

TECHNICAL EXHIBIT
MINOR CHANGE APPLICATION
STATION WGCU (FACILITY ID 62388)
FORT MYERS, FLORIDA

APRIL 27, 2010

CH 31 422 KW 292 M

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TECHNICAL EXHIBIT
MINOR CHANGE APPLICATION
STATION WGPU (FACILITY ID 62388)
FORT MYERS, FLORIDA
CH 31 422 KW 292 M

Technical Narrative

This Technical Exhibit was prepared on behalf of digital television station WGPU at Fort Myers, Florida, in support of a minor change application to increase antenna height and ERP. Station WGPU is licensed for non-directional operation with an effective radiated power (ERP) of 63 kW and an antenna height above average terrain (HAAT) of 276 meters on channel 31.¹

Proposed Facilities

It is proposed to increase the ERP and increase the antenna height by top mounting. The new parameters will be 422 kW (ERP) and 292 meters (HAAT). The site coordinates remain (NAD 27): 26-48-54 N, 81-45-43 W. The FCC antenna structure registration number is 1020483. A sketch of antenna and pertinent elevations are included as Figure 1.

Figure 2 is a map showing the DTV predicted coverage contours. 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.

Allocation Considerations

The proposed WGPU operation meets the FCC's 0.5% post-transition interference standards to pertinent Class A and DTV facilities using the procedures outlined in the FCC's OET-69 Bulletin using a standard 2 kilometer cell size and 1 kilometer terrain distance increment.

¹ See BLEDT-20080922AEM

Environmental Considerations

The proposed WGPU 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 DTV antenna is located 292.2 meters above ground level. The proposed non-directional ERP is 422 kW. A conservative relative field value of 0.1 was assumed for the existing Dielectric antenna (see Figure 3). The calculated power density at a point 2 meters above ground level will not exceed 0.002 mW/cm². This is less than 5% of the FCC's recommended limit of 0.38 mW/cm² for channel 31 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. As this will be a multi-user site, an agreement will control site access. 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. The proposed WGPU operation appears to be otherwise categorically excluded from environmental processing.



