

ENGINEER STATEMENT FOR WOOT-LP

OCTOBER 2002

This engineering statement has been prepared on behalf of Tiger Eye Broadcasting Corporation (Tiger Eye), licensee of Class A low power television (LPTV) station WOOT-LP, Chattanooga, Tennessee and is in support of an amendment to its application (BPTVA20020903AAL) to modify its licensed Channel 6 operation.

At present WOOT-LP is licensed to operate on Channel 6 (+) (82-88 MHz) with 0.058 kW maximum effective radiated power (ERP) and 217 meters antenna radiation center above mean sea level (RCAMSL) using a directional TV antenna. WOOT-LP has filed an application (BPTVA20020903AAL) to operate on Channel 6 (+) with 0.45 kW maximum ERP and 614 meters RCAMSL using a directional antenna from a different antenna site.

It is now proposed to amend that application to specify a different antenna site location and operate with 0.5 kW maximum ERP and 519.8 meters RCAMSL using a directional antenna system.

Antenna Site

The proposed WOOT-LP antenna will be side-mounted at 73 meters (240 feet) above ground level on an existing tower, antenna structure registration No. 1059620. The geographic coordinates (NAD-27) of the proposed WOOT-LP site are as follows: N 35° 08' 59", W 85° 01' 26".

TV Allocation Situation

A TV allocation study indicates the proposed WOOT-LP operation would result in prohibited overlap of contours with the following TV stations:

1. WBRC-TV, Channel 6, Birmingham, AL

2. WATE-TV, Channel 6, Knoxville, TN (Lic. & CP)
3. NEW-TV Translator, Channel 6, Dalton, GA

Consequently, on behalf of station WOOT-LP, engineering interference studies have been conducted based on the FCC OET Bulletin 69 with respect to the aforementioned stations. The studies indicate that any additional predicted interference caused to the full service TV stations would be within the allowed tolerances under the Commission's current policies and guidelines (see Exhibit 4/6). Therefore, WOOT-LP requests a waiver of Sections 74.705 and 74.706 of the Commission's rules.

In addition, the FCC OET Bulletin 69 study indicates the proposed WOOT-LP operation would not cause predicted interference to the proposed TV translator station at Dalton, GA.

The proposed operation of WOOT-LP would receive predicted interference from the licensed operations of analog TV station WBRC-TV and WATE-TV. Interference is also predicted to WOOT-LP from the authorized operation of WATE-TV. However, if the Commission's staff determines that additional predicted interference will be received by the proposed WOOT-LP operation from other such TV stations, WOOT-LP would either amend its proposal or accept interference to expedite grant of its proposal.

Environmental Statement

Since WOOT-LP would be side-mounting its TV antenna on an existing tower, environmental issues listed under Section 1.1307 (a) are not pertinent.

An evaluation has been made to determine compliance with the Commission's specified standards for human exposure to RF fields as set forth in the OET Bulletin No. 65 dated August 1997. For a maximum effective radiated power of 0.5 kW and a radiation center of 73 meters above ground level, the proposed TV operation would have a maximum

of 1 microwatt per square centimeter ($\mu\text{W}/\text{cm}^2$) RF field at 2 meters above the base of tower, conservatively assuming an antenna field factor of 0.5 in the downward direction. The Commission's guidelines for Channel 6 TV operation are 1,000 $\mu\text{W}/\text{cm}^2$ for the occupational/controlled and 200 $\mu\text{W}/\text{cm}^2$ for the general population/uncontrolled environment.

Therefore, members of the public and personnel working around the proposed WOOT-LP, Channel 6 TV facility would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, station WOOT-LP, in coordination with other stations, will establish procedure to ensure that workers are not exposed to RF fields above the Commission's guidelines, by reducing or turning off the power, as appropriate.

For the reasons stated above, it is believed this proposal complies with Section 1.1307(a) and (b) of the Commission's Rules; therefore, under Section 1.1306, it is categorically excluded from the environmental processing.

Waiver of Section 73.3572(a)(2)(ii)

Tiger Eye respectfully requests a waiver of Section 73.3572(a) (2) (ii) of the Commission's rules since the predicted protected contours (62 dBu) of the present and proposed operations would not overlap. Tiger Eye believes its request for a waiver of this rule should be granted based on the following reasons.

As stated earlier, the present WOOT-LP operation is on Channel 6 with only 0.058 kW ERP and 217 meters antenna radiation center above mean sea level using a directional TV antenna. The licensed antenna site was located in a residential area in downtown Chattanooga. The WOOT-LP antenna was installed on a relatively short 35-foot above

ground tower. The owner has sold the residential property; as such Tiger Eye has lost the lease for its present site and is currently on a Special Temporary Authority (STA) to remain silent.

Tiger Eye has evaluated at least six different sites in the Chattanooga area for possible relocation of WOOT-LP facilities. After considerable effort, it has found a suitable site at White Oak Mountain area. However, due to several protection constraints on Channel 6 TV operation, WOOT-LP cannot operate with high enough power and antenna height to overlap its proposed protected contour with a similar contour of its licensed operation. The situation is further exacerbated due to the relatively smaller current facility of WOOT-LP, whose predicted 62 dBu contour extends a maximum of 4.4 km (2.7 miles) from the site. Although the proposed predicted contour would extend a maximum of 22.9 km (14.2 miles), it would slightly miss overlapping the licensed contour as shown on the attached map. However, the proposed 47 dBu (Grade B) contour of WOOT-LP would serve most of Chattanooga including the entire predicted licensed 62 dBu contour.

The proposed WOOT-LP operation from the White Oak Mountain site is also in the public interest since it would enable WOOT-LP to continue providing TV service in the Chattanooga area. The present protected WOOT-LP contour (62 dBu) provides service to 23, 697 people (1990 census) while the proposed protected contour would serve 108,232 people. Therefore, WOOT-LP would be serving substantially more people (84,535-a gain of more than 350%) from the proposed site.

Therefore, Tiger Eye believes a waiver of Section 73.3572(a)(2)(ii) of the Commission's rules is fully justified in this unique situation and it requests the Commission to grant such a waiver.