

**Exhibit E-19**

The proposed facility would be in compliance with the television channel six protection requirements of the Commission's Rules. The applicant would comply with these provisions through the use of vertical only polarization.

A search of the Commission's database yields the existence of two television channel six facilities in the region. These facilities specifically are KOTV at Tulsa, OK and KEMV at Mountain View, AR. Of these three facilities, only KOTV and KEMV are located within 196 kilometers of the KAYH site, and hence are "affected" by the Commission's Rules.

To demonstrate that no interference is predicted to occur to either of these stations, the proposed facility, which would operate with a maximum effective radiated power of 39 kW was assumed to utilize vertical only polarization. The mixed polarity inequality from Section 73.525 of the Commission's Rules was therefore utilized by setting H equal to 0, V equal to 40 kW, and A to 40 since it was assumed that any interference would lie outside a city with a population of 50,000 persons or larger.

Solving this inequality for P yielded a maximum horizontal polarization only effective radiated power of 0.975 kW. The 67.3 dBu F(50,10) contour for KAYH assuming this effective radiated power was plotted relative to the 47 dBu F(50,50) service contours of KOTV and KEMV(TV). As the attached map demonstrates, the KAYH interfering contour would clear the Grade B service contours of both stations. As a result, no interference is predicted to occur to either channel six facility within its Grade B service contour.

**KAYH.PRO**

BPED20070907AEV  
Latitude: 36-10-48 N  
Longitude: 094-05-10 W  
ERP: 0.975 kW  
Channel: 207  
Frequency: 89.3 MHz  
AMSL Height: 507.0 m  
Elevation: 468.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: FCC Method

**KOTV**

Latitude: 36-01-15 N  
Longitude: 095-40-32 W  
ERP: 100.00 kW  
Channel: 06+  
Frequency: 85.5 MHz  
AMSL Height: 769.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: Yes  
Elec Tilt: 0.0  
Prop Model: FCC Method

**KEMV**

Latitude: 35-48-47 N  
Longitude: 092-17-24 W  
ERP: 100.00 kW  
Channel: 06-  
Frequency: 84.5 MHz  
AMSL Height: 753.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: Yes  
Elec Tilt: 0.0  
Prop Model: FCC Method

## Exhibit E-19

Television Channel Six Interference Study  
KAYH(FM) - Fayetteville, Arkansas  
Family Vision Ministries, Inc.  
November, 2007

**D.L. Markley & Associates, Inc.**

- Proposed KAYH 67.3 F(50,10) Contour
- KOTV 47 dBu F(50,50) Service Contour
- KEMV 47 dBu F(50,50) Service Contour

