

APPLICATION FOR STATION LICENSE
CUMULUS LICENSING LLC
WWFF-FM RADIO STATION
CH 227C2 - 93.3 MHZ - 14.5 KW (DA)
NEW MARKET, ALABAMA
December 2007

TECHNICAL STATEMENT

This Technical Statement was prepared on behalf of Cumulus Licensing LLC ("Cumulus"), licensee of radio station WWFF-FM, Channel 227C1, Tullahoma, Tennessee. Cumulus has an outstanding permit to make minor changes in the facilities of WWFF-FM (BPH-20050408ABI), which authorizes a change in community of license to New Market, Alabama and a downgrade to Channel 227C2. Cumulus herein submits a license application to cover the outstanding permit. It is requested that the Commission review this submission and authorize full power operation for WWFF-FM. A calculation of the transmitter power output of the WWFF-FM transmitter is attached as Exhibit A.

In the process of preparing this instant application, it was determined that the geographic coordinates of the existing tower on which the WWFF-FM antenna is installed, Antenna Structure Registration Number 1057232, had been updated by the tower owner. As a result of the update, the coordinates of the outstanding WWFF-FM permit are at slight variance with those now listed in the Antenna Structure Registration.¹ The coordinates listed on the WWFF-FM permit, when rounded to the nearest second, are North Latitude 34° 47' 36" and West Longitude 86° 37' 51". The Antenna Structure Registration coordinates, when converted to NAD 27, are

1) The change occurred after the grant of the WWFF-FM permit.

North Latitude 34° 47' **37"** and West Longitude 86° 37' 51", thus a one second change in Latitude. As such, this instant application seeks to correct the coordinates of the WWFF-FM facility to agree with the Antenna Structure Registration, pursuant to §73.1690(c)(11) of the rules, since this amount of the correction is less than 3 seconds.²

As indicated on Exhibit B1, at the permitted coordinates the authorized WWFF-FM Channel 227C2 has a shortage to stations WSYE, Houston, Mississippi and WAFN-FM, Arab, Alabama (license and permit). These shortages were addressed in BPH-20050408ABI under §73.215 of the rules. As indicated on Exhibit B2, as a result of the correction, the WWFF-FM facility is moving 0.03 kilometer (98 feet) from its authorized location. The correction will increase the spacing between WWFF-FM and WSYE and WAFN-FM. Therefore, as the spacing issues are improved, this correction is in compliance with §73.1690(c)(11) of the rules.

There are six operating conditions/restrictions on the WWFF-FM permit. The first four conditions relate to the use of a directional antenna system for WWFF-FM. Attached as Exhibit C is an antenna proof of performance from Dielectric Communications ("Dielectric"), the manufacturer of the WWFF-FM antenna system, demonstrating the compliance of the antenna system with the requirements and limits contained in the permit. The measured pattern (composite of horizontal and vertical) is within 85% of the envelope pattern submitted with the construction permit application. Exhibit D is a statement from an engineer that the antenna was assembled and installed in accordance with Dielectric's specifications. Finally, attached as

2) This correction does not involve an existing directional antenna system moving from one tower to another tower at the same coordinates, but is for a correction of coordinates only.

Exhibit E is a verification from a Land Surveyor that the antenna is oriented as specified by Dielectric.³ Further, as detailed in Exhibit C, the power of WWFF-FM between 200° and 260° are below the required limits⁴; the relative field at 200° is 0.273, a power level of 1.081 kilowatts (vertical); the relative field at 210° is 0.261, a power of 0.988 kilowatt (vertical); the relative field at 220° is 0.289, a power level of 1.211 kilowatts (vertical); the relative field at 230° is 0.345, a power of 1.726 kilowatts (vertical); the relative field at 240° is 0.370, a power level of 1.985 kilowatts (vertical); the relative field at 250° is 0.372, a power of 2.007 kilowatts (vertical); and the relative field at 260° is 0.369, a power of 1.974 kilowatts (vertical).

Condition #5 states that the permit was issued pursuant to §73.215 of the rules. Cumulus acknowledges this condition. Condition #6 states that Cumulus will reduce the power of WWFF-FM, or cease operation as needed, to insure that persons with access to the tower will not be exposed to radio frequency radiation levels in excess of the Commission's guidelines. Cumulus will comply with this requirement.

Based on the foregoing, it is believed that WWFF-FM is operating in compliance with the Commission's rules and that all conditions have been met. Therefore, Cumulus requests program test at full authorized power for WWFF-FM.

3) 60.0° true orientation.

4) The higher of the relative field of either the horizontal or vertical polarization was used.