

INTERFERENCE STUDY
PROPOSED WSKY-DT
CHANNEL 4 – MANTEO, NORTH CAROLINA

The instant application specifies an ERP of 10 kw (omnidirectional) at 274 meters above-average terrain, 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 WSKY-DT to other pertinent stations are tabulated in Exhibit D-2.

Regarding WUNC-TV, Channel 4 in Chapel Hill, North Carolina, the proposed WSKY-DT facility causes unmasked interference to 4.8 percent of the WUNC-TV service population. However, the present WSKY-TV analog facility causes interference to 5.0 percent of the WUNC-TV service population. Therefore, a grant of the instant proposal would represent a decrease in interference to WUNC-TV.

As far as the other facilities are concerned, the proposed WSKY-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 authorized service area.

EXHIBIT D-1

A Longley-Rice interference study also reveals that the proposed WSKY-DT facility does not cause interference within the protected 74 dBu contour of any potentially affected Class A Low Power television station, including WLWP-LP, Channel 4 in Millsboro, Delaware.

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

EXHIBIT D-2

INTERFERENCE STUDY SUMMARY

PROPOSED WSKY-DT
CHANNEL 4 – MANTEO, NORTH CAROLINA

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WSKY-DT</u>	<u>%</u>	<u>Total DTV Interference</u>	<u>%</u>
WTKR(TV) BMLCT-19850130KI	Norfolk, VA	3	1,830,829	1,899	0.1	1,915	0.1
WRC-TV BLCT-19981230KE	Washington, D.C.	4	6,581,038	85,919	1.3	85,919	1.3
WUNC-TV BLET-19950809KE	Chapel Hill, NC	4	2,918,417	141,182	4.8*	141,182	4.8*

*WSKY-TV, as licensed, causes interference to 145,688 people within the WUNC-TV protected contour. Grant of instant proposal would result in decrease in interference to WUNC-TV.