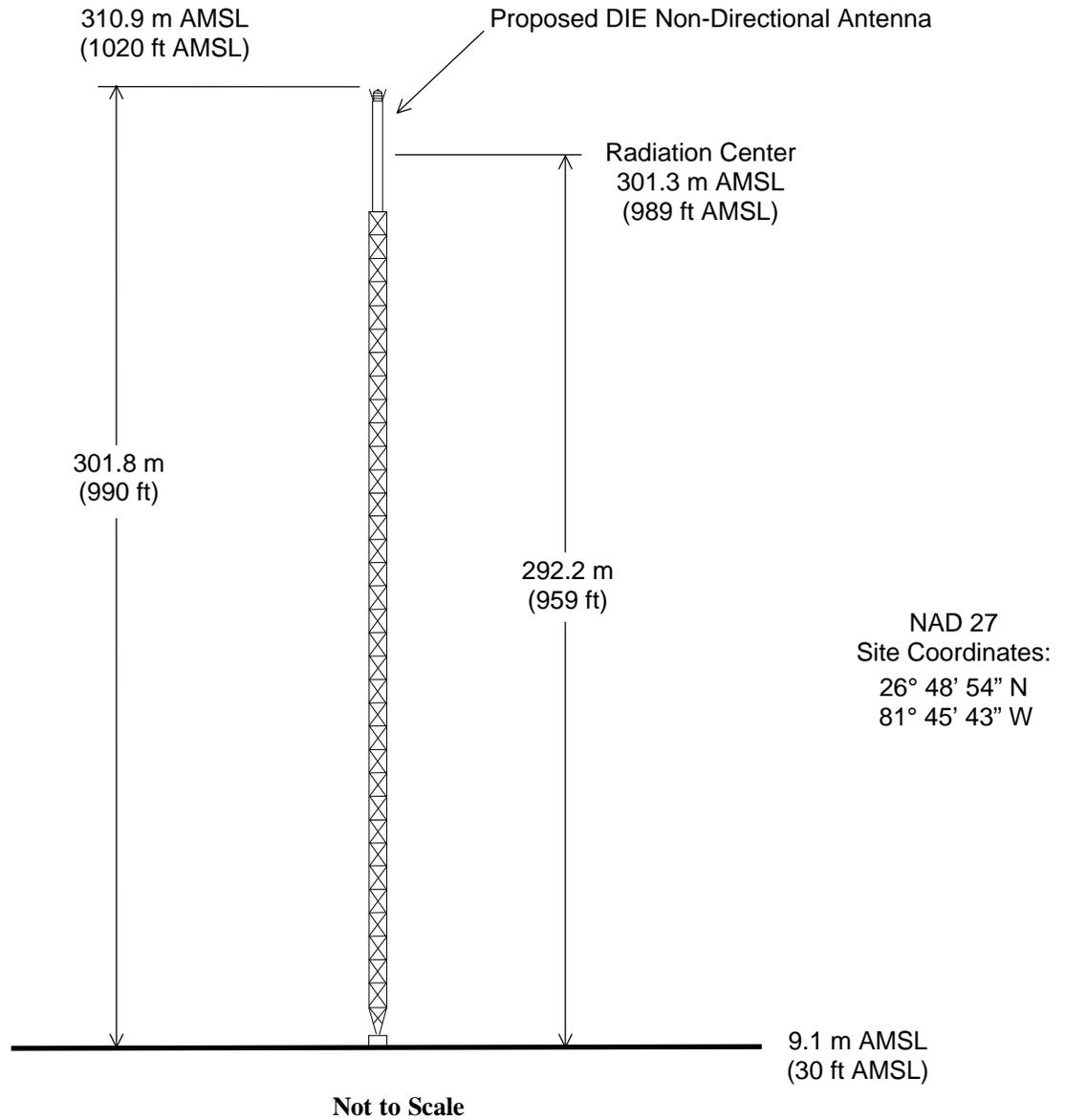
Jonathan N. Edwards

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
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April 27, 2010



