

**Compliance with 47 C.F.R. 73.525****Introduction**

There are several considerations outlined in 47 C.F.R. 73.525 for TV Channel 6 protection. Outlined below are the various factors as they apply to the proposed operation and WLNS-TV.

**1) Distance between proposed operation and WLNS-TV**

47 C.F.R. 73.525(a)(1) requires a minimum separation of 195 km for a channel 212 operation. The distance between the proposed station and WLNS-TV is 102.61 km.

**2) Population Limitation**

When a proposed non-commercial station is not co-located with the channel 6 station question, the applicant is required to show that the interference area (as predicted by the procedures outlined in 47 C.F.R. 73.525(e)(1)) contains no more than 3,000 persons.

Per 47 C.F.R. 73.525(e)(4), if an applicant chooses to use mixed polarity, the permissible ERP is determined by the formula:  $[H + (V/A)]$  is not greater than P

Where: H = the horizontally polarized ERP in kilowatts for mixed polarity

V = the vertically polarized ERP in kilowatts for mixed polarity

A = 40 (if the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more), or 10 (if it does not)

P = the maximum permitted horizontally polarized-only power in kilowatts.

Since the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more, the value of 40 was used for A, giving the result:

$$[1.2 + (1.2/40)] = 1.23 \text{ kilowatts}$$

**Discussion**

All population limits were calculated using the maximum permitted horizontally polarized-only power of 1.23 kilowatts. Population in the predicted interference area was determined using the centroid method and the 2000 census. The predicted interference contour (of the theoretical horizontal component of 1.23 kilowatts) crosses the WLNS channel 6 grade B contour (see Exhibit 19-A).

The predicted interference contour is determined from 47 C.F.R. 73.599 Figure 1 for channel 212 to be 68.8 dBu.

Since the only network affiliation for WLNS is CBS, then per 47 C.F.R. §73.525(e)(3)(iii), the population centroids that are in the interference area that is located outside WLNS's Area of Dominant Influence (ADI)<sup>1</sup>, outside WLNS's Grade A (68 dBu F(50,50)) field

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<sup>1</sup> Nielsen's current Designated Market Area (DMA) for Tulsa was used in place of the outdated ADI information.

strength contour, and within the predicted city grade (80 dBu F(50,50)) field strength contour for WWJ-TV (whose only network affiliation also CBS), have been excluded.

Exhibit 19-A shows the 47 dBu F(50,50) contour for WLNS, the corresponding F(50,10) interfering contour for the proposed channel 212 facility, and the WWJ-TV 80 dBu F(50,50) contour. Since the entire predicted interference area is also within the WWJ-TV city grade contour, all of the population is therefore excluded. Thus, there is no applicable interference area.

**Conclusion**

Therefore, the proposed operation is within the limitations of 47 CFR 73.525(c).



**Exhibit 19-A**

- NEW
- WLNSTV
- WWJTV

**NEW**  
Latitude: 42-40-43 N  
Longitude: 083-07-28 W  
ERP: 1.23 kW  
Channel: 212  
Frequency: 90.3 MHz  
AMSL Height: 296.0 m  
Horiz. Pattern: Directional

**WLNSTV**  
BLCT20020103AAA  
Latitude: 42-41-19 N  
Longitude: 084-22-35 W  
ERP: 100.00 kW  
Channel: 06-  
Frequency: 84.5 MHz  
AMSL Height: 577.0 m  
Horiz. Pattern: Omni

**WWJTV**  
BLCT19990720LF  
Latitude: 42-26-52 N  
Longitude: 083-10-23 W  
ERP: 5000.00 kW  
Channel: 62Z  
Frequency: 761.0 MHz  
AMSL Height: 525.0 m  
Horiz. Pattern: Directional

