

TECHNICAL EXHIBIT
APPLICATION FOR DTV CONSTRUCTION PERMIT
IN SUPPORT OF ITS POST-TRANSITION FACILITY
STATION WGCU-DT (FACILITY ID 62388)
FORT MYERS, FLORIDA

MARCH 17, 2008

CH 31 63 KW 276 M

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Table of Contents

Technical Narrative

Figure 1	Antenna and Supporting Structure
Figure 2	Typical Antenna Elevation Pattern
Figure 3	Predicted FCC Coverage Contours

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Technical Narrative

This Technical Exhibit supports an application for digital television (DTV) station WGCU-DT for its final DTV operation at Fort Myers, Florida. This application requests a construction permit (CP) for a digital television operation on channel 31, using a side-mounted “omnioid” antenna.

Proposed Facilities

Station WGCU-DT proposes to operate DTV channel 31 from its current transmitter site, with a non-directional effective radiated power (ERP) of 63 kilowatts and antenna height above average terrain (HAAT) of 276 meters. The transmitter site coordinates are:

26° 48' 54" North Latitude
81° 45' 43" West Longitude

A sketch of antenna and pertinent elevations are included as Figure 1. Figure 2 depicts a typical antenna elevation pattern.

Figure 3 is a map showing the DTV predicted 40.4 dBu (dipole-adjusted, noise-limited) and 48 dBu city-grade coverage contours as well as the associated Appendix B allotment 40.4 dBu (dipole-adjusted) coverage contours. The extent of the proposed contours

has been calculated using the normal FCC contour prediction method and the U.S.G.S. 3-second digitized terrain database. The predicted 40.4 dBu contour will not extend beyond Appendix B, 40.4 dBu contour at any location.

The proposed 48 dBu contour will encompass all of Fort Myers. The Fort Myers city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Population Served

The herein proposed WGCU-DT facility is predicted to serve 941,227 persons, post-transition, based upon the 2000 Census. WGCU-DT's associated Appendix B facility is predicted to serve 943,021 persons. Therefore, the herein proposed WGCU-DT facility would serve 99.8% of WGCU-DT's Appendix B population.

Allocation Considerations

Since the proposed WGCU-DT operation will not exceed the Commission's *Appendix B* allotment contour, this can be considered a checklist application and no allocation studies are needed.

Radiofrequency Electromagnetic Field Exposure

The proposed WGCU-DT 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 DTV antenna is located 274 meters above ground level with an ERP of 63 kW. A conservative relative field value of 0.2 was assumed for the calculation (see Figure 2 for a typical Dielectric 16-bay low-power antenna pattern). The calculated power density at a point 2 meters above ground level will not exceed 0.0012 mW/cm^2 . This

is less than 5% of the FCC's recommended limit of 0.38 mW/cm^2 for channel 31 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 station is at reduced power or shut down. The proposed WGCU-DT operation appears to be otherwise categorically excluded from environmental processing.

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.

