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

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Douglas L. Vernier
Doug Vernier – Telecommunication Consultants
1600 Picturesque Dr.
Cedar Falls, Iowa 50613

Re: KQAL(FM), Winona, MN
Winona State University
Facility ID No. 72955
File No. 20200916ABI

Request for Experimental Authority

Dear Applicant:

The staff has under consideration the above-referenced September 16, 2020 request for experimental authority (Request) submitted on behalf of the Winona State University (WSU), licensee of a non-commercial educational FM Station KQAL(FM), Winona, Minnesota,¹ to permit KQAL 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 WSU is seeking experimental authority to operate KQAL with lower sideband (LSB) digital effective radiated power (ERP) of -17 dBc³ and upper sideband (USB) digital ERP of -13 dBc to assess IBOC coverage and signal penetration in various environments, including within buildings and in vehicles.

¹ File Number BLED-20120720ADE. KQAL(FM) is licensed to operate on channel 208 (89.5 Megahertz) using a directional antenna, 2.5 kilowatts (kW) effective radiated power (ERP), and 210 meters antenna radiation center height above average terrain at a transmitter site described by geographic coordinates 44° 04' 26" North Latitude, and 91° 34' 38" West Longitude, referenced to 1927 North American Datum.

² 47 CFR § 5.203 (Section 5.203).

³ Decibels relative to analog carrier.

Our review of the Request indicates that the proposed KQAL's experimental operation complies with the contour protection and other technical requirements of the Media Bureau's Order, adopted January 27, 2010, in Mass Media Docket No. 99-325,⁴ and the Request meets the requirements for experimental operations set forth in Section 5.203. Accordingly, the Request is **HEREBY GRANTED**. KQAL(FM) may operate with digital ERP as follows:

Analog ERP:	2.5 kilowatts (kW), H&V ⁵
LSB Digital ERP: ⁶	0.025 kW
USB Digital ERP:	0.063 kW

This experimental authority expires on **November 18, 2021**. 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 report detailing the progress of the experimental operation as of the filing date of the request.

Sincerely,

Rodolfo F. Bonacci
Assistant Division Chief
Audio Division
Media Bureau

cc: Winona State University (via email)

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

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

⁶ Digital ERP values shown are for MP1 service mode. The licensee must adjust the station's asymmetric total digital sideband ERP values in accordance with NRSC guideline "NRSC-G202-A, FM IBOC Total Digital Sideband Power for Various Configurations" (April 2016) if operating using a service mode other than MP1.