

Engineering Statement
Minor Modification of Construction
WTXF-TV Channel 31 Philadelphia, PA
August 9, 2019

The purpose of this application is to modify the Post-Incentive Auction Facility Construction Permit of WTXF-TV Channel 31 Philadelphia, PA to change the antenna model and make a small adjustment to the center of radiation height.

The changes proposed in this application are to change the antenna model from the authorized ERI ATW16HS12-ETO-31H to an ERI ATW18HS9-ETO-31H. The azimuth pattern remains OMNI-Directional; however, there is a change in the electrical beam tilt from 3.0 degrees to 2.25 degrees and therefore a change in the elevation pattern. The modified elevation pattern has been uploaded as it needs to be included in the interference analysis. In addition, the change in the antenna model will reduce the center of radiation above mean sea level (RCAMSL) from 406.6 meters to 402.8 meters. There is no increase in the overall tower height.

An analysis using the FCC's TVStudy software with its default settings has indicated that WTXF-TV can make the above described modifications without causing new interference to other stations above the allowable de minimis limit. A copy of the TVStudy analysis result file showing no interference above the allowable de minimis limit is attached to this application.

William R. Meintel
Senior Partner
Meintel, Sgrignoli, & Wallace, LLC