

**APPLICATION FOR STATION LICENSE**  
**COMMONWEALTH BROADCASTING, L.L.C.**  
**WPYA (FM) RADIO STATION**  
**CH 291A - 106.1 MHZ - 1.7 KW**  
**POQUOSON, VIRGINIA**  
**March 2004**

**EXHIBIT A**

**WPYA Transmission System Calculations**

Effective Radiated Power:

Horizontal	1.7 kilowatts
Vertical	1.7 kilowatts

Antenna:

Shively Labs  
6814-2-SS  
2 bay half wavelength  
0.7

Horizontal power gain

Transmission Line:  
(661 feet)

Cablewave HCC 158-50  
1 5/8 inch air dielectric  
72.3% Efficiency

AM Isocoupler:

Kintronics FMC-7A  
Insertion loss : 0.1836 dB  
Efficiency: 95.86 %

Required Transmitter Power Output  
To Reach Effective Radiated Power:

3.504 kilowatts

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Facilities Authorized:

Channel 291A - 106.1 MHz

Effective Radiated Power:

1.7 kilowatts (H/V)

Geographic Coordinates:

North Latitude 37° 04' 24"  
West Longitude 76° 17' 33"

Antenna Center of Radiation:

Above Ground 151.0 meters

Above MSL 153.0 meters  
HAAT 153.0 meters

Antenna Structure Registration #: 1035308