

Engineering Statement
INCREASED IBOC POWER STUDY
prepared for
AJG Corporation
WCLG-FM Morgantown, West Virginia
Facility Id 6553
6 kW Ch 261A 122m

This study has been prepared on behalf of *AJG Corporation*, licensee of FM broadcast station WCLG-FM for the purpose of determining the allowable digital operating power under the guidelines adopted by the Federal Communications Commission on January 27, 2010¹. The facility under study is that specified in BLH-19901214KG using the technical parameters retrieved from the FCC's CDBS system. WCLG-FM is not considered a super-powered FM station and therefore may be evaluated using the guidelines established in paragraph 17 of the *Order*.

As shown on the attached exhibit, the following F(50,10) signal strength contours were calculated for WCLG-FM, as the proponent facility: 51.1 dBμ, 50.6 dBμ, 50.2 dBμ, and 49.5 dBμ. The 60 dBμ F(50,50) Protected contour has been calculated to all nearby first adjacent channel licensed, authorized and proposed facilities. The distance to each contour was calculated for 72 radials using a 3-arc second terrain database and an implementation of the FCC's TVFMFS computer program. To enable unequal digital sideband powers, the upper and lower first adjacent channel stations are shown as red and blue contours respectively.

Using this methodology and as demonstrated on the attached map, the Maximum Permissible FM Digital ERP for WCLG-FM is **-10 dBc**.

¹ See the Order on *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, MM Docket No. 99-325, DA 10-208, Released January 29, 2010, "Order".

Increased IBOC Operating Power Study

WCLG-FM Morgantown, WV
6 kW 261A 122 m

prepared April 2018 for

AJG Corporation

Cavell, Mertz & Associates, Inc.
Manassas, VA

WCLT-FM

WTUZ(FM)

WFRE(FM)

WVAF(FM)

WAFD(FM)

Colored contour that does not overlap a
nearby facility's protected contour
determines Maximum Permissible FM
Digital ERP greater than -14 dBc.

- Black = -13 dBc
- Brown = -12 dBc
- Orange = -11 dBc
- Green = -10 dBc

Protected 60 dBu contours

- Red = Upper First Adjacent
- Blue = Lower First Adjacent