

**APPLICATION FOR AUXILIARY TRANSMITTER  
CONSTRUCTION PERMIT  
STEREO BROADCASTING, INC.  
KTXR, SPRINGFIELD, MISSOURI**

**Environmental Considerations**

Stereo Broadcasting, Inc., by this application, seeks a construction permit for ultimate licensing of a transmitter and antenna to be employed when the main transmitter and antenna used by KTXR(FM) must cease operation for maintenance purposes. The auxiliary system would employ a relatively low power transmitter and a four-bay antenna mounted 377 meters above ground on the existing KTXR tower (ASRN 1235832). The effective radiated power on channel 267 (101.3 MHz) would be 3.15 kW(H&V).

Maximum radio-frequency (RF) exposure in the tower vicinity occurs at a distance of 136 meters from the tower where the direct ray field strength from a minor lobe of the antenna is 0.4. Applying the calculation procedure specified in OET Bulletin 65, the RF exposure at two meters above ground at the distance specified is 0.22 microwatts per square centimeter, 0.11 percent of the maximum permitted exposure of 200 microwatts per square centimeter for the general population.

The auxiliary antenna is at a sufficient distance below the main antenna that workers at the auxiliary antenna would be exposed to an RF level substantially below that permitted for the workplace. When workers must pass near the auxiliary antenna for work at higher levels of the tower, power will be reduced or shut down as appropriate to avoid over-exposure.