

### **Engineering Statement and Interference Analysis**

This technical statement supports this application to make changes in WCHU-LP on channel 61 in Rochelle, IL. FCC File No. BLTTL-20060127AMH, Facility ID 129745.

#### **Displacement**

The WCHU-LP construction permit application was granted because it did not predict to cause any interference to any other facility as analyzed by the Commission's tv\_process\_dlptv software. However, it does predict to cause interference to W52BR, which is now operating on channel 46 since early June 2006 (FCC File No. BLTTL-20060607AAR, Facility ID 61692), when analyzed by the Commission's newer tv\_process\_dlptv software. As analyzed by the Commission's tv\_process\_dlptv software, the operating facility of WCHU-LP causes new interference to between 6.7% and 10.0% of the population within the service area of W52BR as operating on channel 46. In order to not interfere with the authorized facility of W52BR, WCHU-LP must cease operations on channel 61. Thus, it is displaced.

In this application, the Applicant is proposing to modify from NTSC 61 to digital 49 and to modify the ERP, antenna, and antenna orientation. There is no change in the transmitter location.

The proposed channel 59 facilities were studied using the Techware's tv\_process\_dlptv software on a Sun Blade 1500. The study performed a Longley-Rice study in accordance with FCC rules 74.705, 74.706 and 74.707, 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b), and 73.1030.

#### **TV Broadcast Analog System Protection**

The proposed operation causes less than 0.5% interference to surrounding analog authorized facilities (i.e., "*de minimis*"). It is believed that the proposed operation is in

compliance with the spirit and intent of the FCC's interference standards. If necessary, a waiver of the FCC rules is respectfully requested for this analog allocation study based on use of the OET-69 procedures and all possible variance from FCC rules.

### **Digital TV Station Protection**

The proposed operation causes less than 0.5% interference to surrounding digital authorized facilities (i.e., "*de minimis*"). It is believed that the proposed operation is in compliance with the spirit and intent of the FCC's interference standards. If necessary, a waiver of the FCC rules is respectfully requested for this digital allocation study based on use of the OET-69 procedures and all possible variance from FCC rules.

### **Class A, Low Power TV and TV Translator Station Protection**

The proposed operation causes less than 0.5% interference to surrounding low power and class A authorized facilities (i.e., "*de minimis*"). It is believed that the proposed operation is in compliance with the spirit and intent of the FCC's interference standards. If necessary, a waiver of the FCC rules is respectfully requested for this low power allocation study based on use of the OET-69 procedures and all possible variance from FCC rules.

This application does not cause any predicted interference to any of the other proposals. To the degree it is deemed necessary, the applicant requests a waiver of Section 74.705, 74.706, 74.707, 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b), 73.1030 and other applicable parts of the Rules and Regulations of the Federal Communications Commission in order to allow for the grant of this instant application.