

# ***KLEIN BROADCAST ENGINEERING, L.L.C.***

*dedicated to improving the science and technology of radio & television communications*

**JUNE 2008**

## **FCC FORM 302-FM APPLICATION for MODIFIED STATION LICENSE**

**FCC File# BLH-19991203ABZ  
L B I RADIO LICENSE, L.L.C.  
K B U E (FM)  
(FCC FACILITY ID# 34386)  
FM CHANNEL 288 A / 105.5mHz.  
LONG BEACH, CALIFORNIA**

### **INTRODUCTION and ENGINEERING STATEMENT**

The firm of Klein Broadcast Engineering, L.L.C, has been retained by the licensee of KBUE(FM), to prepare the engineering calculations and exhibits required by FCC Form 302-FM, an application for modified FM Broadcast Station License.

The specifications of the facility are as follows:

#### **Summary of Proposed Operation:**

Effective Radiated Power	3.0 kW	H & V
Antenna Height Above Average Terrain	142 meters	H & V
Antenna Radiation Center Above Mean Sea Level	173 meters	H & V
Antenna Radiation Center Above Ground Level	120 meters	H & V

Antenna Structure Registration Number: (ASR#) 1063992

These specifications are exactly as specified in the existing station's FCC FM Broadcast Station License, FCC File Number BLH-19991203ABZ.

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The reason for filing the instant application with the Commission is the replacement of a non-directional antenna with another non-directional antenna, the subsequent change required in Transmitter Power Output (TPO) by the difference in the antenna gain and system losses, including the interior rigid transmission line and RF coaxial switch in the antenna system to allow the station to remotely switch between the main and standby transmitters.

Under the provisions of 47 C.F.R. Section 73.1690 (c) (1):

Replacement of an omni-directional antenna with one of the same or different number of antenna bays, provided that the height of the antenna radiation center is not more than 2 meters above or 4 meters below the authorized values. Any concurrent change in ERP must comply with Sec. 73.1675(c)(1), 73.1690(4), (c)(5), or (c)(7). Program test operations at the full authorized ERP may commence immediately upon installation pursuant to Sec. 73.1620(a)(1).

Under the above captioned provisions of 47 CFR Section 73.1690 (c) (1), the applicant/licensee has replaced a Jampro Antennas, model JMPC-2-RFR, Non-Directional antenna with a new Electronics Research, Inc., (ERI) model SHPX-2AE-HW-SP, two section, half wave length spaced, Non-Directional FM broadcast antenna system. The new ERI antenna uses no beam tilt and no null fill. The antenna radiation center height above the ground remains unchanged at 120 meters AGL. The Effective Radiated Power of the station (ERP) remains unchanged at 3.0 kW E.R.P. in both the horizontal and vertical planes.

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The transmitter power output (TPO) changes to 5.9 kilowatts as a result of the changes made to the KBUE(FM) antenna system.

Engineering Exhibit E-1 is a copy of the existing KBUE(FM), FM Broadcast Station License, FCC File Number BLH-19991203ABZJ. It is included herein as an aid to Commission staff processing this instant application.

Engineering Exhibit E-10 included herein is a complete RFR study and analysis of the main KBUE transmission facility as modified with the newly installed Electronics Research, Inc, model SHPX-2AE-HW-SP (E.P.A. Type 3) FM broadcast antenna. This exhibit demonstrates compliance with the FCC's O.E.T. Bulletin #65 regarding Human Exposure to Non-Ionizing Radio Frequency Radiation. The permittee/licensee will reduce power or completely cease operations as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines

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The instant application requests the Commission grant a new station license for FM Broadcast Station KBUE(FM), as specified herein. The applicant, L B I Radio License, L.L.C. , respectfully requests the Commission staff consider and grant the instant application for the facilities requested.

Respectfully submitted,

Elliott Kurt Klein,  
Consulting Broadcast Engineer

02 June 2008