

KLEIN BROADCAST ENGINEERING, L.L.C.

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NOVEMBER 2003

**FCC FORM 302-FM APPLICATION
for
MODIFICATION of STATION LICENSE
FCC File # BLH-19990204KB
AGM-ROCKY MOUNTAIN BROADCASTING I, L.L.C.
K S K E – F M
FM CHANNEL 284 C1 / 104.7mHz.
VAIL , COLORADO**

INTRODUCTION and ENGINEERING STATEMENT

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

The main transmission facility of KSKE-FM has been modified with a new Electronics Research, Inc., antenna, model: SHPX8-AC-SP, eight (8) section full wavelength spaced antenna.

The specifications of the facility are as follows:

Summary of Proposed Operation:

Effective Radiated Power	95.0 kW	H & V
Maximum Beam Tilted Effective Radiated Power	100.0 kW	H & V
Antenna Height Above Average Terrain	102 meters	H & V
Antenna Radiation Center Above Mean Sea Level	3015 meters	H & V
Antenna Radiation Center Above Ground Level	67 meters	H & V

The antenna structure registration number is: 1038442

The applicant requests the Commission to change the Vertical E.R.P. as specified above from the present 43kW.

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Exhibit E-1 is a copy of the existing FCC FM Broadcast Station License, FCC File Number, BLH-19990204KB for station KSKE-FM and is included herein as a courtesy to Commission staff to aid in the processing of this FCC Form 302-FM application.

Exhibit E-10 is a complete RFR hazard study of the KSKE-FM site with all sources of RFR considered in the site study. There are three sources of RFR at the KSKE-FM site. KSKE-FM, KZYR(FM) and KPRE(FM). All three facilities were considered with their presently licensed facilities except KSKE-FM. KSKE-FM was studied as proposed in this instant application. The RFR study shows the common KSKE-FM site is in compliance with the FCC O.E.T. Bulletin #65 RF Radiation Hazard Guidelines for Human Exposure to Non-Ionizing RF Radiation. The site with the KSKE-FM facility as proposed is also in compliance with the ANSI and NCRP RF exposure guidelines. The applicant certifies this compliance.

The former antenna in use at KSKE-FM was a Shively 6800 Series half wavelength spaced ten (10) section antenna system. That system suffered lightning damage during the summer of 2002 that rendered three of the radiating elements damaged and not radiating. It was decided to replace the Shively antenna with a new Electronics Research, Inc. antenna. The antenna installed is an ERI model SHPX8-AC-SP, eight (8) section, full wavelength spaced antenna. The antenna has no null fill but does use -0.9 degrees of beam tilt.

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The antenna employed is side mounted on a tower that transitions from a 24" face to a 42" face. Four of the eight bays are on this transition section. It was found that because the tower face transitions through a quarter wavelength at the KSKE-FM operating frequency and is in excess of a quarter wavelength at the 42" face, a deep null occurred in the horizontal plane radiation pattern when mounted on the existing tower. The vertical plane pattern was fairly unaffected by the side mounting but the horizontal plane pattern exhibited a null of approximately 13.9dB in depth. The antenna is now mounted with a set of horizontal parasites and special mounting brackets to eliminate the deep null in the horizontal plane pattern. In this configuration the antenna is more omni than without the special treatments.

The applicant, AGM-Rocky Mountain Broadcasting I, L.L.C., respectfully requests the Commission staff consider and grant the instant application for the facilities requested herein.

Respectfully submitted,

Elliott Kurt Klein
Consulting Broadcast Engineer

17 November 2003