

EXHIBIT E-1

INTERFERENCE STUDY

PROPOSED KTAJ-DT
CHANNEL 21 – ST. JOSEPH, MISSOURI

[MODIFICATION OF BPCDT-19991101AHU]

The Commission allotted Channel 21 to KTAJ-DT with a nominal ERP of 246 kw (directional) at 326 meters above average terrain. The instant application specifies an ERP of 1,000 kw (directional) at 317 meters, which we have determined to be allowable under the FCC's *de minimis* standards with respect to various NTSC and DTV facilities.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe II" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a cell size of 2 square kilometers and an increment spacing of 1.0 kilometer along each radial. In addition, we utilized the 1990 U.S. Census. Changes in interference caused by KTAJ-DT to other pertinent stations are tabulated in Exhibit E-2.

As indicated, the proposed KTAJ-DT facility would not contribute more than two percent DTV interference to the service population of any affected NTSC or DTV station. In addition, this proposal does not result in any NTSC or DTV station receiving more than ten percent total DTV interference to viewers living within its present service area.

In addition, the proposed facility does not cause interference to any Class-A Low Power Television Station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

EXHIBIT E-2

DE MINIMIS INTERFERENCE ANALYSIS
PROPOSED KTAJ-DT
CHANNEL 21 – ST. JOSEPH, MISSOURI
[MODIFICATION OF BPCDT-19991101AHU]

DTV FACILITIES

Call Sign	City, State	Ch.	Grade B Population F(50,50)	INTERFERENCE LOSSES (POPULATION)								
				NTSC & DTV Only	NTSC & DTV Without KTAJ-DT	Unmasked DTV	% ¹	With KTAJ-DT	Unmasked DTV	% ¹	KTAJ-DT Contribution	% ²
WMEC-DT CP (BPEDT-20000501AGY)	Macomb, IL	21	227,200	33	533	500	0.2	601	568	0.3	68	0.1
WMEC-DT Allot	Macomb, IL	21	223,088	0	158	158	0.1	217	217	0.1	59	<0.1
KAKE-DT CP (BPCDT-19991025AEG)	Wichita, KS	21	680,714	0	1,442	1,442	0.2	1,608	1,608	0.2	166	<0.1
KAKE-DT Allot	Wichita, KS	21	675,238	0	429	429	<0.1	529	529	<0.1	100	<0.1
KHAS-DT Allot	Hastings, NE	21	220,078	0	363	363	0.2	364	364	0.2	1	<0.1

EXHIBIT E-2

NTSC FACILITIES

Call Sign	City, State	NTSC/DTV ³ Grade B Pop. Ch. Longley-Rice	INTERFERENCE LOSSES (POPULATION)					
			NTSC & DTV		NTSC & DTV		NTSC & DTV	
			NTSC Only	Without Unmasked KTAJ-DT	With Unmasked KTAJ-DT	NTSC Only	With Unmasked KTAJ-DT	NTSC & DTV DTV
KOZK	Springfield, MO CP (BPET-20020826ABU)	21	503,531	0	11,404	11,404	2.3	18,919
KOZK	Springfield, MO Lic. (BLET-377)	21	495,186	0	8,851	8,851	1.8	16,605
New Appl.	Topeka, KS (BPCT-19960920LZ)	22	463,257	6,427	28,118	21,691	4.7	29,686
New Appl.	Topeka, KS (IBPRM-20000717ADG)	22	441,582	725	53,553	52,828	12.0	53,896

¹ Cannot exceed 10%, under FCC *de minimis* interference standards.

² Cannot exceed 2%, under FCC *de minimis* interference standards.

³ Larger of either NTSC Grade B population (with no DTV losses) or DTV Grade B population with all losses.