

KWTO-FM Aux.

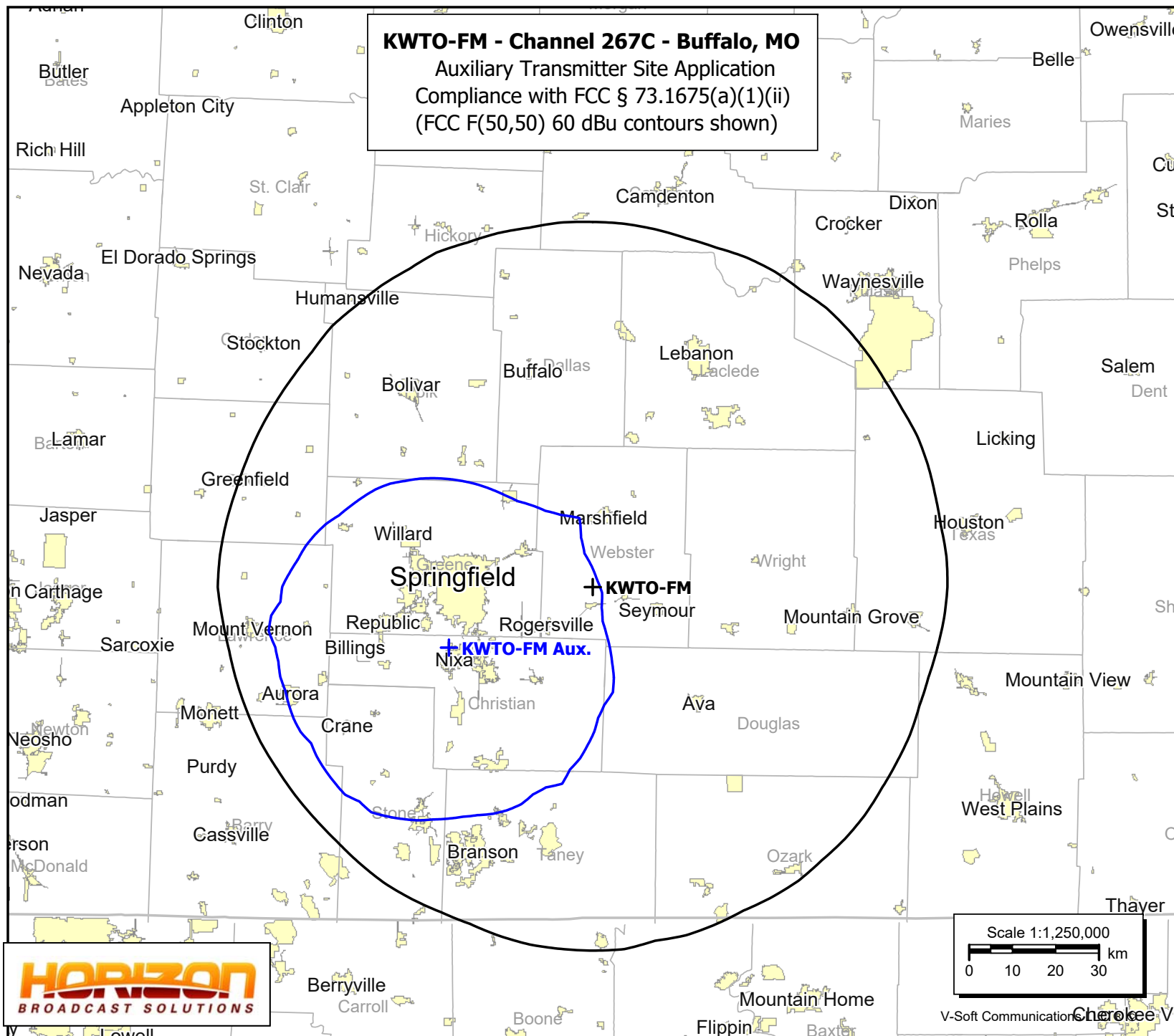
Buffalo, MO
Latitude: 37-04-05.91 N
Longitude: 093-18-30.93 W
ERP: 15.00 kW
HAAT: 135.16
Channel: 267
Frequency: 101.3 MHz
AMSL Height: 510.6 m
Elevation: 378.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

KWTO-FM

Buffalo, MO
0000194066
Latitude: 37-11-40.82 N
Longitude: 092-56-07.37 W
ERP: 100.00 kW
HAAT: 456.0
Channel: 267
Frequency: 101.3 MHz
AMSL Height: 901.0 m
Elevation: 471.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

KWTO-FM - Channel 267C - Buffalo, MO

Auxiliary Transmitter Site Application
Compliance with FCC § 73.1675(a)(1)(ii)
(FCC F(50,50) 60 dBu contours shown)



Human Exposure to Radiofrequency Electromagnetic Field And Section 106 Compliance (Environmental)

