

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED K45HC
CHANNEL 45 – SACRAMENTO, CALIFORNIA
[MODIFICATION OF BPTT-19980603JJ]

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: KBHK-DT, Channel 45 in San Francisco, California; KQCA-DT, Channel 46 in Stockton, California; KMAX-TV, Channel 31 in Sacramento, California; and K45GZ, Channel 45 in Dayton, Nevada.

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 Trinity's proposed K45HC) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-3. They conclude that the facility proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, waivers of Section 74.705 of the Commission's Rules with respect to interference to KMAX-TV, Section 74.706 with regard to KQCA-DT and KBHK-DT, and Section 74.707 with respect to K45GZ are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED K45HC
CH. 45 - SACRAMENTO CA

REFERENCE
38 15 54 N
121 29 24 W

LPTV Pwr = 150 kW, HAMS L COR= 182 M

DISPLAY DATES
DATA 09-02-03
SEARCH 09-02-03

..... Channel 45+, 656 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KBHK-D LI	45	San Francisco	CA 101.65	236.4	> 374 99	-273.34
KQCA-D AP	46	Stockton	CA 0.00	0.0	> 131 61	-131.61
KQCA-D CP	46	Stockton	CA 1.90	90.0	> 132 95	-131.05
KMAXTV LI	31-	Sacramento	CA 0.00	0.0	> 123 27	-123.27
KQCA-D ST	46	Stockton	CA 0.00	0.0	> 074 20	-74.20
K45GZ LI	45+	Dayton	NV 203.11	58.6	> 238 41	-35.30
K45GZ AP	45+	Dayton	NV 203.11	58.6	> 231 55	-28.44
KBHKT*LI	44-	San Francisco	CA 101.62	236.4	> 103 34	10.94
KTNCTV LI	42Z	Concord	CA 54.67	220.9	> 032 00	22.67
AL066 AL	46Z	Chico	CA 165.59	349.7	> 135 16	30.43
NEW AP	45+	Redding	CA 270.58	345.7	> 239 42	31.16
NEW AP	45+	Lufkin	TX 270.58	345.7	> 239 42	31.16
AL038 AL	46-	Salinas-monterey	CA 177.20	184.8	> 135 16	42.04
K30DO LI	30+	Santa Rosa	CA 105.86	285.2	> 062 09	43.77
KRXI-D CPM	44	Reno	NV 200.00	42.1	> 148 18	51.82
NEW* AP	45-	Chico	CA 189.42	354.3	> 155 21	52.79
KRXI ALD	44	RENO	NV 199.99	42.0	> 141 72	58.27
KSTS LI	48-	San Jose	CA 91.37	201.6	> 032 00	59.37
KSTS AP	48-	San Jose	CA 91.37	201.6	> 032 00	59.37
KRXI-D ST	44	Reno	NV 200.00	42.1	> 140 57	59.43
KCVU LI	30Z	Paradise	CA 189.42	354.3	> 129 09	60.33
K33HH* AP	45N	Redding	CA 279.64	341.9	> 224 99	62.40
KIONTV LI	46-	Monterey	CA 192.38	183.5	> 127 45	64.93
NEW AP	45+	Mina-luning	NV 301.14	86.2	> 231 49	69.65

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

INTERFERENCE SUMMARY

PROPOSED K45HC
 CHANNEL 45 – SACRAMENTO, CALIFORNIA
 [MODIFICATION OF BPTT-19980603JJ]

<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>
KBHK-DT BLCDT-20020709AAQ	Lic.	San Francisco, CA	45	5,496,279	7,859	0.1
KQCA-DT BMPCDT-20020626AAA	Appl.	Stockton, CA	46	4,446,751	0	0
KQCA-DT BPCDT-19991029AEZ	CP	Stockton, CA	46	4,068,478	0	0
KQCA-DT BDSTA-20020919ABG	STA	Stockton, CA	46	1,518,162	0	0
KMAX-TV BLCT-20021125AAK	Lic.	Sacramento, C	31	3,554,845	0	0
K45GZ BLTT-20020715AAH	Lic.	Dayton, NV	45	5,848	0	0
K45GZ BPTT-20000824AAR	Appl.	Dayton, NV	45	1,460	0	0