

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED KSMI-LP
CHANNEL 51 – WICHITA, KANSAS

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: KSBI-DT (CP, STA), Channel 51, Oklahoma City, Oklahoma; KSCC(CP), Channel 36, Hutchinson, Kansas; K51GC, Channel 51, Salina, Kansas; and, KPXE-DT(CP), Channel 51 in Kansas City, Missouri.

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 (except where noted), 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 the protected contour of the station under study where interference from another source (other than Newmark's proposed KSMI-LP) 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.

As a result, waivers of Section 74.705 of the Commission’s Rules with respect to interference to KSCC(TV), Section 74.706 with regard to KSBI-DT and KPXE-DT, and Section 74.707 with regard to K51GC, are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED KSMI-LP
WICHITA - KANSAS

REFERENCE
37 41 53 N
97 19 10 W

LPTV Pwr = 14.1 kW, HAMS L COR= 489 M

DISPLAY DATES
DATA 08-23-03
SEARCH 08-28-03

..... Channel 51N, 692 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KSBI-D*CP	51	Oklahoma City	OK 233.56	183.8	> 308.46	-74.90
KSCC* CPM	36+	Hutchinson	KS 31.72	327.9	> 101.90	-69.91
KSBI-D*ST	51	Oklahoma City	OK 233.56	183.8	> 298.27	-64.71
K51GC* LI	51N	Salina	KS 130.48	346.6	> 155.20	-24.72
KPXE-D*CP	51	Kansas City	MO 285.90	58.1	> 290.67	-4.77
960724*CP	51Z	Lincoln	NE 343.76	1.1	> 295.77	52.32
KOPE-L CP	51+	Tulsa	OK 208.23	145.1	> 144.81	63.42
AP330 AP	51Z	Lincoln	NE 344.92	1.9	> 271.00	73.92

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

INTERFERENCE SUMMARY

PROPOSED KSMI-LP
CHANNEL 51 – WICHITA, KANSAS

<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>
KSBI-DT BPCDT-19991028AFH	CP	Oklahoma City, OK	51	1,284,221	0	0
KSCC(TV) BMPCT-19991001ABG	CPM	Hutchinson, KS	36	610,957	0	0
KSBI-DT BDSTA-20020828ABB	STA	Oklahoma City, OK	51	1,226,606	0	0
K51GC BLTT-20030805AHW	Lic.	Salina, KS	51	44,622	0	0
KPXE-DT BPCDT-19991018AAT	CP	Kansas City, MO	51	1,923,177	0	0