

## **ENGINEERING EXHIBITS**

To Support an  
Application For DTV Construction Permit  
Filed On Behalf Of  
Lingard Broadcasting Corporation  
West Point, Mississippi  
Call Sign: WLOV-DT  
Channel: 16     450(Max-DA)kW     494m HAAT

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# **ENGINEERING STATEMENT**

## **APPLICATION FOR DTV CONSTRUCTION PERMIT STATION WLOV-DT**

### **WEST POINT, MISSISSIPPI**

**Channel: 16    450 (Max-DA) kW ERP    494m HAAT**

#### **INTRODUCTION:**

This Application, submitted by Lingard Broadcasting Company, (WLOV-DT) has been prepared in accordance with the Federal Communications Commissions (FCC) Rules pertaining to Digital television (DTV) applications. This Application is proposing maximization of WLOV-DT by operating at 450kW ERP and is under the 2%/10% *de minimis* requirements. This application was prepared in accordance with the FCC Rules and sound engineering practice.

#### **BACKGROUND:**

WLOV is licensed to operate on NTSC Channel 27, with a maximum peak visual effective radiated power (ERP) of 2,000kW and an antenna radiation center height above average terrain (HAAT) of 512 meters. Under the FCC's DTV allotment process, DTV Channel 16 was paired with the existing WLOV NTSC Channel 27 assignment. The reference facilities for the WLOV-DT operation on channel 16 include an authorized output power of 53kW ERP and an HAAT of 512m. This application is proposing to increase the ERP to 450kW and decrease the HAAT to 494m.

### **CERTIFICATION CHECKLIST:**

As indicated on the FCC Form 301, Section III-D, this application conforms with all of the Certification Checklist items except for item 1(c), which pertains to the operation of the facility at the appointed ERP and HAAT established under Section 73.622 of the FCC Rules.

### **ENVIRONMENTAL IMPACT:**

Construction of the facility is NOT a major action in accordance with 47 C.F.R. Subpart I, Section 1.1307, of the Commission's Rules. Therefore no Environmental Assessment is required.

The facility: a.) will not be located in a sensitive area (e.g. an officially designated wilderness area, a wildlife area, a wildlife preserve area, a flood plain), nor will it physically or visually affect sites significant in American History including Indian Religious sites; b.) will not involve significant change in surface features (wetland fill, deforestation or water diversion); c.) will not be equipped with high intensity white lights; d.) will not expose occupational persons or the general population to levels of radiation in excess of the maximum permissible exposure recommendations with respect to Human Exposure to Radio Frequency Electromagnetic Fields in frequencies between 300kHz and 100GHz, (ANSI), as developed by the National Standards Institute, and the Institute of Electrical and Electronics Engineers, Inc., (ANSI-IEEE C95.1-1992), updated in OET Bulletin 65, edition 97-01, revised August 1997.

Further, as for those occupational persons having authorized access ("Controlled") to the tower when maintenance, inspections, and other associated tasks are needed, involving climbing the structure to a point at or near the antennae where the RF exposure might be excessive, the applicant states that the operations will be ceased entirely, as the need may be, until such work is completed.

### **CONTOUR COVERAGE:**

Attached, as Figure 4 is a coverage contour map for the proposed Channel 16 facility. The contour was calculated in accordance with the FCC's guidelines and depicts the 41 dbμ F(50-90) noise limited contour. The extent of the contour has been calculated using normal prediction methods. The community of service is located within the contour as indicated in Figure 4.

### **NOTIFICATION REQUIREMENTS:**

The proposed WLOV-DT channel 16 facility is not located within any "quite zone" as defined by the FCC Rules. Furthermore, the site is not located near the Canadian or Mexican border, which would necessitate any coordination.

### **TOWER REGISTRATION/ FAA NOTIFICATION:**

The antenna support structure is an existing tower that was registered with the FCC on February 11, 1998. The Tower Registration number is 1040183. This application does not propose to increase the height of the structure as indicated in Figure 1. Therefore no new tower registration is required.

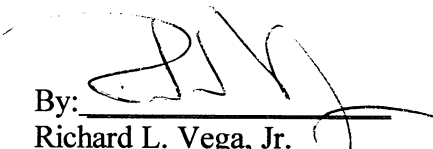
### **INTERFERENCE STUDY:**

An FCC compliant DTV Interference Study based on *OET Bulletin No. 69* has been completed using EDX's SignalPro 3.2 engineering software with DTV design module. According to the study results the proposed facility will not cause any calculated interference to any other proposed and/or existing analog or Digital station. Under the direct-to-Grid method of calculating interference, it has been concluded that the 2%/10% maximums will be maintained.

**INTERFERENCE STUDY Cont.:**

For clarity, it is requested that the FCC review this application using the higher resolution standard available upon request.

There will not be any interference to any channel 14-20 Land Mobile Stations as determined by this study. The nearest co-channel station is located at 724 kilometers in Dallas, Texas and the nearest adjacent-channel station is located in Houston, Texas at a distance over 250 kilometers from the site proposed herein.

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