

## Exhibit 19.1

### Study Concerning Potential Interference To TV Channel 6

The transmitter site for the use of Channel 201B1, WYCE(FM) is located within the 265 km affected radius of Channel 6 television station(s) WITI(TV) – Milwaukee, WI, WCML(TV) – Alpena, MI, WLFM-LP(TV) – Rochelle, IL and WLNS-TV, Lansing, MI. Full protection will be afforded WITI(TV), WCML(TV) and WLFM-LP(TV) as a complete lack of contour overlap exists. Contour maps for these stations have been supplied below.



Concerning protection of WLNS-TV, a study has been made of the potential for interference to the reception of this television station. In accordance with the provisions of §73.525(e)(3)(iii), there is no interference population to WLNS-TV when taking into account the city grade service of co-affiliate station WWMT-TV, Kalamazoo, MI.

This FM application proposes the use of directional antenna. As the FM interference contour reaches a community of 50,000 persons or more, the power used for the contour calculations was determined using the formula of §73.525(e)(4)(ii) or  $P=H+(V/A)$ ; solving for  $0.001+(10.0/10)=1.001$  kW. Therefore,  $P = 1.001$  kW, the power used to calculate the distance to the FM interference contours.

The FM to TV U/D ratio has been determined by reference to 47 C.F.R. Section 73.599, Figure 1. The 47 dBu f(50:50) Channel 6 service contour corresponds to the FM interference contour of 48 dBu f(50:10) which has been used for this study. In accordance with the provisions of §73.525(e)(1)(iii) an adjustment of 6 dB may be made for television reception antenna directivity as elliptical polarization has been employed. This 6 dB provision need not be taken toward WITI(TV), WCML(TV) or WLFM-LP(TV), however this 6 dB provision has been taken toward WLNS-TV.



In accordance with §73.525(e)(3)(iii), portions of the interference overlap area serviced by the City Grade WWMT-TV Kalamazoo, MI Channel 3 service contour may be discounted as both WLNS-TV and WWMT-TV are both sole affiliates of the CBS television network. Information regarding the WWMT(TV) CBS affiliation has been taken from WWMT(TV)'s own website [wwmt.com](http://wwmt.com) and is available for public viewing online at any time. Information regarding the WLNS-TV CBS affiliation has been taken from WLNS-TV's own website [wnls.com](http://wnls.com) and is available for public viewing online at anytime. Affiliations were also noted and verified via information obtained from parent network website [cbsnews.com](http://cbsnews.com).



As stated before, the proposed FM interference contour associated with the protected TV contour used in calculating the actual interference overlap area results in no interference population as the contour overlap area is completely served by the city grade contour of co-affiliate station WWMT-TV. As a result, full protection is afforded WLNS-TV.

Population information has been derived from U.S. Census 2000 SF1 population centroid datum and plotted on computer mapping as supplied by V-soft™ Probe III™ computer mapping software. Tabulations of contours will be supplied to the Commission upon request.

352.7°T (102.7°-110°)

F(50,10) 48.0 dBu

Grade B WLNS-TV6 (47 dBu) Contour

Grade A WWMT-TV 74 dBu Contour

WYCE.P

F(50,10) 54.0 dBu

TV-6 Contour Overlap Area Served Completely by Co-affiliate Station WWMT(TV) - Kalamazoo, MI

WWMT(TV)

WLNS-TV  
102.7°

212.7°T (102.7°+110°)

# Exhibit 19.1 TV Channel 6 Interference Study Page 2 of 2

**WYCE.P**  
TV-6 Adjusted Power  
Proposed Operation  
Latitude: 42-54-43 N  
Longitude: 085-41-00 W  
ERP: 1.001 kW  
Channel: 201  
Frequency: 88.1 MHz  
AMSL Height: 263.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model:

**WLNS-TV**  
BLCT652  
Latitude: 42-41-14 N  
Longitude: 084-22-35 W  
ERP: 100.00 kW  
Channel: 06-  
Frequency: 84.5 MHz  
AMSL Height: 566.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: Yes  
Elec Tilt: 0.0  
Prop Model:

**WWMT(TV)**  
BLCT2070  
Latitude: 42-37-56 N  
Longitude: 085-32-16 W  
ERP: 100.00 kW  
Channel: 03-  
Frequency: 62.5 MHz  
AMSL Height: 553.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: Yes  
Elec Tilt: 0.0  
Prop Model:

