

CONTOUR OVERLAP AND  
LONGLEY-RICE INTERFERENCE STUDIES  
LOW POWER TELEVISION STATION K34EN  
CHANNEL 34 – FORT SMITH, ARKANSAS

We conducted a computer analysis of the interference situation for the proposed facility, the results of which are shown in Exhibit D-2. The study is based on contour protection requirements of Sections 74.705, 74.706, and 74.707 of the FCC's Rules with respect to analog full-power, digital full-power, and low power television stations, respectively. It concludes that the facility proposed herein meets these requirements except to four stations: KWBS-TV(CP), Channel 34, Eureka Springs, Arkansas; K22ES(Appl.), Channel 35, Fayetteville, Arkansas; KMSS-DT(CP), Channel 34 in Shreveport, Louisiana; and, K34FH, Channel 34 in Little Rock, Arkansas.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to these facilities of concern. The software utilizes a 2-square kilometer cell size, calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 1990 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within each station's protected contour where interference from another source (other than TV34's proposed K34EN) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-3. It concludes that the facility proposed herein causes no new interference to any of the above stations, with the exception of K22ES.

As a result, a waiver of Section 74.706 of the Commission's Rules with respect to interference to KMSS-DT, and Section 74.707 with respect to interference to K34FH, are requested and believed to be justified based on the aforementioned Longley-Rice studies.

The displacement application filed on behalf of MS Communications, to move K22ES in Batesville, Arkansas, to Channel 35 in Fayetteville, Arkansas, is defective and does not meet the FCC's minor change criteria, namely, that any proposed displacement facility must have at least a modicum of overlap of its proposed Grade A contour with its original Grade A contour. MS Communications has filed for a displacement of K22ES in Fayetteville, Arkansas, more than 200 km from the authorized site in Batesville, Arkansas. Therefore, its displacement application should not even be considered.

The interfering 36 dbμ contour of the proposed K34EN facility overlaps the protected 64 dbμ contour of KWBS-TV, Channel 34 in Eureka Springs, Arkansas, in apparent violation of Section 74.705 of the FCC's Rules. However, since KWBS-TV and K34EN are co-owned, the interference situation is hereby acknowledged and accepted by the licensee of KWBS-TV. Therefore, a waiver of Section 74.705 of the FCC's Rules is requested with respect to interference to KWBS-TV.

In addition, in an abundance of caution, we ask for a waiver of Section 74.705 of the Commission's Rules with respect to interference to K22ES.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED K34EN  
FORT SMITH - ARKANSAS

REFERENCE  
35 31 30 N LPTV Pwr = 150 kW, HAMS L COR= 405 M  
94 22 27 W  
..... Channel 34Z, 590 MHz .....

DISPLAY DATES  
DATA 08-25-04  
SEARCH 08-25-04

Call	Channel	Location	Dist	Azi	FCC	Margin	
KMSS-D*CP	34	Shreveport	LA	319.71	172.6	> 403.10	-78.58
KWBSTV*CP	34+	Eureka Springs	AR	107.93	19.4	> 165.36	-56.92
K34FH* LI	34Z	Little Rock	AR	189.50	114.7	> 252.51	-50.32
KWBSTV*LI	34+	Eureka Springs	AR	107.93	19.4	> 152.39	-44.03
K22ES* AP	35+	Fayetteville	AR	44.89	44.0	> 054.38	-8.53
KWBT* LI	19Z	Muskogee	OK	131.95	281.5	> 121.42	10.53
K52FJ* CPM	33+	Fort Smith	AR	60.91	113.8	> 044.14	16.90
KOCB* CP	34-	Oklahoma City	OK	282.44	271.5	> 256.98	25.46
KTFO LI	41+	Tulsa	OK	128.29	295.8	> 100.00	28.29
KOKT-L CP	34Z	Sulphur	OK	270.18	227.1	> 241.84	28.34
KOCB* LI	34-	Oklahoma City	OK	282.15	271.7	> 251.28	30.87
NEW* AP	34Z	Denison	TX	265.50	226.8	> 234.47	31.03
K33FG LI	33Z	Siloam Springs	AR	70.72	349.7	> 038.23	32.49
AL9605 AL	20Z	Hot Springs	AR	164.85	132.8	> 129.60	35.25
KRSCTV CP	35Z	Claremore	OK	147.78	311.6	> 106.50	41.28
KRSCTV LI	35Z	Claremore	OK	147.88	311.6	> 106.58	41.30
AP919 AP	20Z	Hot Springs	AR	158.69	131.9	> 110.70	47.99
KEMV ALD	35	MOUNTAIN VIEW	AR	191.39	79.7	> 129.80	61.59
KIDP-L*CP	34Z	Independence	KS	229.69	327.6	> 167.99	61.71
NEW AP	34Z	Gainesville	TX	311.90	234.0	> 245.84	66.06

\* Actual radials antenna height and directional patterns used (if any)

## INTERFERENCE SUMMARY

LOW POWER TELEVISION STATION K34EN  
CHANNEL 34 – FORT SMITH, ARKANSAS

<u>Call Sign</u>	<u>Status</u>	<u>City, State</u>	<u>Ch.</u>	<u>Longley-Rice Service Population</u>	<u>Unmasked Interference From Proposed Facility</u>	<u>%</u>
KMSS-DT BPCDT-19991022ABL	CP	Shreveport, LA	34	963,190	0	0
KWBS-TV BPCT-20010927AAQ	CP	Eureka Springs, AR	34	312,226	437	0.1
K34FH BLTT-20011219AAR	Lic.	Little Rock, AR	34	346,798	286	< 0.1
KWBS-TV BLCT-20000616AGN	Lic.	Eureka Springs, AR	34	242,476	0	0
K22ES BPTTL-20021009AAW	Appl.	Fayetteville, AR	35	36,770	6,1677	16.8