

WCEA-LD STA FOR TEMPORARY CH 36 10 kW DA OPERATION
BOSTON, MASSACHUSETTS
ENGINEERING NARRATIVE AND
RF RADIATION ENVIRONMENTAL ANALYSIS
APRIL 2021

WCEA-LD is currently dark while awaiting a long delayed local building permit to be granted required by both the John Hancock Tower and American Tower company before the WCEA CH 36 DTV Transition facilities authorized in FCC file number 0000053501 can be constructed. WCEA has terminated operation on licensed CH 45 at the request of the FCC and wishes to return service to the public at the earliest possible opportunity.

The proposed STA facility utilizes the CH 45 Alive Telecom panel antenna reoriented at an azimuth bearing of 300 degrees with an ERP of 10 kW to place the STA 51 dBu contour wholly within the CP 51 dBu contour. No other change in transmitter site data is proposed from that specified in the CH 45 LPTV facility as authorized in file number BLDL-20121119AGB.

The proposed antenna system is an Alive Telecom ATC-BPCC13S circularly polarized antenna system consisting of two vertical stacks of 3 each UHF panels. The maximum relative field in the elevation pattern across the depression angle range of 15 to 90 degrees is less than 0.2 with a radiation center 249.5 meters above ground. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 0.2 has been used to calculate the power density 2 meters above ground. The maximum power density is 0.44 uw/cm squared calculated for an ERP OF 10,000 watts H. polarization and 10,000 watts V. polarization. This value is 0.1% of the Public Exposure MPE per section 1.1310. Based on this analysis it is believed that the proposed facility is in compliance with OET-65 Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 Guidelines.

Conclusion

The foregoing was prepared on behalf of C&M BROADCASTING CORPORATION by Clarence M. Beverage of *Communications Technologies, Inc.*, Medford, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The undersigned certifies, under penalty of perjury, that the statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.



By _____

Clarence M. Beverage
for Communications Technologies, Inc.
Medford, New Jersey
April 12, 2021

