

## Exhibit 12

### Interference Analysis Overlap Requirements

According to CFR 47 §74.1204(a), translators are required to protect all existing FM stations from interference due to overlap of the protected contours of the existing stations with the interfering contours of the new translators.

#### US Stations

In the attached tabular printout, only WXKE and W277AK have outgoing contour overlaps from the proposed translator, so no interference to other stations is anticipated. Incoming overlap is not prohibited.

W277AK is the current application, and need not be protected.

WXKE is third adjacent to the proposed translator, and, according to §74.1204(d),

**"The provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to ... lack of population ... ."**

The F(50,50) signal from WXKE at the proposed site is 102.39 dBu. A 40 dB ratio of undesired to desired signal strength gives an allowable interfering F(50,10) field strength of 142.39 dBu. With 19 Watts ERP, the free-space equations give the distance to this contour of 2.32 meters from the antenna:

The screenshot shows the 'FCC Curves' software window. It has three main sections: 'Contour', 'Units', and 'Band'. The 'Contour' section has two radio buttons: 'F(50,50) Protected' (unselected) and 'F(50,10) Interfering' (selected). The 'Units' section has two radio buttons: 'Metric Units' (selected) and 'English Units' (unselected). The 'Band' section has three radio buttons: 'FM-Low VHF TV' (selected), 'High VHF TV' (unselected), and 'UHF TV' (unselected). Below these sections are four input fields: 'ERP (kW)' with the value '0.019 (0)', 'HAAT (m or ft.)' with the value '100', 'Contour (dBu)' with the value '142.39', and 'Distance (km or mi.)' with the value '0.00232198'. At the bottom are four buttons: 'Find ERP', 'Find HAAT', 'Find Contour', and 'Find Distance'.

ERP (kW)	HAAT (m or ft.)	Contour (dBu)	Distance (km or mi.)
0.019 (0)	100	142.39	0.00232198

The antenna is 315 feet (which is 96 meters) above the ground, so the signal never reaches the ground. Hence §74.1204(d) applies, and the predicted area of interference is acceptable to the Commission.