Registration No. 1020483



ANTENNA AND SUPPORTING STRUCTURE

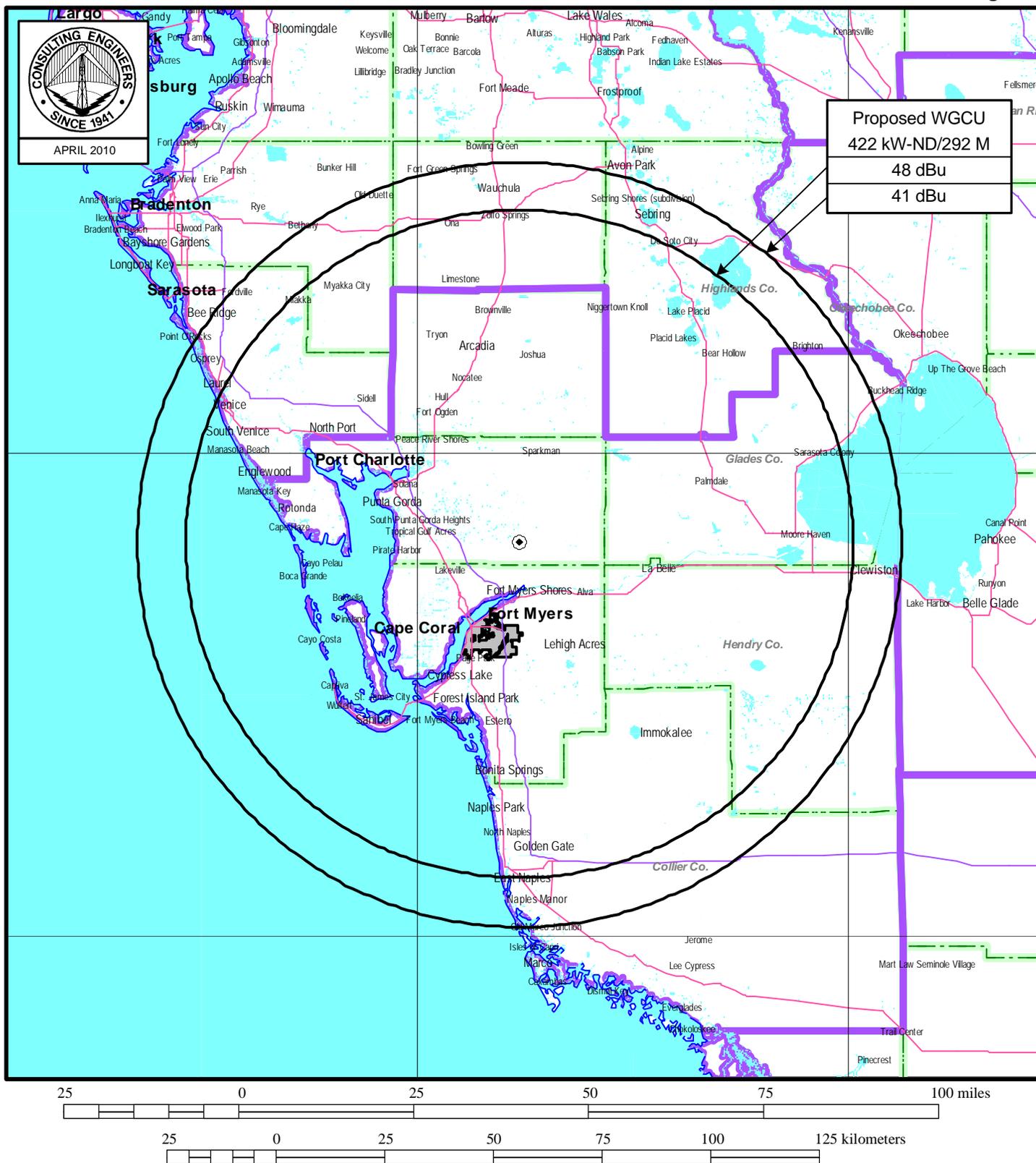
STATION WGCU

FORT MYERS, FLORIDA

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

Figure 2



PREDICTED COVERAGE CONTOURS

STATION WGCU

FORT MYERS, FLORIDA

CH 31 422 kW 292 M

du Treil, Lundin & Rackley, Inc Sarasota, Florida



Proposal Number **C-03823** Revision: **1**
 Date **16-Oct-09**
 Call Letters **WGCU** Channel **31**
 Location **Fort Myers, FL**
 Customer
 Antenna Type **TFU-31JTH-R 04 SP**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **31J280050-90**

