

APPLICATION FOR STATION LICENSE
RADIO LICENSE HOLDING CBC, LLC
KGGO AUXILIARY FM ANTENNA
KGGO RADIO STATION
CH 235C0 - 94.9 MHZ - 15.0 KW
DES MOINES, IOWA
November 2011

EXHIBIT A

KGGO Auxiliary Transmission System Calculations

Effective Radiated Power:	15.0 kilowatts (Horizontal/Vertical)
Antenna:	Electronics Research, Inc. SHPX-4AC-HW 4 bay half wavelength spaced
Horizontal gain	1.307 (power gain)
Transmission Line: (490 feet)	Andrew Corp HJ12-50A 2 1/4 inch air dielectric 83.1% Efficiency
Required Transmitter Power Output To Reach Effective Radiated Power:	13.81 kilowatts

Facilities Authorized:	Channel 235C0 - 94.9 MHz
Effective Radiated Power:	15.0 kilowatts (H/V)
Geographic Coordinates:	North Latitude 41° 49' 51" West Longitude 93° 43' 53"
Antenna Center of Radiation:	Above Ground 145.0 meters Above MSL 444.0 meters Above HAAT 151.0 meters
Antenna Structure Registration #:	1043027