

MULLANEY ENGINEERING, INC.

4937 G - GREEN VALLEY ROAD
MONROVIA, MARYLAND 21770

ENGINEERING EXHIBIT EE- I

DIGITAL TELEVISION STATION CONSTRUCTION PERMIT APPLICATION
DISTRIBUTED TRANSMISSION SYSTEM

LIVING FAITH MINISTRIES, INC.
WLFG (DT)
DIGITAL TELEVISION CHANNEL 14
GRUNDY, VA
FCC FACILITY NUMBER: 37808

OCTOBER 2017

NARRATIVE STATEMENT

Living Faith Ministries, Inc., (“WLFG”) is the licensee of digital television station WLFG, Channel 49, Facility ID 37808, Grundy, Virginia and holds a repack construction permit for Channel 14 (DTV).

Nature of the Requested Action

WLFG seeks a modification of its repack construction permit to a Distributed Transmission System (“DTS”) facility, having two transmitters that operate on the same channel within the currently authorized digital service area.

Conversion of the WLFG repack channel to DTS will allow for the implementation of a channel sharing agreement with WAGV, Harlan, Kentucky (FCC Facility Number 37809). The DTS Site 2 as outlined herein will provide fill-in service to the Harlan, Kentucky area and improved reception service to the community of license of WAGV that would not be available without the use of a DTS system.

DTS SITE 1

The WLFG DTS Site 1, is the current repack (non-DTS) facility as authorized under FCC file number 0000026306. No changes are proposed. Technical parameters for this site remain as currently authorized. The facility also serves as the reference facility for DTS operation. The DTS Site 1 provides city of license service to Grundy, Virginia as required by the Commission’s Rules and Regulations.

DTS SITE 2

The proposed DTS Site 2 is the current WAGV channel 51 transmitter site that will be modified to provide fill-in service to the Harlan, Kentucky area. This area is terrain limited from line-of-sight service from the DTS site 1 of WLFG, but is within the WLFG noise-limited from the current non-DTS service

(and reference facility) as shown on Figure I. WLFG will provide city of license service to Harlan, Kentucky from the DTS-2 site. Harlan, Kentucky is the city of license of WAGV, the facility to be hosted by WLFG.

The proposed Channel 14 DTS Site 2 operation will employ a replacement side-mount directional antenna to be placed on the same tower structure as the licensed WAGV antenna. FCC antenna structure registration for this structure is 1203562. No change to the overall structure height will result.

The directional antenna's azimuthal and elevation patterns are provided within this application as attachments to the application (Figures 2 and 3).

DTS Coverage Area

Figure I is an overview map of the proposed DTS facility contours and the currently WLFG channel 14 service area.

DTS Site 1's proposed 479 kW ERP exceeds the maximum allowed for the proposed antenna HAAT of 662 meters permitted by §73.622(f)(8)(i). But does not extend the service area from the present non-DTS facility. Thus, the 1000 kW ERP specified herein for DTS Site 1 is in compliance with §73.622(f)(5) of the FCC's Rules.

As demonstrated in Figure I, each DTS transmitter's coverage is contained within the authorized service area of the non-DTS facility being modified. There are no contour extensions beyond the currently authorized non-DTS service area. The two DTS transmitter's coverage contours are contiguous with each other.

DTS Site Number 1 will continue to provide principal community coverage to Grundy, Virginia as required in §73.625(a), and DTS Site Number 2 will provide principal community coverage to Harlan, Kentucky as required in §73.625(a), thus allowing a channel sharing agreement between WLFG and WAGV to proceed.

Interference Protection

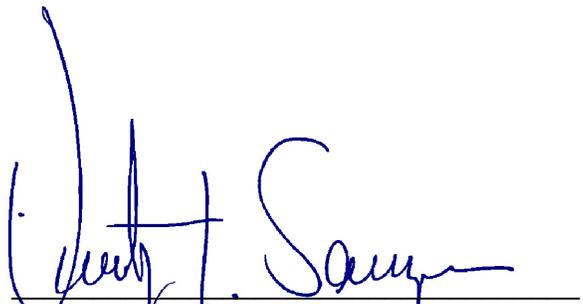
The proposed TV station satisfies the interference protection provisions of 47 C.F.R. Section 73.626. The combined field strength of all of the DTS transmitters in the proposed DTS facility do not cause interference to another station in excess of the criteria specified in 47 C.F.R. Section 73.616, as required in 47 C.F.R. Section 73.626 (e)(5).

Human Exposure to Radiofrequency Electromagnetic Fields

The general public or workers will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines (See Figure 4).

RF exposure warning signs will continue to be posted. With respect to worker safety, the applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

October 22, 2017



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List of Attachments:

- Figure 1 Proposed Coverage Contours
- Figure 2, Directional Antenna Azimuthal Pattern – Site 2 (DTS-2)
- Figure 3, Directional Antenna Elevation Pattern – Site 2 (DTS-2)
- Figure 4, Human Exposure to Radiofrequency Electromagnetic Fields