KLEIN BROADCAST ENGINEERING, L.L.C.

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JUNE 2004

FCC FORM 349 APPLICATION
FOR
MODIFICATION of FM BOOSTER STATION KQBA-FM1
(FOR an FM BOOSTER STATION CONSTRUCTION PERMIT)

GT MEDIA, L.L.C.
KQBA-FM1 / FCC FILE# BLFTB-20030716ABC

FM CHANNEL 298 / 107.5 mHz.
SANTA FE , NEW MEXICO

INTRODUCTION and ENGINEERING STATEMENT

The engineering portion of this application was prepared by the firm of Klein Broadcast Engineering, L.L.C. in support of an application filed by GT Media, L.L.C., for Modification of the above captioned KQBA-FM1 FM Booster Station to serve the Community of Santa Fe , New Mexico.

The FM Booster Station is proposed for operation on FM Channel 298 / 107.5 mHz with 5.100kW Effective Radiated Power (Vertical Polarization ONLY) using a Scala model CL-FM/VRM Composite Directional Antenna with custom directional pattern as specified within this application, using two antennas vertically stacked 0.94 wave lengths spaced apart with one antenna oriented at 90 degrees true using 50% power ratio and one antenna oriented at 150 degrees true using a 50% power ratio.

The antenna location is proposed at NL:35-40-41 / WL:105-59-26 (NAD-27).

The antenna is to be side mounted at the 29 meter level AGL, on an existing antenna support structure. The existing structure is 55 meters overall height above ground level (AGL). The proposed construction of the facility specified herein will NOT change the overall height of the existing structure.

The equipment to be used will be Type Accepted by the Commission. The elevation data pertinent to this application follows (rounded to the nearest meter):

Overall Existing Structure Height Above Ground	55 meters
Elevation of Site Above Mean Sea Level	2084 meters
Height of Antenna Radiation Center AMSL	2113 meters
Height of Antenna Radiation Center AGL	29 meters
Antenna HAAT	6 meters

FM ALLOCATION and INTERFERENCE CONSIDERATIONS

Engineering Exhibit E-1 is a map exhibit showing the 60dBu f(50,50) contour of the main transmission facility of FM Broadcast Station KQBA(FM) and the 60dBu f(50,50) contour of the proposed FM Booster Station facility. As this exhibit clearly demonstrates the 60dBu contour of the proposed FM booster station is wholley contained within the 60 dBu contour of the main KQBA(FM) facility. As defined this proposed operation is in compliance with Section 74.1204 of the Commission's Rules.

This map exhibit was prepared using the Commission's Standard Contour Prediction Method using 360 radials. The Terrain Data employed came from the Defense Mapping Agency (DMA 3 Arc Second Digitized Terrain Datafile)

ENVIRONMENTAL STATEMENT

The proposed FM translator antenna will be side mounted at the 29 meter level (AGL) on an existing structure. This will not change the existing height of the structure. No new antenna support structure construction is proposed.

The applicant will cooperate with all the site users within the College Electronic Communications Site with regard to the cessation of operation or the reduction of operating power, whatever is necessary to comply with the Commission's Rules , Regulations and Guidelines on Human Exposure to Non-Ionizing RF Radiation. Details of actual compliance with the Commission's RFR Guidelines may be found in Exhibit E-10RHS. The proposed facility has an ERP of 5.100kW in the Vertical Plane only. Engineering Exhibit E-10RHS is a detailed study of the proposed FM Booster facility with regard to its contribution to RFR levels on the site. The Engineering Exhibit E-10RHS concludes the facility proposed contributes no RFR levels in excess of the Commission's RFR Guidelines as found in O.S.T. Bulletin #65 as amended to date.

Engineering Exhibit E-2 is a Polar Pattern Plot of the proposed horizontal plane directional antenna radiation pattern proposed for the proposed FM Booster Station. This exhibit also includes is a tabulation of the proposed directional radiation pattern specified every 10 degrees.

Exhibit E-10RHS is a complete RFR analysis and study. It shows the proposed operation of the proposed FM Booster Station complies with the Commission's Policy and Rules concerning Human Exposure to Non-Ionizing Radio Frequency Radiation.

Exhibit E-10 Figure #1 is a plot of the proposed antenna's Vertical Radiation Pattern. A tabulation of the data every one degree is included within the exhibit and was used to determine the antenna proposed exhibits extremely limited downward radiation. This exhibit was used to determine the proposed Kathrein/Scala composite directional antenna system meets and beats the BEST case for downward radiation.

The operation of this FM Booster Station for KQBA(FM) Los Alamos, New Mexico is proposed to be diplexed with an identical facility for FM Broadcast Station KBOM(FM) Santa Fe, New Mexico.

The applicant, GT Media, L.L.C., requests the Commission consider this application for the facility proposed herein and respectfully requests the Commission GRANT this application for the facility as proposed.

Respectfully submitted,

Elliott Kurt Klein, Consulting Broadcast Engineer

09 JUNE 2004

KLEIN BROADCAST ENGINEERING, L.L.C.