

KTCL(FM) Facility ID No.: 68684  
Jacor Broadcasting of Colorado, Inc.  
Comprehensive Engineering Exhibit  
November 13, 2006

This instant application is filed in compliance with Report and Order of MB Docket No. 03-57, RM-10565, adopted March 17, 2004, to comply with section 8(a) of that order. This application is a one-step class change request from C0 to C1.

It is proposed that KTCL(FM) be located upon a tower know by Antenna Structure Registration Number 1033691 at 49 meters above ground level in a shared antenna with stations KRFX and KPTT each of which have or will file construction permit applications for operation from the proposed shared antenna.

### Spacing Study as C1

The site is fully spaced 73.207 as demonstrated in Figure 1 to all known facilities, applications and allocations. The facility's height above average terrain (HAAT) has been calculated based on six radials, which increases the resulting HAAT to 346 meters (as opposed to 236 meters obtained when HAAT is calculated based on the normal 8 radials). Assuming a HAAT of 346 meters, utilizing the FCC program "FMpower" results in a calculated operating power of 71 kW as the class equivalent power for a C1 facility.

Figure 1.

| ComStudy 2.2 search of channel 227 (93.3 MHz Class C1) at 39-43-59.0 N, 105-14-10.0 W. |       |                  |      |        |       |        |         |     |        |                     |
|--|-------|------------------|------|--------|-------|--------|---------|-----|--------|---------------------|
| Callsign   | State | City             | Chnl | ERP_w  | Class | Status | Dist_km | Sep | Clr    | Notes               |
|  | CO    | WHEAT RIDGE      | 227  | 0      | C0    | APP    | 11.68   | 259 | -247.3 | This Allocation     |
|  | CO    | FORT COLLINS     | 227  | 0      | C     | APP    | 49.48   | 270 | -220.5 | This Allocation     |
| KTCL   | CO    | FORT COLLINS     | 227  | 100000 | C     | LIC    | 49.48   | 270 | -220.5 | This Allocation     |
| KTCL   | CO    | FORT COLLINS     | 227  | 0      | C     | USE    | 90.68   | 270 | -179.3 | This Allocation     |
| DKRMH  | CO    | LEADVILLE        | 228  | 3000   | A     | LIC    | 106.16  | 133 | -26.8  | Deleted             |
|  | CO    | WESTCLIFFE       | 227  | 0      | A     | APP    | 185.96  | 200 | -14    | Deleted per RM10565 |
|  | CO    | WESTCLIFFE       | 227  | 0      | A     | APP    | 185.96  | 200 | -14    | Deleted per RM10565 |
| KYSL   | CO    | FRISCO           | 230  | 560    | A     | LIC    | 77.93   | 75  | 2.9    |                     |
| KYSL   | CO    | FRISCO           | 230  | 0      | A     | USE    | 77.93   | 75  | 2.9    |                     |
| KKPK   | CO    | COLORADO SPRINGS | 225  | 0      | C     | USE    | 114.32  | 105 | 9.3    |                     |
| KKPK   | CO    | COLORADO SPRINGS | 225  | 60000  | C     | LIC    | 114.3   | 105 | 9.3    |                     |
| KKPK   | CO    | COLORADO SPRINGS | 225  | 1100   | C     | LIC    | 114.3   | 105 | 9.3    |                     |

### Directional Antenna and Table Mountain Radio Receiving Zone

As the KTCL site is located near the Table Mountain Radio Receiving Zone (TMRRZ), a directional antenna is employed to limit emissions over TMRRZ as well as limiting the field that potentially would reflect from the Rocky Mountains and degrade the signal to

listeners. This directional antenna is NOT required for contour protection pursuant to commission rules, and is not subject to Section 73.316.

As shown in Figure 1, the expected field in the vicinity of TMRRZ is less than the 80.0 dBu/m permissible measured signal prescribed in Section 1.924.

### **Blanketing**

A signal of 115 dBu/m is calculated to extend over a populated area. When the height of the antenna above the ground and element directivity is considered, very few adverse effects are expected. The applicant is responsible as prescribed in Section 73.318.

### **Facilities**

The shared antenna is presently licensed as an auxiliary antenna for stations KBPI and KRFX, and is presently authorized as the operating antenna for KPTT by special temporary authority. This antenna is an ERI type 1082-8CP-DA, 8-section, circularly polarized, directional, panel antenna, side mounted on the existing structure of ASR 1033691 at a center elevation of 49 meters above ground level. Previously submitted as part of the license applications for the KBPI and KRFX auxiliary facilities were the antenna proof of performance, surveyors affidavit, engineers statement, RF field strength measurement report, and spurious emissions test results.

### **NIER**

Should the previously submitted electromagnetic (RF) field strength measurements demonstrating compliance with FCC guidelines not be acceptable, KBPI will make additional measurements prior to filing of an application for license to demonstrate compliance with 73 CFR 1.1306.

Figure 1

