

APPLICATION FOR MODIFICATION OF STATION LICENSE
APEX BROADCASTING, INC.
WXST RADIO STATION
CH 259C1 - 99.7 MHZ - 70.0 KW
HOLLYWOOD, SOUTH CAROLINA
September 2008

EXHIBIT A

WXST Transmission System Calculations

Effective Radiated Power:	
Horizontal/Vertical	70.0 kilowatts
Antenna:	Electronics Research, Inc.
	SHPX-10AC6-SP 10 bay full wavelength spaced
Horizontal gain	5.278 ¹
Transmission Line:	Dielectric EHT
(835 feet)	4 1/16 inch air dielectric rigid
	0.551 db
	88.09% Efficiency
Transmitter combiner:	ERI - Branch Combiner - 973-3
	Insertion loss : 0.1621 db
	96.336% Efficiency
Required Transmitter Power Output To Reach Effective Radiated Power:	15.628 kilowatts

Facilities Authorized:	Channel 259C1 - 99.7 MHz
Effective Radiated Power:	70.0 kilowatts (H/V)
Geographic Coordinates:	North Latitude 32° 49' 04"
	West Longitude 79° 50' 08"
Antenna Center of Radiation:	Above Ground 235.0 meters
	Above MSL 239.0 meters
	HAAT 238.0 meters
Antenna Structure Registration #:	1024868

1) The gain is slightly different than that of a standard ten bay, due to the fact that the antenna is being shared by other stations and the gain value differs from frequency to frequency. A vertical elevation pattern of the antenna is included within Exhibit B (page 14).