

TECHNICAL EXHIBIT  
DIGITAL FLASH-CUT APPLICATION FOR  
CLASS A TV STATION WITD-CA (FACILITY ID 71130)  
CHESAPEAKE, VIRGINIA  
CH 23 0.39 KW (MAX-DA)

Technical Narrative

This Technical Exhibit supports a flash-cut application for Class A television station WITD-CA. Station WITD-CA is licensed to operate on analog channel 65 with a non-directional antenna (visual) effective radiated power (ERP) of 3.14 kW and an antenna height above mean sea level (RCAMSL) of 80 meters (BLTTL-19941026IC). Station WITD-CA is authorized to operate on analog channel 23 with a directional antenna maximum (visual) ERP of 65 kW and an RCAMSL of 236 meters (BPTTA-20020624AAQ).

Proposed Facilities

This application proposes digital operation on the currently authorized channel (23), using a new directional antenna on an adjacent tower. The transmitter site coordinates remain (NAD27): 36-49-14 N, 76-30-41 W. A Dielectric (DIE) TUA-C2SP-3/6L-1-N directional antenna, with a maximum ERP of 0.39 kW and antenna RCAMSL of 200.5 meters is proposed. The proposed 313 meter structure (1027 feet) is registered with the FCC (ASRN: 1018104).

Figure 1 is a map showing the authorized 74 dBu (analog) and proposed 51 dBu (digital) coverage contours. As can be seen on the map, there is common area where both contours overlap. In addition, since WITD-CA is a Class A station, the proposed DC contour is completely within the authorized analog contour, complying with the current FCC Freeze.

#### Allocation Considerations

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending analog or digital TV, LPTV/translator and Class A TV stations. Using the procedures outlined in the FCC's OET-69 Bulletin, a 1 kilometer grid and 1990 U.S. Census, the proposal complies with the current FCC policy (i.e., less than 0.5% new interference caused to other pertinent assignments). If necessary, a waiver of the FCC rules is respectfully requested based on use of the procedures outlined in the FCC's OET-69 Bulletin.

The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation.

#### Radiofrequency Electromagnetic Field Exposure

The proposed WITD-CA facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed antenna is located 193.5 meters above ground level. The proposed ERP is 0.39 kW. Based on a conservative downward relative field of 0.5, the calculated power density at a point 2 meters (6.6 feet) above ground level will not exceed  $0.0001 \text{ mW/cm}^2$ , which is less than 5% of the FCC's recommended limit of  $0.35 \text{ mW/cm}^2$  for channel 23 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner as part of the tower registration process.



Jonathan N. Edwards  
du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
(941) 329-6000

March 24, 2006

Figure 1

