

ENGINEERING STATEMENT IN SUPPORT OF  
APPLICATION TO MODIFY LICENSED LPTV FACILITY  
WGSC-CD CH 8 FACILITY ID 4349  
MURRELLS INLET, SOUTH CAROLINA  
OCTOBER 2, 2017

**SUMMARY**

This statement has been prepared in support of a minor change application which proposes a replacement of the existing WGSC-CD Kathrein antenna with a new, elliptically polarized, Kathrein antenna system, an increase in RC to 256.1 M AMSL and an increase in ERP to 3 kW. This is the current location of the antenna system of station WGSJ-CD which holds a construction permit for channel sharing with WGSC-CD. Once the WGSC-CD construction permit is granted WGSJ-CD will file an application for modification of construction permit to operate with the same facilities.

This application does not increase the distance to the existing authorized F(50,90) contour except at azimuth bearings directed over the Atlantic Ocean as required by current FCC rules. See Figure 1 attached. As such there is no impermissible interference to other DTV facilities and this proposal has been discussed with FCC staff.

**RF RADIATION**

The proposed antenna system consists of a custom Kathrein K522257 system of log periodic antennas with the radiation center 250 meters AGL. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 1.0 has been used to calculate the power density 2 meters above ground. The maximum power density is 3.25 uw/cm squared calculated for an ERP OF 3,000 watts H. and V. polarization. This value is 1.6% of the Public Exposure MPE of 200 microwatts per centimeter squared. 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.

The proposed tower is an existing site with tower, building, access road and power.

**CONCLUSION**

The foregoing was prepared on behalf of Beach TV of South Carolina, Inc. by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. 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.



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Clarence M. Beverage  
*for* Communications Technologies, Inc.  
Marlton, New Jersey

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