

**KONQ  
Dodge City, Kansas  
Special Temporary Authority  
Engineering Statement**

Dodge City Community College is requesting Special Temporary Authority to operate KONQ (FM) from the KDCC (AM) site in Dodge City, Kansas, as approved in construction permit BPED-19920504MI, issued on February 10, 1994.

A current FM Spacing Study showed two close spaced co-channel stations, KWBI, licensed to Great Bend, KS and KZGC-FM, licensed to Garden City, KS. The closest spacing of contours towards KWBI was a clearance of 24 kilometers. KZGC was not licensed back in 1994, when the KONQ construction permit was issued. (The FM Spacing Study is attached to this statement.)

To protect the KZGC contours and to bring the KONQ-FM STA into compliance of the current Part 73.509 of the Commission's Rules, the effective radiated power of the station will be reduced to 1,790 watts. The 1,790 watts level was obtained from a Maximum Effective Radiated Power study that is attached to this statement.

The requested KONQ operation parameters are also attached to this statement. The KONQ antenna and transmission line are already installed on the KDCC (AM) #1 tower (ASR# 10331543).

Operation of KONQ-FM, as requested in the Special Temporary Authority filing, will fully protect the operating contours of KZGC and will be in compliance with the Commission's Rule

  
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05-24-2018

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FM Study for: KONQ                      FCC Database Date: 5/18/2018      37-47-14  
Location: DODGE CITY, KS                      Channel Class: A      100-01-55

Contours calculated on direct line using 73.509(a)

[\*] by Distance indicates directional antenna used in calculation.

[\*] by HAAT indicates calculated as missing in database.

Call    City, State                      Chan Class Freq   kW   Latitude   Dist.   Required  
Status Proponent                      File Number HAAT   Longitude   Azm.   Clear (km)

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>>>>>>> Study For Channel 220    91.9 MHz <<<<<<<<

KKCV	ROZEL, KS	273 C1	102.5	100.	37-57-28	56.3	22	73.215
LIC	Fac. No. 164111	BLED-20070209AAE	149		99-25-45	70.2	+34.3	CLEAR
KWBI	GREAT BEND, KS	220 C3	91.9	7.40	38-20-16	127.0	142	
LIC	Fac. No. 93610	BLED-20140310ABG	85		98-45-48	60.9	-15.0	CLOSE
KWBI	F(50,10) 40 dBu =	85 km, KONQ	F(50,50)	60 dBu =	18 KM	+24 km		
KONQ	F(50,10) 40 dBu =	61 km, KWBI	F(50,50)	60 dBu =	26 KM	+40 km		
KZGCFM	GARDEN CITY, KS	220 A	91.9	3.00	38-02-50	79.5	115	
LIC	Fac. No. 174936	BLED-20170202ACO	50		100-52-26	291.6	-35.5	CLOSE
KZGCFM	F(50,10) 40 dBu =	65 km, KONQ	F(50,50)	60 dBu =	14 KM	+0.5 km		
KONQ	F(50,10) 40 dBu =	51 km, KZGCFM	F(50,50)	60 dBu =	18 KM	+10.5 km		

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05-18-2018

VHF Low Band FM, Maximum Effective Radiated Power  
For KONQ, at 37-47-14 100-01-55 Rad Ctr: 840 meters AMSL  
Based on 1 degree study near direct line between sites  
with data stored at nearest 5 degree azimuth.

Azimuth	Max ERP	Station	Contour	KONQ
230	82.1	KZGCFM	40	60 F(50,10)
235	19.8	KZGCFM	40	60 F(50,10)
240	10.0	KZGCFM	40	60 F(50,10)
245	5.8	KZGCFM	40	60 F(50,10)
250	4.2	KZGCFM	40	60 F(50,10)
255	3.1	KZGCFM	40	60 F(50,10)
260	2.3	KZGCFM	40	60 F(50,10)
265	2.4	KZGCFM	40	60 F(50,10)
270	2.4	KZGCFM	40	60 F(50,10)
275	3.6	KZGCFM	40	60 F(50,10)
280	3.8	KZGCFM	40	60 F(50,10)
285	3.6	KZGCFM	40	60 F(50,10)
290	3.1	KZGCFM	40	60 F(50,10)
295	2.1	KZGCFM	40	60 F(50,10)
300	1.96	KZGCFM	40	60 F(50,10)
305	1.79	KZGCFM	40	60 F(50,10)
310	1.82	KZGCFM	40	60 F(50,10)
315	1.96	KZGCFM	40	60 F(50,10)
320	2.2	KZGCFM	40	60 F(50,10)
325	2.5	KZGCFM	40	60 F(50,10)
330	3.1	KZGCFM	40	60 F(50,10)
335	5.0	KZGCFM	40	60 F(50,10)
340	9.2	KZGCFM	40	60 F(50,10)
345	27.7	KZGCFM	40	60 F(50,10)

KONO S.T.A Operating Parameters

Antenna Coordinates:

N37 47' 14"

W100 01' 55"

Horizontally Polarized Antenna: Gates FM-11 4 Bay

Effective radiated power in the Horizontal Plane: 1,790 watts

Transmitter output power: 658 watts

Height of radiation center above ground (Meters): 44 meters

Height of radiation center above mean sea level: 840 meters

Height of radiation center above average terrain: 68 meters

Antenna structure registration number: 1033154