

# *APPLICATION FOR LICENSE*

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FM STATION KUFA  
HEBBRONVILLE, TEXAS  
FACILITY ID: 198740 / BMPH-20180723AAL

RUFUS RESOURCES, LLC

NOVEMBER 2018

## **APPLICATION FOR LICENSE**

The following engineering statement and attached exhibits have been prepared for **Rufus Resources, LLC** ("Rufus"), permittee of FM broadcast station KUFA at Hebbronville, Texas, and are in support of their application for license.<sup>1</sup> This application seeks to cover the latest construction permit for the facility under FCC File No. BMPH-20180723AAL.

The facility as authorized, and constructed, operates on FM channel 282 as a class A facility with a maximum effective radiated power of 5.5 kW at a center of radiation of 59 meters above average terrain, or 233 meters above mean sea level. The facility utilizes a Bext model TFC2K-4 antenna. This is a nominally non-directional antenna comprised of four sections spaced one-wavelength apart. No beamtilt is employed by KUFA. The facility has been constructed fully in accordance with the terms of the construction permit.

The facility complies with the provisions of Section 73.1225 of the Commission's Rules. Rufus maintains toll-free telephone numbers in the communities of license of its facilities.

The specified transmitter power output achieves the authorized effective radiated power. The authorized effective radiated power for KUFA is 5.5 kW. The non-directional antenna has a power gain of 3.2 dBd as specified by the manufacturer. This value corresponds to a numerical power gain of 2.089. The input power to the antenna required to achieve the authorized effective radiated power is 2.63 kW.

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<sup>1</sup> The Facility ID for KUFA at Hebbronville, Texas is 198740.

JEREMY RUCK & ASSOCIATES, INC.

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Between the antenna and the transmitter is the main run of transmission line, which consists of 210 feet of Andrew LDF5-50B semi-flexible coaxial cable with a 7/8 inch nominal diameter. Data from the manufacturer indicates that this run of transmission line has an efficiency of 83.83 percent, including the connectors. The input power to the coaxial cable to achieve the authorized effective radiated power is 3.14 kW. The input to the transmission line is the output of the transmitter, thus the specified transmitter power output achieves the authorized effective radiated power.

The facility was constructed in accordance with the terms of the underlying construction permit. The construction permit, as issued by the Commission, lists one (1) special condition or restriction. This condition pertains to RF safety at the site. In compliance with this condition, Rufus certifies that it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature  
License Expires November 30, 2019

Jeremy D. Ruck, PE  
November 2, 2018

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