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THE UNIVERSITY OF NORTH CAROLINA

PERMITTEE OF W30IF-D

GARNER, NORTH CAROLINA

FAC ID# 69080

FCC FILE # BDR Tet-20090428AAD

**APPLICATION FOR A MODIFICATION OF CONSTRUCTION PERMIT
TO SPECIFY A NEW TRANSMITTER LOCATION**

ENGINEERING EXHIBIT 11

September 6, 2010

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**THE UNIVERSITY OF NORTH CAROLINA
REASEARCH TRIANGLE PARK, NC**

**APPLICATION FOR A MODIFICATION OF CONSTRUCTION PERMIT TO
SPECIFY A NEW TRANSMITTER SITE**

EXHIBIT 11

FACILITIES REQUESTED

THE UNIVERSITY OF NORTH CAROLINA (UNCTV), is filing this application to request authority to relocate its proposed transmitter (FCC File No. BDRTET-20090428AAD) for a digital replacement translator to an adjacent tower, increase the HAAT, and reduce the ERP. With this application, we proposed operation with an effective radiated power of 0.5 kW (DA) (H) with slightly different directional antenna parameters and at 156M HAAT (234.7m AMSL) on FCC registered tower 1027322.

Figure 1 shows a plot of the WUNC-DT, Channel 25 post transition coverage {Blue} as well as the 41 and 51 dBu F(50,90) presently authorized (RED) and proposed (Green) Ch 30 digital service contours for W30IF-D.

The change in proposed location and height requested herein has come about because the aperture required for the presently authorized antenna system on the original tower is no longer available. The proposed location tower facility is owned by the same entity that the presently authorized facilities were to be located.

The proposed Channel 30 replacement translator is located on one of the group of towers southeast of Raleigh where most of the Raleigh-Durham market TV transmitters are located. By placing a replacement translator here, UNCTV expects to more easily capture reception from viewers in the vicinity that have antennas that have been optimized for the cluster of transmitters at the Garner site.

Pursuant to FCC Public Notice, DA 08-2818¹ and Rules regarding digital fill-in translators, this office, with assistance from Techware, Inc., has completed a Longley-Rice analysis of the proposed digital operation on TV Channel 30 with an ERP of 0.5 kW directional, a “Stringent” channel filter per 74.794, and that study shows that no prohibited interference will occur to any other authorized or pending full service and LPTV analog or digital station as required by 74.792 and 74.793. The results of the Longley-Rice Study can be supplied to the staff if needed. The revised 41 dBu F(50,90) fill-in translator proposed on CH 30 does not extend beyond the 47 dBu Channel 4 F(50,50) contour.

¹ See FCC DA08-2818, “MEDIA BUREAU ANNOUNCES APPLICATION AND STA FILING PROCEDURES FOR NEW REPLACEMENT DIGITAL TELEVISION TRANSLATORS BEGINNING JANUARY 5, 2009”.



quick contours

WUNC-DT25

Reference Grid (spacing: 30')

Notes

Plot showing
 WUNC-DT, CH 25 (Blue);
 CP Replacement W30IF-D (Red);
 and Prop CP MOD, W30IF-D (Green).
 CH 25 plot is the 41 dBu F(50,90).
 CH 30 plots are 41/51 dBu F(50,90).
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KILOMETERS



COVERAGE STUDY

WUNC-TV/DT - Fill-In

Figure 1

09/06/2010