

APPLICATION FOR STATION LICENSE
BLUEWATER BROADCASTING COMPANY, LLC
WQKS-FM RADIO STATION
CH 241A - 96.1 MHZ - 0.9 KW
MONTGOMERY, ALABAMA
February 2013

EXHIBIT A

WQKS-FM Transmission System Calculations

Effective Radiated Power:		0.9 kilowatt (horizontal/vertical)
Antenna:		Dielectric DCR-M2E5 2 bay half wavelength spaced circular
Power Gain:		0.75
Transmission Line:	(728 feet)	Andrew LDF5-50A 1 5/8 inch air dielectric 71.2% Efficiency
Combiner:		SPX 4FM-Channel 0.75 dB Loss 84.14% Efficiency
Transmission Line(s):	(20 feet)	Andrew LDF5-50A 7/8 inch foam dielectric 98.4% Efficiency
	(60 feet)	Andrew HJ7-50A 1 5/8 inch air dielectric 97.2% Efficiency
Required Transmitter Power Output To Reach Effective Radiated Power:		2.094 kilowatts (2,094 watts)

Facilities Authorized:	Channel 241A - 96.1 MHZ	
Effective Radiated Power:	0.9 kilowatt (H/V)	
Geographic Coordinates:	North Latitude	32° 22' 03"
	West Longitude	86° 15' 42"
Antenna Center of Radiation:	Above MSL	306.0 meters
	HAAT	250.0 meters