

# GREG BEST CONSULTING, INC.

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## TECHNICAL EXHIBIT FOR PROPOSED WLGA CHANNEL 17 DISTRIBUTED TRANSMISSION SYSTEM

### Introduction

This Technical Exhibit provides the supplemental technical data and information associated with the FCC Form 2100 DTS application of CNZ Communications SE, LLC (“CNZ”) for a construction permit modification for digital television distributed transmission system (“DTS”) facilities for WLGA on Channel 17 in Opelika, Alabama.

### Background

On April 13, 2017, the FCC released the Closing and Channel Reassignment Public Notice, which set forth the post-auction channel assignments for all full power and Class A television stations that did not relinquish their spectrum usage rights in the Incentive Auction.<sup>1</sup> The CCRPN included a list of 49 full power and Class A stations predicted to lose more than 1% of their pre-auction interference-free population, including WLGA.

Under Section 73.3700(b)(1)(iv)(B) of the FCC’s rules, television stations, such as WLGA, that were predicted to experience greater than one percent population loss were eligible to file for an alternate channel or an expanded facility in the “first priority window.” Applicants in the first priority window were required to protect the construction permit facilities of reassigned stations and band changing stations filed in the initial 90-day window or those specified in the CCRPN.

CNZ timely filed an application for a minor modification of WLGA’s assigned facilities, which was granted on July 27, 2017. See LMS File No. 0000028626. On September 15, 2017, WLGA timely filed a first priority window application requesting an alternate channel for WLGA. See LMS File No. 0000029988. At the time, CNZ indicated to FCC staff that it intended to file an application for a distributed transmission system, but that it was investigating unexpected results in the DTS engineering that prevented it from completing the application. CNZ subsequently discovered that the source of the unexpected results was an incorrect antenna registration system number in the FCC’s database for one of the DTS sites. Once CNZ substituted the correct ASR, the engineering results were accurate, as reflected in the instant application.

### Specific Circumstances for WLGA

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<sup>1</sup> *Incentive Auction Closing & Channel Reassignment Pub. Notice the Broad. Television Incentive Auction Closes; Reverse Auction & Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, Public Notice, 32 FCC Rcd. 2786 (2017) (“CCRPN”).

*Largest in Market Calculation.* FCC Rule Section 73.622(f)(5) provides that stations may exceed the limits on power and antenna height included in 73.622(f)(6) through (8) up to that needed to provide the same geographic coverage area as the largest station within their market. In this case, WRBL is the largest station in the Columbus market with a coverage area of 44838 sq km. The radius of a circle with an area of 44838 sq km is 119 km. Thus, WLGA could construct a “single-stick” facility which could have a distance to contour of 119 km. A corresponding dashed-line contour is shown with a reference point on Attachment A. Also on Attachment A is the proposed facility for WLGA with technical parameters of an ERP of 1 MW with an RCAMSL of 707 meters which fits into the 119 km circle around the reference point for the WLGA facility.

An interference study was executed for this “Reference” facility of 1 MW and an RCAMSL of 707 meters at the indicated coordinates using a directional antenna to protect one post repack facility. The results indicate only *de minimis* interference. Thus WLGA could construct such a facility which would be grantable as a “single-stick” facility.

The DTS Report and Order applies the same exception described in 73.622 (f)(5) to DTS operations.

*Proposed Facility.* The proposed DTS facility is implemented by two transmission sites. One is located at the same coordinates from the “Reference” facility shown in Attachment A and the second is located farther to the north. The proposed DTS system with technical parameters is shown in Attachment B. The antenna patterns for both facilities are shown on Attachment C & D. WLGA recognizes that some further optimization of the antenna patterns may be beneficial.

*Interference.* Interference studies conducted for the proposed DTS facility utilize directional patterns for both facilities and result with *de minimis* levels of interference. The results of the interference analysis are provided in Attachment E.

WLGA recognizes that the proposed facility is MX with WUVG (LMS File No. 0000029625). However, licensees are permitted to propose transmission facilities that will cause only *de minimis* interference (defined as a rounding tolerance of 0.5 percent) to any other broadcast television station. See 47 C.F.R. § 73.3700(b)(ii)(C). Because the proposed facility will only cause 0.24 % interference to WUVG, it is permissible under the FCC’s rules. Moreover, although the proposed facility will receive approximately 20% interference from the Baseline facility for WUVG (DTVBL48813), and 23 % from the WUVG First Priority Window App (LMS File No. 0000029625), WLGA agrees to accept this interference.

Sincerely,



President  
Attachments