

ENGINEERING STATEMENT
MARYLAND PUBLIC BROADCASTING COMMISSION
MODIFICATION OF CONSTRUCTION PERMIT FILE NUMBER 0000025176
WCPB, SALISBURY, MD
GRANTED: CH 21, 113 KW-DIRECTIONAL, 154 m HAAT
PROPOSED: CH 16, 320 KW-DIRECTIONAL, 154 m HAAT

This statement supports an application by Maryland Public Broadcasting Commission, licensee of WCPB, to modify construction permit file number 0000025176 to construct its post-auction television repack facility.

This proposed modification is part of an Unable to Construct Channel Resolution Agreement (“Agreement”) and attached to this application. As a part of that Agreement, this application proposes that WCPB be reallocated channel 16 from 21 and proposes to operate with an Effective Radiated Power of 320 kW.

An interference analysis was performed pursuant to the parameters used by the Commission for application interference processing.

TVSTUDY PROCESSING REQUEST

Applicant requests that the TVStudy processing be conducted with the following setting:

1. A Profile Point Spacing of 0.1 km

Using the Profile Point Spacing of 0.1 km the results of the analysis showed that the proposed operation for WETA is not predicted to cause interference in excess of that allowed by the rules. The analysis was performed using the methodology stated in OET-69 using the same software (TVStudy v2.2.3) utilized by the Commission and, therefore, should yield similar results.

TVStudy also reported the following land mobile distance failure:

- Proposal fails distance check to land mobile station: Washington DC ch. 17, 135.5 km.

The applicant is requesting a waiver of the rules pertaining to the required distance separation of 176 km from the city center from an adjacent channel land mobile operation (ref §73.623(e)). This waiver request is based on the following:

1. Prior to the analog television station shutdown in 2009, WBOC, Salisbury, MD was operating on channel 16 with an Effective Radiated Power of 4,070 kW at a height above average terrain of 301.8 meters. WBOC-TV was 126.3 km from the city center coordinates for Washington, DC, land mobile operations. WCPB is proposing to operate at 340 kW at a height of 154 meters above average terrain at a distance of 135.5 km from the city center coordinates for Washington, DC. The applicant is unaware of any interference issues into land mobile operations when WBOC-TV was operating on channel 16.

2. Applicant performed a study of the potential impact WCPB would have, operating on channel 16 at the proposed parameters, to currently authorized land mobile operations on channel 16 in the Washington, DC, area. The study results showed that no interference issues were present.
3. Applicant proposes to take an extra measure and utilize an 8-Pole mask filter at the output of its transmitter, prior to feeding the antenna, which will provide further reduction of any out-of-band emissions into current land mobile operations on channel 17 in Washington, DC.

For the reasons set forth above the applicant is herein requesting a waiver of the distance separation rule for adjacent channel land mobile operation set forth in §73.623(e) of the rules to enable WCPB to operate on channel 16 with the parameters specified in this application.