

ENGINEERING STATEMENT
IN SUPPORT OF
AN APPLICATION FOR CONSTRUCTION PERMIT
FOR RESERVED CHANNEL
NONCOMMERCIAL EDUCATIONAL BROADCAST STATION
KCPW-FM, SALT LAKE CITY, UTAH
ON BEHALF OF
COMMUNITY WIRELESS OF PARK CITY, INC.

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INTRODUCTION

This engineering report has been prepared on behalf of Community Wireless of Park City, Inc., licensee of FM broadcast station KCPW-FM, Salt Lake City, Utah, in support of a minor change application to increase effective radiated power and improve coverage.

METHODOLOGY

With the exception of RFR studies, the data used in this engineering statement are generated using RadioSoft ComStudy 2 software.

PROPOSED STATION DATA

Frequency: 88.3 MHz.

Channel: 202

ERP: 3000 watts

Class: A

ANTENNA LOCATION

The geographic coordinates of the proposed site are as follows:

North Latitude: 40-44-17.0

West Longitude: 111-48-42.0

EQUIPMENT DATA

ANTENNA: Shively 6813 configured for a directional pattern. See Figure 1.

ORIENTATION: 194 degrees

ELEVATION DATA

Overall structure above ground:	25.0 meters
Elevation of site:	1532.0 meters
Height of antenna radiation center above ground:	14.0 meters
Height of antenna radiation center above mean sea level:	1546 meters
Height above average terrain:	-162.6 meters

MAIN STUDIO

This application complies with 47 CFR § 73.1125 in that the main studio will be located at 210 South 400 East, Salt Lake City, Utah, which is within the 70 dBu contour of the proposed station as indicated in Figure 2.

COMMUNITY COVERAGE

This application complies with 47 CFR § 73.515 in that the proposed station will cover at least 50% of the principal community with a 60 dBu signal or better, as indicated in Figure 2.

CONTOUR OVERLAP

This application complies with 47 CFR § 73.509 in that the interfering contours of the proposed station do not overlap with the protected contours of KWCR-FM and KPGR-FM as shown in Figure 3 and Figure 4.

SPACING REQUIREMENTS

This application complies with 47 CFR § 73.207 in that proposed station is properly spaced with any pertinent first, second, third adjacent and IF channels, as shown in Table 1.

TV CHANNEL 6 PROTECTION

This application complies with 47 CFR § 73.525 in that there are no channel 6 TV stations within 154 km of the proposed station.

AVAILABILITY OF CHANNELS

This application complies with 47 CFR § 73.203 in that the proposed station will occupy the existing channel of KCPW-FM.

ENVIRONMENTAL PROTECTION ACT

This application complies with 47 CFR § 1.1396 in that the proposed station meets the General Population Exposure radio frequency radiation limit of 200 $\mu\text{W}/\text{cm}^2$. The analysis was conducted utilizing the FCC FM Model software program. Results of this analysis are shown in Figure 5.

Callsign	State	City	Freq	Channel	ERP_w	Class
KWCR-FM	UT	OGDEN	88.1	201	2000	A
KPGR	UT	PLEASANT GROVE	88.1	201	115	A
KNKL	UT	NORTH OGDEN	88.7	204	73000	C1
KCWW	WY	EVANSTON	88.1	201	92	A

TABLE 1: Pertinent first, second, third adjacent and IF channel stations spaced with proposed station.