

Date:

2-28-18