

INTERFERENCE STUDY

PROPOSED KETH-DT  
CHANNEL 24 - HOUSTON, TEXAS

[MODIFICATION OF BPEDT-20000103AAS]

The Commission allotted Channel 24 to KETH-DT with a nominal ERP of 277 kw at 438 meters above average terrain. The instant modification specifies an ERP of 900 kw (directional) at 579 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 signal resolution of 2 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 KETH-DT to other pertinent stations are tabulated in Exhibit E-2.

As indicated, the proposed KETH-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.

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

EXHIBIT E-2

DE MINIMIS INTERFERENCE ANALYSIS

PROPOSED KETH-DT  
CHANNEL 24 - HOUSTON, TEXAS

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NTSC FACILITIES

INTERFERENCE LOSSES (POPULATION)

Call Sign	City, State	Ch.	Grade B Population F(50,50)	NTSC & DTV Without KETH-DT		Unmasked DTV	% <sup>1</sup>	NTSC & DTV With KETH-DT		Unmasked DTV	% <sup>1</sup>	KETH-DT Contribution	% <sup>2</sup>
				NTSC Only	DTV			NTSC & DTV	DTV				
KVUE	Austin, TX	24	992,462	73,099	77,716	4,617	0.5	88,966	15,867	1.6	11,250	1.1	
KHMV-LP	Houston, TX	28	1,881,622 <sup>4</sup>	0	0	0	0	0	0	0	0	0	

DTV FACILITIES

INTERFERENCE LOSSES (POPULATION)

Call Sign	City, State	Ch.	NTSC/DTV <sup>3</sup> Grade B Pop. Longley-Rice	NTSC & DTV Without KETH-DT		Unmasked DTV	% <sup>1</sup>	NTSC & DTV With KETH-DT		Unmasked DTV	% <sup>1</sup>	KETH-DT Contribution	% <sup>2</sup>
				NTSC Only	DTV			NTSC & DTV	DTV				
KL TJ-DT (CP)	Galveston, TX	23	3,702,959	0	0	0	0	57,960	57,960	1.6	57,960	1.6	
KL TJ-DT (Allot.)	Galveston, TX	23	3,695,830	0	0	0	0	58,998	58,998	1.6	58,998	1.6	

<sup>1</sup> Cannot exceed 10%, under FCC *de minimis* interference standards.

<sup>2</sup> Cannot exceed 2%, under FCC *de minimis* interference standards.

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

<sup>4</sup> 74 dBu contour population.