Zimmer Midwest Communications, Inc. ("Zimmer") proposes to license an auxiliary facility for KWTO-FM Channel 267C Facility ID No. 63339, licensed to Buffalo, Missouri. The proposed facility will operate at 15.0 kW at 132.6 meters above ground level and 135.16 meters HAAT and is in compliance with FCC §73.1675(a)(1)(II) Auxiliary antennas. Because Zimmer will locate the auxiliary facility at an existing tower and no actual construction will be required, it is believed that this application is exempt for a Section 106 review by the SHPO/THPO. The FCC ASR number 1006331 has been associated with this tower. The coordinates of the proposed auxiliary site are located at 37° 04' 06" North, 93° 18' 32" West (NAD 83). The proposed transmitting antenna is a Bext Model TFC2K side mounted 3 bay full wave broadband antenna with a center of radiation of 543 meters AMSL. This antenna will also function as the auxiliary facility for KTXR Channel 254C1, Springfield, MO. The auxiliary facility is capable of transmitting only one auxiliary facility at a time.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The Bext antenna is included in the Antenna Types in the OET's updated FM Model Program under Type 2 Opposed "V" dipole. The maximum calculated signal density near the tower at two meters above ground level attributable to the proposed KWTO-FM auxiliary facility is $9.132/\text{cm}^2$ at 60.8 meters, which is 4.566 percent of the general population/uncontrolled maximum permitted exposure limit. This is below the five percent threshold limit described in 1.1307(b) regarding sites with multiple emitters, which excludes applicant from responsibility for taking any corrective action in areas where the proposal's contribution is less than five percent.

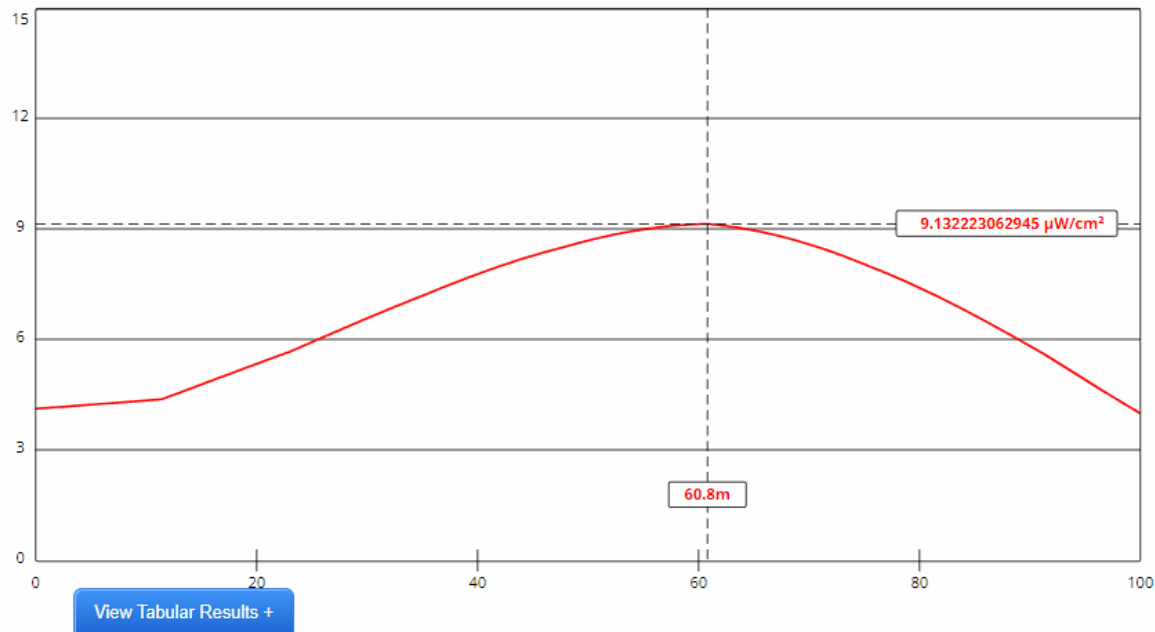
The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

FM Model

Radio Frequency Safety

[FCC Policy on Human Exposure](#)[RF Safety Highlighted Releases](#)[RF Safety FAQ](#)**[FM Model](#)**[Body Tissue Dielectric Parameters](#)

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data [published in 1985 by the EPA](#). [Show More....](#)



| | | | |
|-------------------|------------------------------------|--------------------------------------|------------------------------------|
| Channel Selection | Channel 267 (101.3 MHz) ▼ | | |
| Antenna Type + | EPA Type 2: Opposed V Dipole ▼ | | |
| Height (m) | <input type="text" value="132.6"/> | Distance (m) | <input type="text" value="100"/> |
| ERP-H (W) | <input type="text" value="15000"/> | ERP-V (W) | <input type="text" value="15000"/> |
| Num of Elements | <input type="text" value="3"/> | λ | <input type="text" value="1"/> |
| Num of Points | <input type="text" value="500"/> | <input type="button" value="Apply"/> | |