

REPLACEMENT DIGITAL TELEVISION TRANSLATOR
GRIFFIN LICENSING, LLC
NEW FILL-IN DIGITAL TV TRANSLATOR
CH 19 - 500-506 MHZ - 1.0 KW (DA)
MCALISTER, OKLAHOMA
June 2011

TECHNICAL STATEMENT

This Technical Statement and attached exhibits were prepared on behalf of Griffin Licensing, LLC ("Griffin"), licensee/permittee of KOTV-DT, Channel 45, Tulsa, Oklahoma.¹ Griffin herein seeks permission to construct a new replacement digital television translator on Channel 19 to restore service to an area in and around the vicinity of McAlester, Oklahoma. This area lost service due to the cessation of analog operation of KOTV on Channel 06Z(BMLCT-19850920KF). Replacement digital low power TV translators were authorized in MB Docket #08-253.

Exhibit A depicts the proposed fill-in TV translator's 51 dBu contour, the noise limited digital contour of KOTV-DT, and the Grade B analog contour of the former KOTV facility on Channel 6. As indicated, the noise limited digital contour of KOTV-DT does not reach the community of McAlester, Oklahoma. The proposed fill-in digital translator will provide service to 26,180 persons² not being served by the KOTV-DT facility, but were served by the KOTV analog operation prior to transition. The proposed digital translator's service contour extends beyond the predicted KOTV Grade B contour. In MB Docket #08-253, the Commission

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- 1) Griffin is operating KOTV-DT with the facilities authorized in BPCDT-20080317AEZ, with a pending application for license to cover the permit (BLCDT-20090625ACJ).
 - 2) All population data for comparison of coverage is taken from the 2010 U.S. Census. Calculations for digital interference review are based on 2000 Census data.

recognized that it may be impossible for the fill-in translator to be sited to provide replacement service without expanding the digital service contour. Further, the Order noted that it would allow some de minimis expansion of the digital translator's service contour to "...properly engineer...." the replacement translators.³

The proposed fill-in translator will be implemented on an existing tower with an antenna system intended to be used by more than one fill-in or LPTV facility. The sharing of the antenna system will limit the costs for the implementation of the replacement system. The proposed digital translator will provide service to 44,411 persons. Some 7,648 persons will be in an area that is beyond the former Grade B contour of KOTV. This extension will provide service to just 17.2% of the population within the predicted contour. Further, this population represents only 0.5% of the population within the former Grade B contour of KOTV, which theoretically delivers Grade B service to 1,585,207 persons. Without this minor extension, an alternate antenna system would have to be considered, which would preclude the sharing of the system with other users.

The antenna system for the proposed new replacement digital facility is to be located on an existing structure. Therefore, the Federal Aviation Administration was not apprised of this proposal. The antenna supporting structure has been registered with the Commission and assigned Antenna Structure Registration Number 1051571.

3) Report and Order, MB Docket #08-253, Paragraph 2, released May 8, 2009.

The proposed digital replacement translator's operation on Channel 19 complies with the Commission's interference rules, based on the use of the Longley-Rice OET-69 Bulletin.⁴ It is noted that the terrain was sampled at 0.1 kilometer, and a signal cell size of 1.0 kilometer was used with 2000 Census population reviews. Exhibit B is a tabulation of the results of the Longley-Rice review showing that the proposed facility causes no interference to any other existing, applied for, or proposed facility, based on the database used on the indicated study date. A stringent emission mask was used for the calculations.

No full service station receives predicted interference above 0.5% of its population as a result of this instant proposal. No secondary LPTV station receives predicted interference above 2.0% of its population as a result of this instant proposal. Exhibit C is a review which shows the proposed digital replacement translator facility is in compliance with the Commission's RF exposure limits.

All other data used to certify compliance with the Commission's rules has been forwarded to Griffin and is available for submission to the Commission on request.⁵

4) The Longley-Rice model was implemented on the Probe 3 computer model from V-Soft Communications. This model has been found to closely replicate the results provided by the Commission's computer model.

5) The undersigned is certifying only the radio frequency exposure portion of the environmental analysis. All data regarding TV facilities was extracted from the CDBS database on the date of the interference study included herein. We assume no liability for errors or omissions in that database which may be adverse to the request made herein.