

**Exhibit 21 Page 1**  
**Community Public Radio, Inc.**  
**NCE FM Interference to Television Channel 6**  
**Greensboro, Georgia**

The purpose of this exhibit is to show compliance with §73.525 of the Commission's Rules. The Rules require that an applicant proposing operation on FM Channel 210, whose antenna location is less than 196 kilometers from a television Channel 6 facility, furnish a map and an engineering statement, with calculations, demonstrating compliance with the Rules with regard to interference to the reception of Television Channel 6. There is one affected TV 6 station.

1. WCES-TV - 80 km distant

Therefore, this station must receive consideration.

First, the relative HAAT figures were generated for the station using the NGDC 30 Second Database and the data from the FCC TV Database. The distance to the contours were predicted according to the procedures specified in §73.684 of the Commission's Rules, "Prediction of Coverage," using the F(50,50) curves in Figure 9 of §73.699.

For each television channel 6 field strength contour, the associated F(50,10) FM interference contour was obtained from Figure 1 of §73.599. The distances to the applicable NCE-FM interference contours were predicted according to the procedures specified in "Prediction of Coverage," using the F(50,10) curves in Figure 1 of §73.333 of the Rules. Radials were then computed every 5 degrees from the proposed NCE-FM site to the point at which interference stops occurring.

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A table of the proposed new NCE-FM F(50,10) interfering contours to the Television Channel 6 F(50,50) protected contours may be seen as Table 1 of this exhibit.

These calculations are based on the appropriate F(50,50), F(50,10) and FM/TV 6 protection ratio curves for an NCE-FM station operating with facilities of 0.9 kilowatts ERP at 80 meters HAAT. Free space calculations were used when computing the field strength for distances less than 1 mile.

A map of the proposed new NCE-FM F(50,10) interfering contours to the Television Channel 6 F(50,50) protected contours may be seen as Figure 1 of this exhibit.

The applicant chooses to use vertically polarized transmissions only. The maximum horizontally polarized ERP permissible at the same proposed antenna height (22.5 watts at 80 meters A.A.T.), calculated without the adjustment for television receiving antenna directivity, multiplied by 40 ( $22.5 \times 40 = 0.9$  kilowatts at 80 meters A.A.T.).

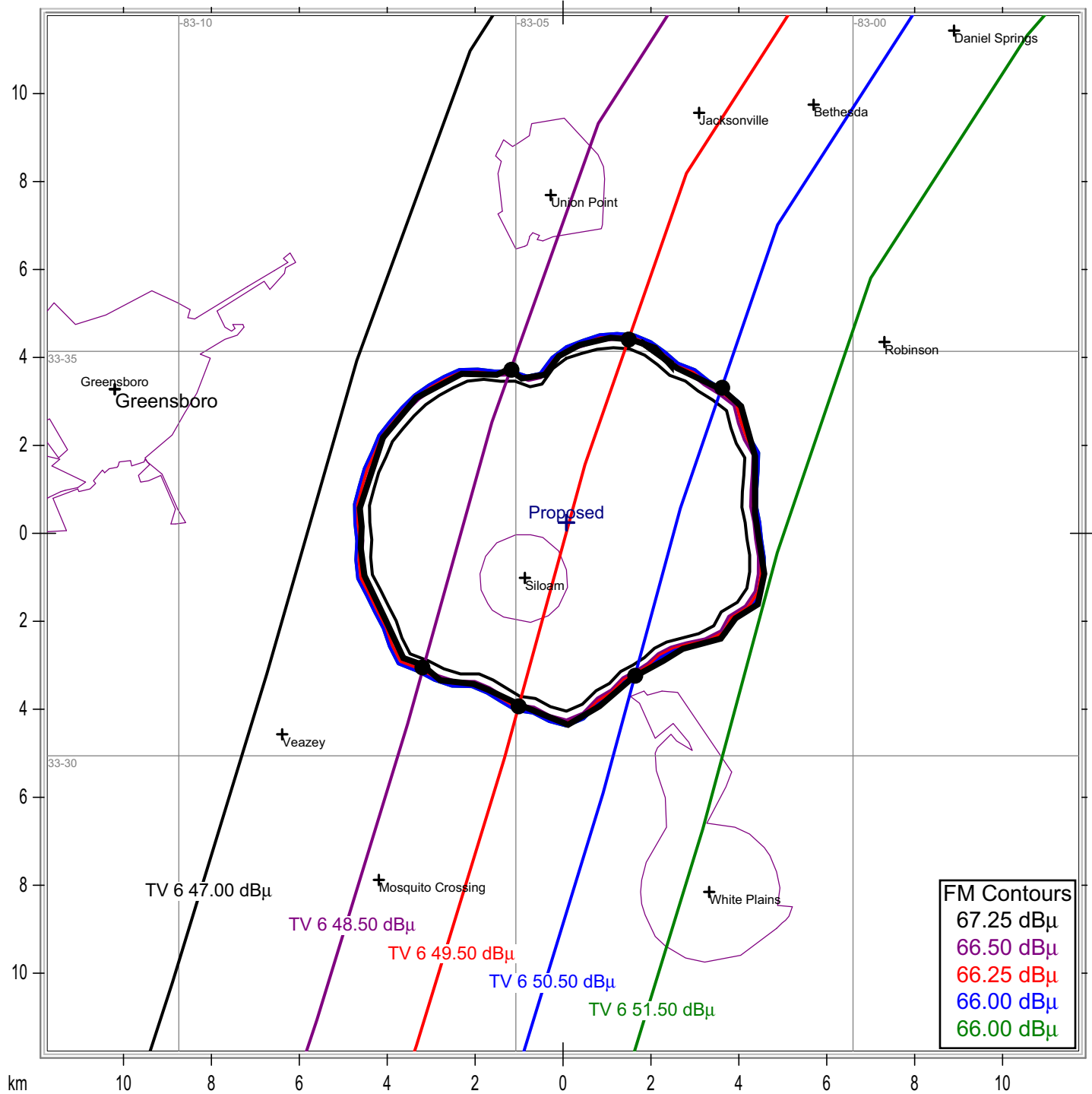
The total area receiving interference is 61 square kilometers within the WCES-TV protected contour. The total population (2000 Census) receiving interference is 1,051 persons.

The population receiving interference is less than 3,000 persons. Because the population receiving interference is less than 3,000 persons, the application complies with §73.525 of the Commission's Rules as pertains to interference to the reception of TV Channel 6 by NCE-FM stations.

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<b>TV Contour dB</b>	<b>U/D Ratio dB</b>	<b>FM Contour dB</b>
<b>47.00</b>	<b>20.25</b>	<b>67.25</b>
<b>48.50</b>	<b>18.00</b>	<b>66.50</b>
<b>49.50</b>	<b>16.75</b>	<b>66.25</b>
<b>50.50</b>	<b>15.50</b>	<b>66.00</b>
<b>51.50</b>	<b>14.50</b>	<b>66.00</b>

# Interference Area to WCES-TV



**Exhibit 21 Figure 1**  
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**Interference Area to WCES-TV 6**  
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State Borders City Borders Lat/Lon Grid