

INTERFERENCE STUDY
PROPOSED WNAB-DT
CHANNEL 23 – NASHVILLE, TENNESSEE
[MODIFICATION OF BPCDT-19991014ABF]

The Commission allotted Channel 23 to WNAB-DT with a nominal ERP of 53 kw (directional) at 240 meters above average terrain. The instant application specifies an ERP of 350 kw (directional) at 367 meters at a different site, 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, unless otherwise noted. In addition, we utilized the 1990 U.S. Census. Changes in interference caused by WNAB-DT to other pertinent stations are tabulated in Exhibit E-2.

As shown, the proposed WNAB-DT facility would not contribute more than two percent DTV interference to the service population of any affected NTSC or DTV full-power 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 authorized service area.

Further, a Longley-Rice interference study reveals that the proposed WNAB-DT facility does not cause significant (>0.5%) interference within the protected 74 dBu contour of any potentially affected Class A low power television station, including W23BV, Channel 23 in Evansville, Indiana, and WJDE-LP, Channel 24 in Nashville, Tennessee.

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

EXHIBIT E-2

INTERFERENCE STUDY SUMMARY
 PROPOSED WNAB-DT
 CHANNEL 23 – NASHVILLE, TENNESSEE
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<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WMMF-DT</u>	<u>%</u>	<u>Total DTV Interference</u>	<u>%</u>
WHIQ-DT BMPEDT-20000501AIN	Huntsville, AL	24	1,038,272	0	0	4,252	0.4
WELF-TV BLCT-19940516KE	Dalton, GA	23	652,658	5,610	0.9	42,381	6.5
WKZT-TV BLET-19830404KF	Elizabethtown, KY	23	678,377	3,782	0.6	7,114	1.0
KBSI BLCT-19951120KT	Cape Girardeau, MO	23	520,018	8,514	1.6	10,244	2.0
WCTE BLET-19880802KE	Cookeville, TN	22	350,095	0	0	19,379	5.5
WPXK-DT BLCDT-20020510AAJ	Jellico, TN	23	877,429	146	<0.1	3,151	0.4
WPMC-DT (Allotment)	Jellico, TN	23	800,709	366	<0.1	1,786	0.2
W23BV BLTTA-20021104AEE	Evansville, IN	23	112,310	0	0		
WJDE-LP BLTTA-20001208AEY	Nashville, TN	24	510,971	1,392	0.3		