Angle	Field										
-10.0	0.028	2.4	0.315	10.6	0.085	30.5	0.041	51.0	0.034	71.5	0.037
-9.5	0.033	2.6	0.302	10.8	0.081	31.0	0.040	51.5	0.030	72.0	0.040
-9.0	0.056	2.8	0.299	11.0	0.072	31.5	0.035	52.0	0.031	72.5	0.042
-8.5	0.099	3.0	0.292	11.5	0.045	32.0	0.035	52.5	0.036	73.0	0.043
-8.0	0.124	3.2	0.277	12.0	0.041	32.5	0.037	53.0	0.038	73.5	0.042
-7.5	0.107	3.4	0.252	12.5	0.051	33.0	0.033	53.5	0.036	74.0	0.040
-7.0	0.069	3.6	0.221	13.0	0.041	33.5	0.021	54.0	0.030	74.5	0.036
-6.5	0.090	3.8	0.189	13.5	0.020	34.0	0.008	54.5	0.021	75.0	0.032
-6.0	0.133	4.0	0.164	14.0	0.024	34.5	0.011	55.0	0.014	75.5	0.026
-5.5	0.142	4.2	0.152	14.5	0.031	35.0	0.014	55.5	0.011	76.0	0.020
-5.0	0.138	4.4	0.152	15.0	0.029	35.5	0.012	56.0	0.013	76.5	0.013
-4.5	0.156	4.6	0.158	15.5	0.044	36.0	0.019	56.5	0.014	77.0	0.007
-4.0	0.164	4.8	0.163	16.0	0.065	36.5	0.033	57.0	0.015	77.5	0.004
-3.5	0.157	5.0	0.162	16.5	0.068	37.0	0.043	57.5	0.021	78.0	0.007
-3.0	0.202	5.2	0.154	17.0	0.051	37.5	0.044	58.0	0.029	78.5	0.012
-2.8	0.234	5.4	0.140	17.5	0.029	38.0	0.038	58.5	0.037	79.0	0.017
-2.6	0.261	5.6	0.124	18.0	0.029	38.5	0.031	59.0	0.043	79.5	0.021
-2.4	0.276	5.8	0.110	18.5	0.033	39.0	0.031	59.5	0.046	80.0	0.024
-2.2	0.274	6.0	0.104	19.0	0.028	39.5	0.034	60.0	0.044	80.5	0.027
-2.0	0.249	6.2	0.106	19.5	0.034	40.0	0.033	60.5	0.038	81.0	0.028
-1.8	0.200	6.4	0.113	20.0	0.048	40.5	0.027	61.0	0.030	81.5	0.029
-1.6	0.125	6.6	0.119	20.5	0.051	41.0	0.019	61.5	0.023	82.0	0.029
-1.4	0.041	6.8	0.120	21.0	0.043	41.5	0.015	62.0	0.023	82.5	0.029
-1.2	0.109	7.0	0.116	21.5	0.041	42.0	0.013	62.5	0.028	83.0	0.028
-1.0	0.242	7.2	0.106	22.0	0.049	42.5	0.009	63.0	0.034	83.5	0.026
-0.8	0.387	7.4	0.091	22.5	0.049	43.0	0.009	63.5	0.039	84.0	0.024
-0.6	0.532	7.6	0.074	23.0	0.038	43.5	0.017	64.0	0.041	84.5	0.022
-0.4	0.670	7.8	0.059	23.5	0.019	44.0	0.026	64.5	0.040	85.0	0.020
-0.2	0.791	8.0	0.051	24.0	0.004	44.5	0.028	65.0	0.039	85.5	0.018
0.0	0.890	8.2	0.052	24.5	0.001	45.0	0.025	65.5	0.037	86.0	0.015
0.2	0.959	8.4	0.058	25.0	0.008	45.5	0.018	66.0	0.036	86.5	0.013
0.4	0.995	8.6	0.064	25.5	0.021	46.0	0.013	66.5	0.037	87.0	0.010
0.6	0.997	8.8	0.068	26.0	0.030	46.5	0.015	67.0	0.038	87.5	0.008
0.8	0.965	9.0	0.069	26.5	0.029	47.0	0.018	67.5	0.038	88.0	0.006
1.0	0.904	9.2	0.068	27.0	0.020	47.5	0.016	68.0	0.038	88.5	0.004
1.2	0.819	9.4	0.068	27.5	0.021	48.0	0.014	68.5	0.037	89.0	0.002
1.4	0.717	9.6	0.071	28.0	0.031	48.5	0.021	69.0	0.034	89.5	0.001
1.6	0.609	9.8	0.073	28.5	0.034	49.0	0.032	69.5	0.033	90.0	0.000
1.8	0.504	10.0	0.078	29.0	0.028	49.5	0.040	70.0	0.032		
2.0	0.414	10.2	0.083	29.5	0.026	50.0	0.044	70.5	0.032		
2.2	0.350	10.4	0.086	30.0	0.035	50.5	0.041	71.0	0.034		

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