

APPLICATION FOR STATION LICENSE
POWELL BROADCASTING, INC.
KCGL (FM) RADIO STATION
CH 281C - 104.1 MHZ - 100.0 KW
POWELL, WYOMING
November 2001

TECHNICAL STATEMENT

This Technical Statement was prepared on behalf of Powell Broadcasting, Inc. ("PBI"), permittee of radio station KCGL, Channel 281C, Powell, Wyoming. PBI herein submits FCC Form 302-FM to license the outstanding KCGL construction permit, BMPH-20010806AAI. KCGL has commenced automatic program test with the facilities specified in its permit. Attached as Exhibit A is a calculation of the transmitter output power for KCGL

The KCGL construction permit had three conditions. The first condition was that the KCGL antenna had to be an EPA/FCC Type 3 antenna system, eight elements, to comply with the Commission's radio frequency radiation rules. The KCGL antenna is a Dielectric Communications Skytiller (rototiller) type eight bay system, which complies with the condition on the permit.

The second condition relates to the reduction in power of the facility for those persons having access to the site with regard to radio frequency radiation levels at the site. PBI herein restates that it will reduce the power of the KCGL facilities to ensure that persons having access to the site will not be exposed to radio frequency radiation levels in excess of the rules.

The remaining condition was to supply the Commission with a vertical plane pattern of the KCGL antenna, since electrical beam tilt of 1.1° is being used. Attached as Exhibit B is a vertical plane pattern of the KCGL system, including a tabulation. Since the KCGL antenna utilizes 1.1° of beam tilt as well as first and second null fill, the antenna gain for the system is 3.7. This figure was used to calculate the transmission system values. Based on the foregoing, all of the conditions on the KCGL permit have been met.

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EXHIBIT A

KCGL Transmission System Calculations

Effective Radiated Power:

Horizontal	100.0 kilowatt
Vertical	100.0 kilowatt

Antenna:

Dielectric SKH-8AC
8 bay full wavelength
3.7

Horizontal gain

Transmission Line:
(128 feet)

Andrew HJ8-50B
3 inch air dielectric
95.9% efficiency

Required Transmitter Power Output
To Reach Effective Radiated Power:

28.18 kilowatts

Facilities Authorized:

Channel 281C - 104.1 MHz

Effective Radiated Power:

100.0 kilowatts (H/V)

Geographic Coordinates:

North Latitude 44 29' 42"
West Longitude 109 09' 10"

Antenna Center of Radiation:

Above Ground	37.0 meters
Above MSL	2337.0 meters
HAAT	547.0 meters

FCC Tower Registration Number:

1213154