

**APPLICATION FOR STATION LICENSE**  
**QANTUM OF CAPE COD LICENSE COMPANY, LLC**  
**WRZE RADIO STATION**  
**CH 242A - 96.3 MHZ - 3.6 KW**  
**DENNIS, MASSACHUSETTS**  
**June 2008**

**EXHIBIT A**

**WRZE Transmission System Calculations**

Effective Radiated Power:	
Horizontal	3.6 kilowatts
Vertical	3.6 kilowatts
Antenna:	Shively 6810-1
	1 bay full wavelength spaced.
Horizontal gain	0.46
Transmission Line:	Andrew HJ7-50A
(250 feet)	1 5/8 inch air dielectric
	89.0% Efficiency
Required Transmitter Power Output To Reach Effective Radiated Power:	8.793 kilowatts

---

Facilities Authorized:	Channel 242A - 96.3 MHz
Effective Radiated Power:	3.6 kilowatts (H/V)
Geographic Coordinates: <sup>2</sup>	North Latitude     41° 43' 44"
	West Longitude     70° 10' 02"
Antenna Center of Radiation:	Above Ground     70.0 meters
	Above MSL         88.0 meters
	HAAT               86.0 meters
Antenna Structure Registration #:	1007750

---

2) Corrected coordinates.