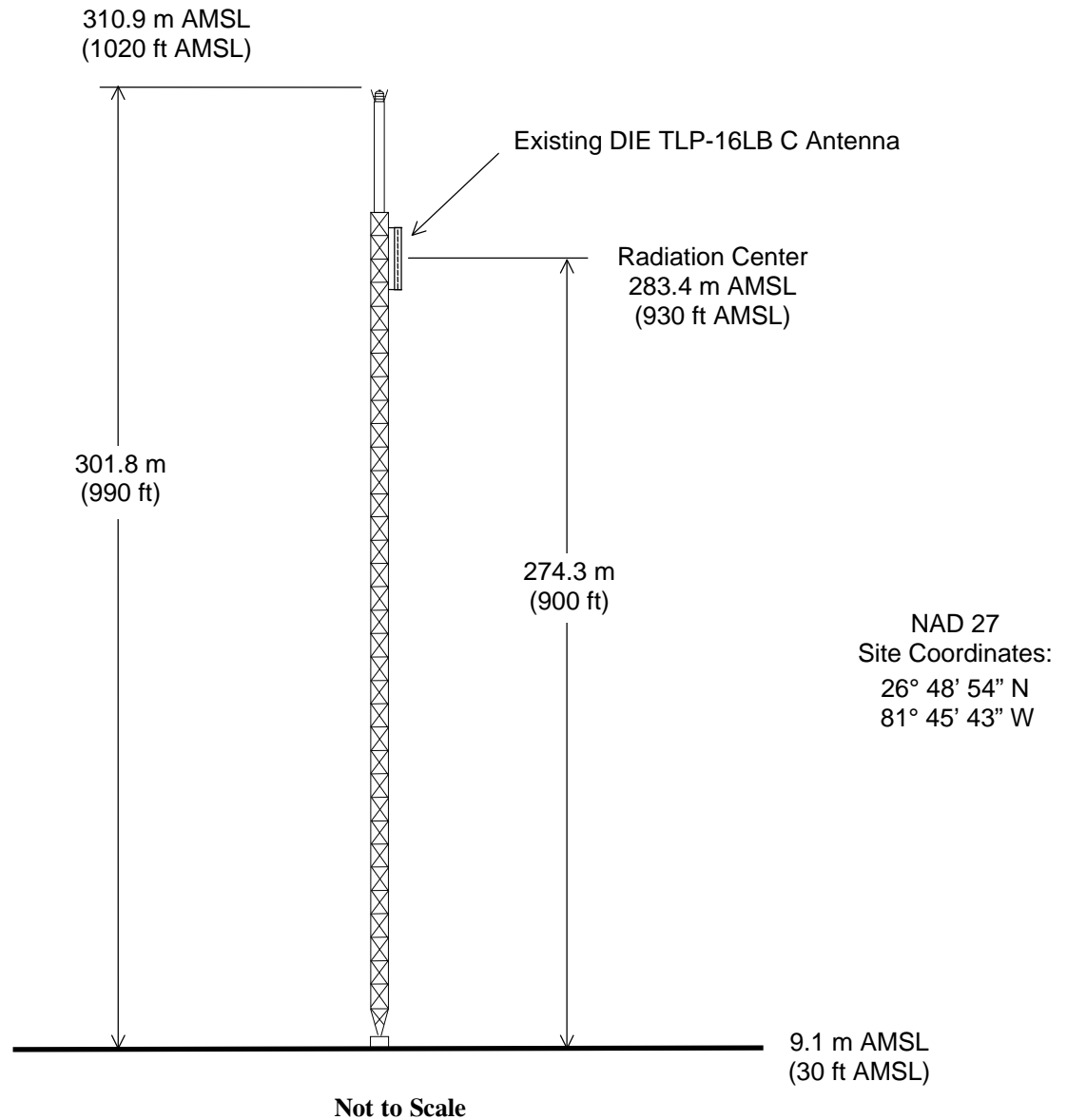


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ANTENNA AND SUPPORTING STRUCTURE

STATION WGCU-DT
FORT MYERS, FLORIDA
CH 31 63 KW 276 M

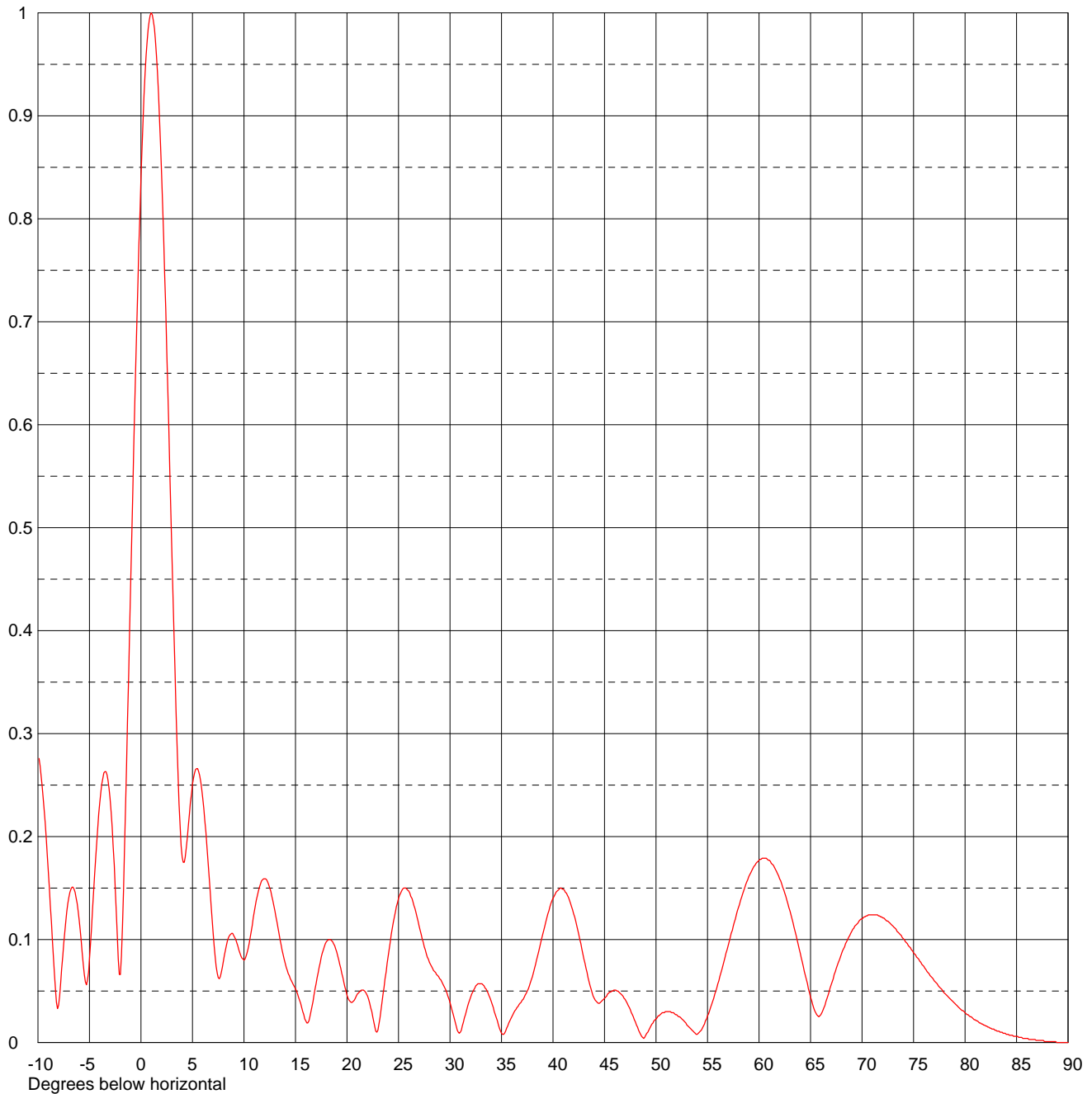
du Treil, Lundin & Rackley, Inc. Sarasota, Florida



Date	17 Mar 2008
Call Letters	WGCU-DT
Location	Channel 31
Customer	
Antenna Type	TLP-16B

ELEVATION PATTERN

RMS Gain at Main Lobe	16.0 (12.04 dB)	Beam Tilt	1.00 Degrees
RMS Gain at Horizontal	11.3 (10.53 dB)	Frequency	575.00 MHz
Calculated / Measured	Calculated	Drawing #	16L160100-90



Remarks:

Figure 3

