

KLBJ-FM Austin, Texas
Construction Permit 0000106043 License Application
Special Operating Conditions and Transmitter Power Output
March 17, 2021

Due to structural issues with the tower associated with ASR No. 1043248, the KLBJ-FM main license location, KLBJ-FM will operate from this facility with auxiliary license file number 0000106043 until a new main facility can be licensed.

Special Operating Conditions

1. The KLBJ-FM application specified a ERI SHP-6AC6 six bay full wave broadband circularly polarized antenna. The antenna installed is an ERI SHP 8AC6-SP 8 bay full wave broadband circularly polarized antenna. A new FM Model for Windows is included with this exhibit.
2. This antenna will also be the transmit antenna for the licensed facility of KROX-FM, Channel 268C2, Facility ID No. 54569, Buda, Texas as well as auxiliary license No. 0000129795 for KBPA, Channel 278C1, Facility ID No. 41213, licensed to Austin, Texas. A spurious emissions report conducted by Jeff Taylor from Electronics Research, Inc. is included as an exhibit with this application. Please note that the spurious emissions reports also includes two FM translators, K259AJ, Facility ID No. 82261, Channel 259D, Austin, Texas and K274AX Facility ID No. 139278, Channel 274D, Austin, Texas. The two translators are not currently operating from this antenna. They were added to the report because future plans may include relocating them to this antenna thus allowing the use of the same report their license applications.
3. The permittee/licensee in coordination with other users of the site agrees to reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

Transmitter Power Output

The ERI SHP 8AC6-SP 8 bay full wave broadband antenna has a power gain of 4.342. The transmission line has a loss of 0.623 dB. The combiner total losses are 0.278 dB. The total losses are 0.901 dB for an overall line efficiency of 81.265 percent.

65.0 kW divided by 4.342 divided by 0.81265 = 18.241 kW Transmitter Power Output